Responses to Comments

on the

Draft Environmental Analysis Prepared for the

Community Air Protection Blueprint

California Air Resources Board 1001 I Street Sacramento, California, 95814

Released September 14, 2018 to be considered at the September 27, 2018 Board Hearing This page intentionally left blank.

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A. Comment Letters

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PREFACE

The California Air Resources Board (CARB) released a Draft Environmental Analysis (Draft EA) for the proposed Draft Community Air Protection Blueprint, also known as the Draft Blueprint (i.e., the proposed project under the California Environmental Quality Act) on June 7, 2018, for a 45-day public review and comment period that concluded July 23, 2018. During the public comment period for the proposed Draft Blueprint, a total of 41 comments were received (38 electronically-submitted comment letters, two written comments that were presented during the public hearing, and one verbal comment related to environmental issues that was received during the Fresno Workshop held on June 19, 2018). Fifteen of the comment letters and the verbal comment were determined to raise significant environmental issues related to the analysis in the Draft EA and are responded to in this document.

CARB staff made modifications to the Draft EA to create the Final EA. To facilitate identifying modifications to the document, modified text is presented in the Final EA with strike-through for deletions and <u>underline</u> for additions. None of the modifications alter any of the types of foreseeable compliance responses evaluated or conclusions reached in the Draft EA, introduce new significant effects on the environment, or provide new information of substantial importance relative to the EA. As a result, these revisions do not require recirculation of the draft document pursuant to the California Environmental Quality Act Guidelines, California Code of Regulations, title 14, Section 15088.5, before consideration by the Board.

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1. INTRODUCTION

The California Air Resources Board (CARB) released a Draft Environmental Analysis (Draft EA) for the proposed Draft Community Air Protection Blueprint, also known as the Draft Blueprint (i.e., the proposed project under the California Environmental Quality Act [CEQA]) on June 7, 2018, for a 45-day public review and comment period that concluded July 23, 2018. CARB received numerous comment letters through the comment docket opened for the proposed Draft Blueprint, including the Draft EA, during that time. All of the comment letters are available for viewing on the comment docket at: https://www.arb.ca.gov/lispub/comm/bccommlog.php?listname=ab617ocap18.

CARB staff carefully reviewed all comment letters received and amended the Draft Blueprint based on public comments received in preparing the final Draft Blueprint (released on August 24, 2018). In addition, CARB staff reviewed all comment letters received to determine which ones raised significant environmental issues related to the analysis in the Draft EA and require a written response under CARB's certified regulatory program implementing the California Environmental Quality Act (CEQA). This document includes CARB staff's written responses to that subset of comments, and will be provided to the Board for consideration prior to it taking final action on the proposed Final Draft Blueprint, as amended through public input.

The written responses include a brief summary of each comment, followed by the written response. The full comment letters, from which the comments responded to were extracted, are provided in Attachment A of this document. Although this document includes written responses only to those comments related to the Draft EA, all comment letters received were considered by staff and provided to the Board members for their consideration.

Following consideration of the comments received on the Draft EA and during the preparation of the responses to those comments, CARB revised the Draft EA to prepare the Final EA, which was released on September 14, 2018, as Appendix G to the proposed Final Draft Blueprint staff report.

1.1. Requirements for Responses to Comments

These written responses to public comments on the Draft EA are prepared in accordance with CARB's certified regulatory program to comply with CEQA. CARB's certified regulations state:

California Code of Regulations, title 17, Section 60007. Response to Environmental Assessment

(a) If comments are received during the evaluation process which raise significant environmental issues associated with the proposed action, the staff shall summarize and respond to the comments either orally or in a supplemental written report. Prior to taking final action on any proposal for which significant environmental issues have been raised, the decision maker shall approve a written response to each such issue.

Public Resources Code (PRC) Section 21091 also provides guidance on reviewing and responding to public comments in compliance with CEQA. While this section refers to environmental impact reports, proposed negative declarations, and mitigated negative declarations, rather than an EA, it contains useful guidance for preparing a thorough and meaningful response to comments.

PRC Section 21091, subdivision (d) states:

(1) The lead agency shall consider comments it receives if those comments are received within the public review period.

(2) (A) With respect to the consideration of comments received, the lead agency shall evaluate any comments on environmental issues that are received from persons who have reviewed the draft and shall prepare a written response pursuant to subparagraph (B). The lead agency may also respond to comments that are received after the close of the public review period.

(B) The written response shall describe the disposition of each significant environmental issue that is raised by commenters. The responses shall be prepared consistent with section 15088 of Title 14 of the California Code of Regulations.

California Code of Regulations, title 14, Section 15088 (CEQA Guidelines) also includes useful information and guidance for preparing a thorough and meaningful response to comments. It states, in relevant part, that specific comments and suggestions about the environmental analysis that are at variance from the lead agency's position must be addressed in detail with reasons why specific comments and suggestions were not accepted. Responses must reflect a good faith, reasoned analysis of the comments.

California Code of Regulations, title 14, Section 15088 (a - c) states:

(a) The lead agency shall evaluate comments on environmental issues received from persons who reviewed the draft EIR and shall prepare a written response. The Lead Agency shall respond to comments received during the noticed comment period and any extensions and may respond to late comments.

(b) The lead agency shall provide a written proposed response to a public agency on comments made by that public agency at least 10 days prior to certifying an environmental impact report.

(c) The written response shall describe the disposition of significant environmental issues raised (e.g., revisions to the proposed project to mitigate anticipated impacts or objections). In particular, the major environmental issues raised when the Lead Agency's position is at variance with recommendations and objections raised in the comments must be addressed in detail giving reasons why specific comments and suggestions were not accepted. There must be good faith, reasoned analysis in response. Conclusory statements unsupported by factual information will not suffice.

1.2. Comments Requiring Substantive Responses

In accordance with CARB's certified regulatory program it is required to prepare written responses only to those comments that raise "significant environmental issues" associated with the proposed action, as outlined in California Code of Regulations, title 17, Section 60007(a). A total of 41 comments were received on the proposed Draft Blueprint, 30 comment letters were submitted electronically on or before July 23, 2018 to the comment docket set up for the proposed Draft Blueprint and its appendices, including the Draft EA, and eight additional comment letters were received late after the close of the docket. Two written comments were presented during the public hearing, and one verbal comment was submitted during the Fresno Workshop. Out of the 41 total comments received, 15 comment letters and the verbal comment were determined to include comments raising significant environmental issues related to the Draft EA and requiring a written response under CARB's certified regulatory program and CEQA. CARB staff was conservative and inclusive in determining which comments warranted a written response and even included comments that did not mention the analysis included in the Draft EA, but did raise an issue related to potential adverse impacts related to the proposed Draft Blueprint.

Below is a list of all the comment letters that were received but not responded to in this document (Table 1-1). These comment letters were considered by CARB staff and provided to the Board members for their consideration. Responses are not provided to these comments in this document because CARB staff determined they do not raise significant environmental issues related to the Draft EA and do not require a response under CARB's certified regulatory program and CEQA. Furthermore, the proposed Draft Blueprint is not subject to the requirements of the Administrative Procedures Act to prepare a Final Statement of Reasons with written responses to each issue, and there is no requirement in the Health and Safety Code, Assembly Bill (AB) 617, or any other statute governing the preparation of the proposed Draft Blueprint that requires CARB to prepare written responses to each issue raised related to the proposed Draft Blueprint. Nonetheless, these comments are part of the record, and were taken into consideration when CARB staff prepared the proposed Final Draft Blueprint and were provided to Board members for their full consideration before acting on the proposed Final Draft Blueprint, as amended through August 24, 2018.

Table 1-1: List of Comment Letters Requiring No Further Response for CEQA Compliance Purposes				
Comment Number	Date	Name	Affiliation	
2	June 24, 2018	Gordon, Margaret	West Oakland Environmental Indicators Project	
6	July 23, 2018	Henry, Lois	BizFed Central Valley	
7		osted then deleted becaus Board item or it was a dupl		
8	July 23, 2018	Morrill, Jackson	Composite Panel Association	
9	July 23, 2018	Burga, Irene	Environmental Defense Fund	
11	July 23, 2018	Ottinger, Gwen	Drexel University	
13	July 23, 2018	Nakatani, Keith	Clean Water Action	
14	July 23, 2018	Rothrock, Dorothy	California Manufacturers & Technology Assn	
15	July 23, 2018	Loof, Rita	Radtech, The Association for UV&EB Technology	
16	July 23, 2018	Berenshteyn, Roman	Bay Planning Coalition	
17	July 23, 2018	LaMarr, Bill	California Small Business Alliance	
18	July 23, 2018	Casora, Jose	Naval Facilities Engineering Command Southwest, EV1 Environmental - Air Program	
20	This comment was posted then deleted because it was unrelated to the Board item or it was a duplicate			
22	July 23, 2018	Gutierrez, Irene	Natural Resources Defense Council	
23	July 23, 2018	Chavez, Christopher	Coalition for Clean Air	
24	July 23, 2018	Jacob, Thomas	Chemical Industry Council of California	
28	July 23, 2018	Cremers, Noelle	California Farm Bureau Federation	
30	July 23, 2018	Cannon, Chris	Port of Los Angeles	
31	July 23, 2018	Aird, Sarah	Californians for Pesticide Reform	
33	July 27, 2018 (Late)	Ronsse, Betsy	N/A	
34	July 30, 2018 (Late)	Olmedo, Luis	Comite Civico del Valle	

Table 1-1: List of Comment Letters Requiring No Further Response for CEQA Compliance Purposes			
Comment Number	Date	Name	Affiliation
35	July 30, 2018 (Late)	Nastri, Wayne	South Coast Air Quality Management District
36	July 30, 2018 (Late)	Broadbent, Jack	Bay Area Air Quality Management District
Hearing-1	June 29, 2018	Gale, Genevieve	San Joaquin Valley's AB 617 Environmental Justice Steering Committee
Hearing-2	July 27, 2018	Torres, Paulina	Center on Race, Poverty, & the Environment

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2. **RESPONSES TO COMMENTS**

The comment letters responded to in this document were coded by the order in which they were received. Table 2-1 provides the list of comment letters that contain substantive environmental comments. Responses to these comments are provided below. Comment letters, bracketed to indicate individual comments, are provided in Attachment A.

Table 2-1: List of Comment Letters Receiving Responses for CEQA Purposes			
Comment Number	Date	Name	Affiliation
1	June 20, 2018	Torres, Paulina	Center on Race, Poverty, & the Environment
3	July 19, 2018	Reheis-Boyd, Catherine	Western States Petroleum Association
4	July 19, 2018	Reheis-Boyd, Catherine	Western States Petroleum Association
5	July 21, 2018	Valdemar, Mary	San Bernardino Valley College Sustainability Committee
10	July 23, 2018	Savage, Christopher	Manufacturers Council of the Central Valley
12	July 23, 2018	Masetti, Nick	Individual
19	July 23, 2018	Torres, Paulina	Center on Race, Poverty, & the Environment
21	July 23, 2018	May, Julia	Communities for a Better Environment
25	July 23, 2018	May, Julia	Communities for a Better Environment
26	July 23, 2018	Whittick, Janet	California Council for Environmental and Economic Balance
27	July 23, 2018	Tsai, Stephanie	California Environmental Justice Alliance
29	July 23, 2018	Gale, Genevieve	San Joaquin Valley's AB 617 Environmental Justice Steering Committee
32	July 23, 2018	Wilson, Michael	BlueGreen Alliance
37	August 2, 2018 (Late)	Tsai, Stephanie	California Environmental Justice Alliance
38	August 3, 2018 (Late)	Marquez, Jesse	Coalition for a Safe Environment
Verbal1	June 19, 2018	Anonymous	Individual

The following Master Response addresses recurring themes within the comments listed in Table 2-1. This Master Response is referenced within the individual responses, where applicable.

Master Response 1:

Comment:

The Draft Environmental Analysis (Draft EA) fails to adequately assess all reasonably foreseeable compliance responses and thus underestimates the environmental impacts of the proposed Draft Community Air Protection Blueprint (proposed Draft Blueprint).

Response:

In Section 2.0, "Project Description," the Draft EA provides an overview of the project objectives, concepts of the proposed Draft Blueprint, and outlines the potential compliance responses that could occur because of implementation of the recommended actions. As described in the last paragraph on page 3 of the Draft EA, "[t]he level of detail of impact analysis is necessarily and appropriately general because the proposed Draft Blueprint is programmatic." Indeed, though the proposed Draft Blueprint does establish an array of planning principles, and identifies certain actions CARB may propose to take, it does not itself regulate any industry, or cause any direct physical changes in the environment. Instead, it establishes processes by which air districts may work with the community to consider community emission reduction programs and monitoring efforts, while forecasting various actions CARB may ultimately take through formal regulatory processes. Nonetheless, CARB has worked throughout the CEQA process to provide the public as much information as reasonably possible, despite this early-stage, programmatic focus.

The reasonably foreseeable compliance responses are analyzed in a programmatic manner for several reasons: (1) any individual action or activity would be carried out under the same program; (2) the reasonably foreseeable compliance response would result in generally similar environmental effects that can be mitigated in similar ways (Cal. Code Regs., tit.14, Section 15168 (a)(4)); and (3) while the types of foreseeable compliance responses can be reasonably predicted, the specific location, design, and setting of the potential actions are unknown at this time. Furthermore, attempting to predict decisions by entities regarding the specific location and design of infrastructure undertaken or specific programs developed by local air districts that involve extensive decision-making processes in response to implementation of the proposed Draft Blueprint is speculative given the influence of other business and market considerations in those decisions. Such efforts would also improperly leapfrog over a core purpose of the proposed Draft Blueprint, which it clearly explains - creating processes by which communities can work together to develop appropriate monitoring and emission reduction efforts, which CARB will later review. A core principle of the proposed Draft Blueprint, and of environmental justice generally, is this community engagement; CARB cannot reasonably forecast exactly what communities will do within the broad planning

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structure it has laid out, and CEQA does not require it to do so. Those choices, instead, are committed in the first instance to stakeholders. Thus commenters demanding that CARB not only forecast, but analyze, potential impacts of unwritten plans fundamentally misunderstand the purpose and structure of the proposed Draft Blueprint, and do not accurately state CEQA's requirements.

Consequently, the Draft EA takes a reasonably conservative approach in its postmitigation significance conclusions (i.e., tending to overstate the risk that feasible mitigation may not be implemented by the agency with authority to do so, or may not be sufficient) and discloses, for compliance purposes with the California Environmental Quality Act (CEQA), that potentially significant environmental impacts may be unavoidable, where appropriate. Specific actions undertaken to implement the proposed Draft Blueprint would undergo project-level environmental review as required and compliance processes at the time they are proposed (page 3 of the Draft EA).

The degree of specificity required in a CEQA document corresponds to the degree of specificity inherent in the underlying activity it evaluates. The environmental analysis for broad programs cannot be as detailed as for specific projects. (Cal. Code Regs., tit.14, Section 15146.) For example, the assessment of a construction project would naturally be more detailed than for the adoption of a plan because the construction effects can be predicted with a greater degree of accuracy. (Cal. Code Regs., tit.14, Section 15146, subd. (a).) The level of detail in the Draft EA reflects that the project is a broad statewide action framework. Consequently, the analysis does not provide the level of detail that will be provided in subsequent environmental documents prepared for specific regulatory actions that the California Air Resources Board (CARB) or other agencies decide to pursue to reduce air pollutant emissions and exposures in California communities with high cumulative exposure burdens for criteria air pollutants and toxic air contaminants (TACs). (Cal. Code Regs., tit. 14, Section 15152.) If CARB, other state agencies, or local air districts pursue regulations to implement any of the emission reduction strategies discussed in the proposed Draft Blueprint, each regulation would go through the Administrative Procedure Act (APA) process. The APA is a rigorous process that includes technical, environmental, and economic analyses, and public review and input. The Initial Statement of Reasons (ISOR) prepared by CARB for each proposed regulation, also known as the Staff Report, would include an environmental analysis specific to that proposal. The Draft EA provides a good-faith effort to evaluate programmatically the potential for significant adverse impacts associated with implementation of the proposed Draft Blueprint based on what is known at this time.

Similarly, if the air districts pursue regulations to implement any of the emission reduction strategies, each regulation would go through the extensive rulemaking process outlined in statute. Air districts are statutorily authorized to "adopt and enforce rules and regulations to achieve and maintain the state and federal ambient air quality standards" within their respective jurisdictions. (Health & Saf. Code, Section 40001, subd. (a).)

Comment Letter 1	Torres, Paulina
June 20, 2018	Center on Race, Poverty, & the Environment

1-1: The comment recommends that the State establish buffer zones and setbacks as "early action" strategies in the proposed Draft Blueprint. Specifically, the commenter recommends at least a 2,500-foot setback between toxic air emitting sources and sensitive receptors.

Response: The comment pertains to a specific implementation strategy that would be used by local air districts or land use and transportation agencies, depending on continued discussions later in the AB 617 implementation process. See Master Response 1. As discussed on page 15 of the proposed Draft Blueprint, local community steering committees would engage with local agencies to determine appropriate strategies such as "setbacks, buffer zones, and alternative truck routing." To be sure, a range of emission control strategies, including the approach commenter suggests, may be considered during this phase.

However, cities, counties, and other local agencies, not CARB, are responsible for land use planning and zoning, which cover siting, design, and permitting for new or modified facilities. Zoning codes can include design requirements to mitigate exposure (e.g., mandatory setbacks, buffers, barriers). While CARB can provide broad guidance and regulatory measures, it is the role of local air districts and agencies to implement community-level projects, including setbacks if needed. As discussed on page 8 of the Draft EA, "CARB will also be working with other governmental agencies to identify future actions that are outside of CARB's authority in order to improve data collection and the ability to understand air quality/public health relationships at the community level, promote greater consideration of air quality for transportation projects, and address issues in selected communities associated with non-air quality environmental concerns." Thus, the guidance presented in the proposed Draft Blueprint is appropriate given that it is ultimately the local air district's responsibility to engage with local agencies (i.e., cities and counties) determine appropriate strategies such as to define specific setbacks and buffer zones.

Beyond the recommendation to include setbacks as an "early action strategy," this comment does not address the adequacy, accuracy, or completeness of the Draft EA, and no changes to the Draft EA are required in response to this comment.

1-2: The comment recommends including several "early action" strategies in the proposed Draft Blueprint such as enforcing emission control technologies; developing adequate control measures for emissions, leaks, and spills; and controlling TACs from oil and gas production wells.

Response: As discussed on page 15 of Attachment 1 of the Draft EA, local air districts have primary responsibility for preparation, adoption, and implementation of appropriate emission control measures, especially for criteria pollutants, related to oil and gas

production wells. Measures enforcing emission control technologies, controlling leaks and spills, and regulating air pollutant emissions from oil and gas production wells have already been adopted in many local air districts.

Beyond the recommendation to include such "early action" strategies, this comment does not address the adequacy, accuracy, or completeness of the Draft EA and no changes to the Draft EA are required in response to this comment. Refer to Response to Comment 1-1. The comment has been noted and will be provided to the Board members for their consideration.

Comment Letter 3	Reheis-Boyd, Catherine
July 19, 2018	Western States Petroleum Association

3-1: This comment states that the Draft EA fails to sufficiently address CEQA requirements because it does not evaluate reasonably foreseeable environmental impacts from implementation of the proposed Draft Blueprint.

Response: See Master Response 1.

3-2: The comment states that CARB has improperly piecemealed the environmental review of the proposed Draft Blueprint because the impacts of local agency compliance actions were not analyzed.

Response: The EA prepared for the proposed Draft Blueprint evaluates the anticipated environmental consequences of the reasonably foreseeable compliance responses that may have a physical effect on the environment. The commenter states that "[t]o avoid improper piecemealing, a complete programmatic analysis must be prepared covering multiple related actions, rather than subsequently evaluating those for the first time as separate CEQA projects." CARB disagrees with the comment that CARB has improperly piecemealed the project within the context of CEQA. As discussed on pages 31 and 32 of the Draft EA, the environmental analysis conducted is programmatic in nature and reviews the potentially significant environment effects of implementation of the proposed Draft Blueprint in its entirety. Furthermore, the Draft EA takes a conservative approach and overstates the anticipated adverse environmental impacts of implementation of the proposed Draft Blueprint. These impacts are discussed and, for CEQA compliance purposes, disclosed to be potentially significant and unavoidable. where appropriate. The detail required in any particular case depends on a multitude of factors including, but not limited to, the nature of the project, the directness or indirectness of the contemplated impact and the ability to accurately forecast the effects the project will have on the physical environment. (See Napa Citizens for Honest Government v. Napa County Bd. of Supervisors (2001) 91 Cal.App.4th 342, 369). CEQA does not require a lead agency to speculate regarding potential impacts where future conditions are unspecific and uncertain (refer to CEQA Guidelines section 15145), such as specific programs and rules that may be developed by local air districts that would be subject to extensive public involvement and local decision-making processes. Courts have consistently found that a related activity need not be treated as part of the project under review when the activity was not foreseeable, but was instead speculative or uncertain. This is especially so here, where the proposed Draft Blueprint explicitly is intended to structure further planning processes at the district level and cannot anticipate the precise results of those processes. Further, as individual air districts develop plans that consider for their respective jurisdiction, further CEQA documentation with each air district as the respective lead agency will be prepared as warranted. See Master Response 1 for additional information regarding the programmatic nature of the Draft EA.

3-3: The comment states that CARB failed to analyze reasonably foreseeable means of compliance and impacts from those commitments, which the comment asserts are not

speculative. The comment states incorrectly that CARB has committed itself to the project so to as effectively preclude the alternative of not going forward with the project and that CARB has improperly piecemealed the CEQA review because CARB excluded from programmatic review locally adopted compliance measures.

Response: The comment pertains to predicting and forecasting local air districts compliance strategies, which are yet undetermined. See Master Response 1. As stated above, the Draft EA includes a programmatic analysis of the reasonably foreseeable compliance responses associated with emission reduction strategies that could be anticipated to result in physical changes to the environment. CEQA requires an analysis of a project's reasonably foreseeable direct and indirect environmental impacts. However, the detail required in any particular case depends on a multitude of factors including, but not limited to, the nature of the project, the directness or indirectness of the contemplated impact and the ability to accurately forecast the effects the project will have on the physical environment. (See Napa Citizens for Honest Government v. Napa County Bd. of Supervisors (2001) 91 Cal.App.4th 342, 369). As outlined in CEQA Guidelines Section 15168, a programmatic analysis is appropriate in connection with issuance of a plan or other general criteria to govern the conduct of a program, the advantages of which include allowing the agency to evaluate broad policy alternatives and program-wide mitigation measures at an early time when the agency has greater flexibility to deal with basic problems or cumulative impacts and where the development of detailed, specific information is not yet feasible. (See Cal. Code Reg., tit. 14 Section 15168 and discussion in City of Hayward v. Trustees of California State Univ., 242 Cal. App. 4th 833, 849-850.)

For district programs, the proposed Draft Blueprint sets forth policies, requirements, and criteria for community emissions reduction programs. However, the individual strategies selected by the air districts will vary by air district and community. While the proposed Draft Blueprint provides criteria and broad guidance on the types of actions to be included in district air programs, the programs developed by local air districts in response to CARB's criteria, will involve extensive decision-making processes that cannot be forecasted with reasonable specificity. It would be wholly inconsistent with AB 617's community-oriented purposes, or the specific obligations CARB has to start these processes – but not to decide their outcomes in advance – to analyze purely hypothetical planning decisions at this point, and would not meaningfully inform the public. Moreover, any future district projects are contingent upon CEQA compliance, if required. Repeated statements are made in both the proposed Draft Blueprint and the Draft EA for preparation of future CEQA documents prior to district approval. For example, in its development and approval of a community emissions reduction program, air districts (as CEQA lead agencies) will be required to conduct CEQA compliance, as warranted.

CARB disagrees with the comment that CARB has improperly piecemealed the project. See Response 3-2. CARB also disagrees with the comment that CARB has "committed itself to the project to effectively preclude... the alternative of not going forward with the project." CARB included the No-Project Alternative to assist in the analysis and consideration of the proposed Draft Blueprint and the action alternatives for the same

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reasons that this type of alternative is called for in the State CEQA Guidelines. As noted in the CEQA Guidelines, "[t]he purpose of describing and analyzing a no-project alternative is to allow decision-makers to compare the impacts of approving the proposed project with the impacts of not approving the proposed project" (14 CCR Section 15126.6(e)(1)). The No-Project Alternative also provides an important point of comparison to understand the potential environmental benefits and impacts of the other alternatives. However, the No-Project Alternative would fail to meet statutory requirements of AB 617, such as the requirement to develop a process and criteria for the identification, assessment, and selection of communities for community emissions reduction programs and air monitoring and the fail to meet many of the project objectives listed in Chapter 2 of the Final EA. The overall goal of the proposed Draft Blueprint (as amended through September 14, 2018) is to improve local air quality in pollution-burden communities. To achieve this objective, the proposed Draft Blueprint (as amended through September 14, 2018) includes policies and measures that would be implemented at the local level by affected air districts throughout the state. Notably, there would be no process and criteria for the identification of pollution-burdened communities, and, as a result, there would be no community emission reduction programs would not be developed or implemented.

The approach to evaluating of the project in its entirety, including the anticipated environmental consequences of the reasonably foreseeable compliance responses to proposed Draft Blueprint, is adequate for programmatic analysis. No changes to the Draft EA are required in response to this comment. The comment has been noted and will be provided to the Board members for their consideration, but no further response is required.

3-4: The comment asserts that the Draft EA's conclusion that no physical environmental impacts could result from "incentive funding to support immediate emissions reductions" is false.

Response: The Draft EA provides a programmatic analysis of the reasonably foreseeable compliance responses to implementation of the proposed Draft Blueprint, which includes increased hydrogen and electric infrastructure and manufacturing facilities; lithium demand, recycling, and disposal; vehicle scrapping, recycling, or sale outside of California; and modifications to existing facilities and/or construction of new facilities, as requested by the commenter. Page 27 of the Draft EA concludes that deployment of the emission reduction strategy entailing use of incentive funding to support immediate emissions reductions would not likely result in a direct physical changes to the environment; however, as noted by the commenter, any physical changes to the environment occurring as a result of deployment of the aforementioned emission reduction strategy would be similar to those analyzed under other emission reduction strategies (e.g., Cargo Handling Equipment Amendment). These impacts are discussed and, for CEQA compliance purposes, disclosed to be potentially significant and unavoidable, where appropriate. See Master Response 1 for additional information regarding the programmatic nature of the Draft EA. Further analysis, if required, would be conducted during fund disbursement decisions at the district level. Contrary to the statements made in this comment, the requested analysis regarding the aforementioned compliance responses is included; however, the quoted text from page 27 of the Draft EA is intended to pertain to impacts associated with the incentive funding.

3-5: The comment states that CARB incorrectly excludes impacts associated with the implementation of community emissions reduction programs as it pertains to the installation of new control equipment and deployment of "cleaner vehicles" and the anticipated impacts of such regulatory actions. The comment asserts in so doing, CARB is underestimating adverse local air pollution impacts and overestimating the beneficial air pollution impacts.

Response: Part of the Draft EA's programmatic analysis of reasonably foreseeable compliance responses to implementation of the proposed Draft Blueprint includes the adoption and implementation of community emissions reduction programs at the local level by local air districts. Based on the existing air quality and community-specific needs, local air districts would develop and implement community emissions reduction programs that include a non-exclusive menu of emission reduction strategies considered appropriate to improve local ambient air quality in the community. Several air districts (refer to Letters 37 and 38) assert that the proposed Draft Blueprint should not attempt to extend CARB's authority into what the air districts consider to be their jurisdiction and responsibility to determine what new rules/regulations, incentives, and local land use and transportation strategies may be appropriate. CARB has an oversight role under AB 617, which it has fulfilled, but it is not purporting to extend its authorities beyond those authorized by statute.

That said, the Draft EA does generally evaluate the environmental impacts that may be associated with reasonably foreseeable compliance responses to the proposed Draft Blueprint, which include increased hydrogen and electric infrastructure and manufacturing facilities; lithium demand, recycling, and disposal; vehicle scrapping, recycling, or sale outside of California; and modifications to existing facilities and/or construction of new facilities. The analysis presented in the Draft EA encompasses the reasonably foreseeable environmental impacts of the emission reduction strategies presented in the proposed Draft Blueprint. Based on community-specific needs and challenges, local air districts would select emission reduction strategies to mitigate air pollution within their respective jurisdiction, consistent with the proposed Draft Blueprint. As such, the Draft EA takes a conservative approach and overstates the anticipated the adverse environmental impacts of implementation of the proposed Draft Blueprint. These impacts are discussed and, for CEQA compliance purposes, disclosed to be potentially significant and unavoidable, where appropriate. See Master Response 1 for additional information regarding the programmatic nature of the Draft EA.

The comment also states that CARB overestimates the beneficial environmental impacts associated with implementation of the proposed Draft Blueprint because the impacts associated with implementation of emission reduction strategies at the local level are not disclosed. As stated above, the Draft EA includes a programmatic analysis of the reasonable foreseeable compliance responses associated with the emission reduction strategies that would be anticipated to result in physical changes to the environment. Implementation of community emissions reduction programs would undergo project-level

environmental review by the air districts, and impacts would be identified and mitigated as appropriate with the respective air district serving as lead agency and tailoring the respective program to an area's conditions. See Master Response 1 for additional information regarding programmatic impact determinations in the Draft EA.

3-6: The comment states that implementation of the "incentive funding to support immediate emissions reductions" emission reduction strategy as well as community emissions reduction programs and the impacts associated with each should have been analyzed in the Draft EA.

Response: See responses to comments 3-4 and 3-5.

3-7: The comment states that CARB downplays the potential adverse environmental impacts of compliances responses to the proposed Draft Blueprint.

Response: See Master Response 1.

3-8: The comments states that the Draft EA's land use analysis is insufficient.

Response: See Master Response 1.

3-9: The comments states that the Draft EA's analysis for solid waste and hazardous materials is insufficient.

Response: The Draft EA evaluates the reasonably foreseeable operational impacts to solid waste generation and hazardous materials. The comment states that CARB's assertion that while implementation of the proposed Draft Blueprint could result in increases in the total amount of solid waste diverted to landfills, it would be unlikely that such an increase would be substantial enough to result in the closure of a landfill or construction of a new landfill. The Draft EA provides evidence that due to increased turnover of high-emission technologies and demand for recycled cobalt, recycling of materials could also increase. Although CARB makes the aforementioned statement regarding increased volume of solid waste disposal as a result of implementation of the proposed Draft Blueprint, the Draft EA ultimately concludes that implementation of the proposed Draft Blueprint could result in potentially significant long-term operationalrelated impacts to utilities and service systems (see page 82 of the Draft EA). Chapter 4 of the Draft EA provides a suite of project-level mitigation measures that could be enforced by a lead agency to reduce impacts to less-than-significant levels; however, because CARB lacks the authority to determine project-level impacts and require project-level mitigation, the Draft EA takes the conservative approach in its postmitigation significance conclusion and discloses, for CEQA compliance purposes, that long-term operational-related impacts to utilities and service systems associated with the proposed Draft Blueprint would be potentially significant and unavoidable. Thus, the analysis contained in Chapter 4 of the Draft EA provides an appropriate level of review.

3-10: The comment states that the less-than-significant impact determination under Impact 9-2, "Long-Term Operational-Related Effects to Hazards and Hazardous

Materials" (page 58 of the Draft EA) related to increased use of lithium batteries is insufficient.

Response: The commenter asserts that the Draft EA lacks substantial analysis to support the less-than-significant conclusion. In response to this comment, the following text changes have been made to the discussion following paragraph one on page 59 of Chapter 4 of the Draft EA as further evidence in support of the Draft EA's conclusions.

Lithium is the lightest solid metal. It can be absorbed into the body by inhalation of its aerosol and by ingestion and is corrosive to the eyes, the skin, and the respiratory tract. Lithium reacts violently with strong oxidants, acids, and many compounds (hydrocarbons, halogens, halons, concrete, sand, and asbestos) causing a fire and explosion hazard. In addition, lithium reacts with water, forming highly flammable hydrogen gas and corrosive fumes of lithium hydroxide. Lithium hydroxide represents a potentially substantial environmental hazard, particularly to water organisms.

However, lithium metal batteries contain no toxic metals. Besides lithium, other typical components of lithium-ion batteries are iron, phosphate, manganese, cobalt, and aluminum. The primary hazard posed by lithium and lithium-ion batteries is their ability to overheat and ignite, and once ignited, the resulting fires can be especially difficult to extinguish as temperatures can rapidly increase to up to 500 degrees Celsius (932 degrees Fahrenheit) as a result of interactions between a battery's cathodes and anodes. In cases where lithium-ion EV batteries ignite, the highly energetic active materials and flammable organic electrolytes may contribute to the exacerbation of a fire; however, when compared to the combustion of an internal combustion engine (ICE), the general behavior of an EV and ICE exposed to the same parameters of combustion demonstrate similar characteristics. For instance, both categories of vehicle exhibit similar degrees of external heat and emissions of several gases (i.e., CO₂, carbon monoxide, hydrocarbons, nitric oxide, nitrogen dioxide, hydrogen chloride, and hydrogen cyanide). However, due to components of lithium-ion batteries, emissions of hydrogen fluoride are substantially higher during EV combustion comparatively (Lecocq et al. 2012).

The general behavior of an EV and ICE exposed to the same parameters of combustion demonstrate similar characteristics. For instance, both categories of vehicle exhibit similar degrees of external heat and emissions of several gases (i.e., CO₂, carbon monoxide, hydrocarbons, nitric oxide, nitrogen dioxide, hydrogen chloride, and hydrogen cyanide). However, due to components of lithium-ion batteries, emissions of hydrogen fluoride from the combustion of of an EV as compared to an ICE of different components; however, when combusted, LiPF₆, does not release oxygen, which is highly flammable (Lecocq et al. 2012, Fredrik Larsson et al. 2017, Nedjalkov et al. 2016). It is possible, therefore, that increased deployment of EVs as a result of the proposed Draft Blueprint could increase the possibility of localized emissions of hydrogen

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fluoride following the combustion of an EV, which would be powered by lithiumbased electric batteries. Notably, the likelihood of combustion of an EV would not be greater as compared to an ICE; therefore, release of hazardous pollutants, or exposure to dangerous temperatures associated with combustion of ICEs or EVs would be similar (Lecocq et al. 2012).

In addition, lithium-ion batteries may be recycled, and due to increasing demand for EVs and technologies coupled with high demand for limited cobalt supply, rates and volume of lithium-ion battery recycling has increased (USGS 2017a). To date, there are ten specialized companies processing and recycling lithiumion batteries in the U.S. and Canada. At present, recycling activities for lithiumion batteries primarily serve to conserve cobalt, which by comparison, is a rarer material (U.S. EPA 2013). Due to the expense of cobalt mining, limited cobalt ore, and social-justice issues associated with the cobalt industry, the recycling of lithium containing such elements has risen in recent years. Disposal of lithiumion batteries within the State would be required to comply with California's Hazardous Waste Control Law and implementing regulations, including but not limited to Universal Waste Rule (22 CCR Chapter 23), which prohibits the disposal of used batteries to solid waste landfills. (See also 60 FR 25492-01 at 25505 for discussion of Universal Waste Rule) Instead, batteries may be reused, recycled, or disposed of as hazardous waste in compliance with existing laws and regulations. For example, the California Department of Resource Recycling and Recovery in conjunction with the California Department of Toxic Substances and Control regulate battery disposal in California.

EVs introduced to the transportation sector as a result of the implementation of the proposed Draft Blueprint could reduce reliance on fossil fuel-powered vehicles, which could result in decrease demand for gasoline, diesel, and CNG as well as the activities required to extract them. The process of extracting oil and gas presents numerous opportunities for the introduction of hazardous materials to human and natural environments. Oil and gas extraction requires the use of chemicals that can be harmful to human and biological health and produces toxic wastewater and air contaminants. Additionally, accidental release of oil and gas products may occur during distribution through piping and freight, which introduces hazards including pollution and explosion. Through the use of EVs under the proposed Draft Blueprint, these hazards associated with oil and gas extraction and distribution would be less and demand for ICE vehicles decreases.

The following text changes have been made to the Draft EA starting in paragraph two on page 60 in Chapter 4.

Thus, because ILithium-batteries and hydrogen fuel cell systems are designed to reduce the potential for hazardous conditions associated with transport-and, use, and disposal, and because regulations exist to ensure that lithium-ion batteries are disposed of appropriately, operational-related effects to hazards and hazardous materials associated with the proposed Draft Blueprint would be **less than significant**.

The following references have been added to page 125 of Chapter 8 of the Draft EA:

<u>Fredrik, Larsson, Petra Andersson, Per Blomqvist, and Bengt-Erik Mellander.</u> <u>2017. Toxic Fluoride Gas Emissions from Lithium-Ion Battery Fires.</u> <u>Science Reports. Available: https://www.nature.com/articles/s41598-017-09784-z.pdf. Accessed: August 2018.</u>

Nedjalkov, Antonio, Jan Meyer, Michael Kohrin, Alexander Doering, Martin Angelmahr, Sebastian, Andrea Sander, Axel Fischer, and Wolfgang Schade. 2016. Toxic Gas Emissions from Damaged Lithium Ion Batteries—Analysis and Safety Enhancement Solution. *Batteries*, 2 (5): pp. 1-10. Available: www.mdpi.com:8080/2313-0105/2/1/5/pdf. Accessed: August 2018.

The following reference has been added to page 126 of Chapter 8 of the Draft EA:

U.S. Environmental Protection Agency. 2013 (April). Application of Life-Cycle Assessment of Nanoscale Technology: Lithium-Ion Batteries for Electric Vehicles. EPA 744-R-12-001. Available: <u>https://www.epa.gov/sites/production/files/2014-</u> 01/documents/lithium_batteries_lca.pdf. Accessed: August 2018.

The addition of the text above substantiates the existing hazards and hazardous materials discussion in response to Comment 3-10. Because CARB lacks the authority to determine project-level impacts and require project-level mitigation, the Draft EA takes the conservative approach in its post-mitigation significance conclusion and discloses, for CEQA compliance purposes, that long-term operational-related impacts to hazards and hazardous materials associated with the proposed Draft Blueprint would be potentially significant and unavoidable. Moreover, the proposed Draft Blueprint itself will not directly cause any of these impacts, as it is a planning document that forecasts certain responses that may occur as regulations are further developed; the degree of disclosure it nonetheless offers is therefore more than appropriate.

3-11: The comment states that the less-than-significant impact determination under Impact 15-1, "Short-Term Construction-Related and Long-Term Operational-Related Effects to Public Services" (pages 75 through 76 of the Draft EA) is insufficient.

Response: The comment argues that the Draft EA's analysis which asserts that the deployment of the proposed Draft Blueprint would not introduce population growth such that a substantial effect on public services would occur. The commenter argues that increased construction and operation of manufacturing facilities, hydrogen fueling and electric vehicle infrastructure, and use of hydrogen fuel cells and electric vehicles would place significant demand on public services which could produce a potentially significant impact. As discussed in the additional text under Response to Comment 3-10 lithiumion batteries and internal combustion engines (ICEs) exhibit similar characteristics upon combustion. Furthermore, electric vehicles (EVs) are not considered more prone to combustion as compared to light- and heavy-duty vehicles supported by ICEs. As such,

the deployment of EVs to the transportation sector would not introduce a substantial increase in mobile-sources of combustion requiring additional resources from state and local fire agencies. Thus, the analysis contained in Chapter 4 of the Draft EA provides an appropriate level of review. See Master Response 1 for additional information regarding the programmatic nature of the Draft EA.

3-12: The comment summarizes the assertion that the Draft EA's evaluation of the aforementioned resource areas listed in Comment 3-8 through 3-11 is insufficient.

Response: This document provides responses to all substantial environmental comments. See Responses to Comments 3-8 through 3-11.

3-13: The comment asserts that the deficiencies in the analysis contained in the Draft EA trigger recirculation of the Draft EA for additional public disclosure and comment.

Response: The Final EA released in conjunction with the Responses to Comments document reflect the text changes listed above under Response to Comment 3-10. The Final EA and Responses to Comments document was released to the public on September 14, 2018 in compliance with the requirements under CARB's certified regulatory program and California Code of Regulation, title 14, Section 15088. As noted through this Final EA and Response to Comments document and as stated above in Section 1, no new significant information has been presented that would necessitate substantive revisions to the Draft EA or new or substantially more significant impacts, which would then necessitate recirculation of a revised EA. The analysis presented in the Draft EA, as amended through Responses to Comments, is considered reasonable and appropriate, and recirculation is not required.

Comment Letter 4	Reheis-Boyd, Catherine
July 19, 2018	Western States Petroleum Association

4-1: The comment states that the analysis contained in the Draft EA does not meet the statutory requirements of CEQA and leaves "many questions unanswered."

Response: Chapter 4 of the Draft EA provides an evaluation of the environmental effects of the proposed Draft Blueprint and offers mitigation measures where appropriate which, when implemented by a lead agency, could reduce the severity of significant environment effects. This comment contains no specific issues for which a further response is required.

4-2: The comment serves as an introduction to subsequent of comments, which are responded to below.

Response: This comment is noted and no further response is required.

4-3: The comment states that CARB does not include an analysis of the cost-effectiveness and feasibility in the Draft EA.

Response: The Draft EA contains a programmatic and comprehensive analysis of the environmental effects that could occur from the implementation of the proposed Draft Blueprint. The programmatic nature of the analysis does not allow for a precise description of the cost of implementing projects (e.g., community emissions reduction programs) under the proposed Draft Blueprint as such projects have yet to be compiled, and AB 617 does not require such an analysis at this phase. The proposed Draft Blueprint serves as a guidance document for local air districts, who would, based on their local air quality needs, topography, and meteorology, develop a comprehensive strategy to reduce emissions using various emission reduction strategies in addition to other emission reducing measures not identified in the proposed Draft Blueprint. Potentially such actions would be considered a project under CEQA and would be required to undergo project-level environmental review, wherein the cost-effectiveness and feasibility of implementing certain of the reasonably foreseeable compliance responses under the proposed Draft Blueprint would be assessed. Thus, the analysis contained in the Draft EA provides an appropriate level of review based on the programmatic requirements of CARB's certified regulatory program. See Master Response 1 for more information regarding the programmatic nature of the Draft EA.

4-4: The comment expresses concern regarding effects to city, county, and regional planning agencies' control from implementation of the proposed Draft Blueprint. The commenter states that the CARB does not adequately address the impacts associated with potential land use and transportation strategies that may or may not be adopted at the local level.

Response: As discussed in Chapter 4 on page 32 of the Draft EA, CARB does not have the land use authority to implement land use strategies or the authority to implement project-level mitigation measures. Furthermore, development of community

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emissions reduction programs would entail robust public engagement involving all stakeholders including other local agencies separate from air districts. Through engagement with other agencies invested in improving the health and welfare of local communities, as directed by the proposed Draft Blueprint, adverse impacts associated with land use and transportation strategies would be reduced. Additionally, projects implemented as reasonably foreseeable compliance responses to the proposed Draft Blueprint would undergo project-level environmental review where project-specific environmental impacts would by identified and mitigated where feasible. As such, the Draft EA takes a conservative approach and overstates the anticipated the adverse environmental impacts of implementation of the proposed Draft Blueprint. These impacts are discussed and, for CEQA compliance purposes, disclosed to be potentially significant and unavoidable, where appropriate. See Master Response 1 for additional information regarding the programmatic nature of the Draft EA.

4-5: The comment asserts that CARB should not emphasize or promote the use of zero-emission technologies over other potentially feasible emissions reduction strategies. The commenter argues that other emission reduction strategies can be as effective as zero-emission technologies.

Response: This comment relates to the cost-effectiveness of zero-emission technologies compared to near-zero emission technologies. The Draft EA analyzed the environmental effects of the measures as discussed in the proposed Draft Blueprint, not economic effects. Therefore, no changes to the Draft EA are required in response to this comment. State goals include encouraging the use of zero-emission technology where feasible. In emphasizing that air districts focus on zero-emission technology where feasible, the proposed Draft Blueprint is consistent with these goals. However, the proposed Draft Blueprint specifies on page C-17 that air districts must consider cost-effectiveness when developing emission reduction strategies for inclusion in Community Emissions Reduction Programs.

4-6: The comment suggests that the analysis prepared for the Draft EA is not full or fair, and underestimates the impacts of the adoption and implementation of the proposed Draft Blueprint.

Response: See Master Response 1.

4-7: This comment is a duplicate of comment 3-1.

Response: See response to comment 3-1.

4-8: This comment is a duplicate of comment 3-2.

Response: See response to comment 3-2.

4-9: This comment is a duplicate of comment 3-3.

Response: See response to comment 3-3.

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4-10: This comment is a duplicate of comment 3-4.

Response: See response to comment 3-4.

4-11: This comment is a duplicate of comment 3-5.

Response: See response to comment 3-5.

4-12: This comment is a duplicate of comment 3-6.

Response: See response to comment 3-6.

4-13: This comment is a duplicate of comment 3-7.

Response: See response to comment 3-7.

4-14: This comment is a duplicate of comment 3-8.

Response: See response to comment 3-8.

4-15: This comment is a duplicate of comment 3-9.

Response: See response to comment 3-9.

4-16: This comment is a duplicate of comment 3-10.

Response: See response to comment 3-10.

4-17: This comment is a duplicate of comment 3-11.

Response: See response to comment 3-11.

4-18: This comment is a duplicate of comment 3-12.

Response: See response to comment 3-12.

4-19: This comment is a duplicate of comment 3-13.

Response: See response to comment 3-13.

Comment Letter 5	Valdemar, Mary
July 21, 2018	San Bernardino Valley College Sustainability Committee

5-1: The comment states that considering the public health impacts, zero-emission technology should be prioritized in the proposed Draft Blueprint.

Response: Zero-emission technologies are prioritized in the proposed Draft Blueprint, though their implementation pathways will be considered further in later processes. The proposed Draft Blueprint states that CARB staff are developing new regulations with a "focus on zero-emission technologies where the technologies are now feasible" (see pages 19 and 20).

This comment does not address the adequacy, accuracy, or completeness of the Draft EA and no changes to the Draft EA are required in response to this comment. The comment has been noted and will be provided to the Board members for their consideration, but no further response is required.

Comment Letter 10	Savage, Christopher
July 23, 2018	Manufacturers Council of the Central Valley

10-1: The comment states that the CEQA process needs to be improved to allow for further and more in-depth analysis of health-related issues.

Response: The comment presents the commenter's opinion regarding the way lead agencies comply with CEQA statute and guidelines. The comment does not pertain to the analysis of the Draft EA but rather an assessment of the broader intent of CEQA and potential need for further amendments to the scope of CEQA. No further response is required.

Comment Letter 12	Masetti, Nick
July 23, 2018	Individual

12-1: The comment states that there is no system in place to reconcile an EIR's claims with the actual outcome to see if the analysis was accurate. The commenter recommends that the proposed Draft Blueprint include an element that requires all projects implemented under the proposed Draft Blueprint which are subject to CEQA to complete a follow-up study to ensure that the assessments of the CEQA-document were accurate.

Response: Federal and state statues do not require post-project vetting of a CEQAdocument. Analysis contained within an EIR is based on project characteristics and established modeling techniques, including models approved by the U.S. Environmental Protection Agency (U.S. EPA), CARB, and local air districts. An EIR's accuracy is vetted during the mandatory public comment period. This is the period where commenters review the document and can bring substantial evidence to show that the EIR's claims are incorrect or suggest potential shortfalls of the analysis. Once an EIR has been certified, it is determined to be accurate and complete.

Furthermore, EIRs contain mitigation measures which are designed to be specific, enforceable, and to demonstrably reduce impacts to a less-than-significant level. Any mitigation measures adopted are implemented and monitored for the potential impact period, in accordance with Mitigation Monitoring and Reporting Plan (MMRP). MMRPs provide additional information about how impacts were reduced, as requested by this comment.

Beyond the suggestion for follow-up studies, this comment does not address the adequacy, accuracy, or completeness of the specific Draft EA and no changes to the Draft EA are required in response to this comment. The comment has been noted and will be provided to the Board members for their consideration, but no further response is required.

Comment Letter 19	Torres, Paulina
July 23, 2018	Center on Race, Poverty, & the Environment

19-1: The comment provides an introductory statement that the Draft EA fails to adequately analyze a reasonable range of alternatives and does not include an accurate description of the proposed Draft Blueprint's environmental setting. Specifically, the commenter requests CARB to analyze an alternative that includes the implementation of a statewide setback on all oil and gas operations in California.

Response: This comment presents a summary of the more specific responses presented later in this letter. See responses to the more detailed comments in responses to comments 19-2 and 19-3, below.

19-2: The comment states that the Draft EA's alternatives analysis is too narrow and fails to analyze viable and reasonable alternatives that meet the project objectives. The comment suggests that the implementation of a statewide setback on all oil and gas operations would satisfy the project objective of providing regulatory measures that CARB could undertake.

Response: CARB need not consider all possible alternatives to this programmatic document; nor does the commenter offer evidence that the proposed setback alternative (even if appropriate) would reduce the environmental impacts of the project, as opposed to the environmental impacts of oil and gas operations. Although the commenter's policy preferences may be raised in later proceedings, they were not required to be considered for CEQA purposes.

Moreover, contrary to the commenter's assertion, implementation of a statewide setback by CARB as a land use measure is not a potentially feasible alternative, as those terms are defined in CEQA. CARB is not a land-use agency, and does not generally have authority to formally zone operations in this way. In addition, because there are many localized factors that can affect pollutant levels such as a region's topography, meteorology, and vegetation, creating implementation problems for a statewide measure. Thus, a setback distance that may be appropriate in one air district may not be appropriate in another air district. CARB does, however, continue to explore ways to further reduce air pollution impacts, including those from oil and gas operations, and is conducting a research program (the Study of Neighborhood Air Near Pollution Sources, or SNAPS) to learn more about these issues, including whether particularly stringent controls are warranted near certain sensitive receptors. Local air districts have a better understanding of the air basin in which they are situated and can better define appropriate setback distances and buffer zones, to the extent such regulations are in their jurisdictions, for their jurisdiction.

Additionally, the commenter's suggestion for oil and gas setbacks does not constitute a new alternative because setbacks are discussed as part of the proposed Draft Blueprint. Page 15 - 16 of the proposed Draft Blueprint states that CARB is providing specific guidance and direction on the process for air districts to work with the community steering committee to identify emission reduction strategies such as how to engage with

"local agencies on land use and transportation strategies such as setbacks, buffer zones, and alternative truck routing."

19-3: The comment states that the Draft EA fails to include adequate discussion of oil and gas operations in California, and their disproportionate impact on disadvantaged communities.

Response: CEQA is intended to analyze a project's physical impacts on the environment; however there is no requirement to include discussion of the location of oil and gas operations in relation to disadvantaged communities within the environmental setting of the Draft EA. Furthermore, future projects implemented under the proposed Draft Blueprint would undergo project-level analysis which would examine the proximity of specific projects to sensitive receptors, considering the cumulative nature of air quality impacts and existing localized TAC levels. No changes to the Draft EA are required in response to this comment.

19-4: The comment provides a summary of the comment letter and requests that should CARB decline to consider the proposed alternative regarding implementation of a statewide setback on all oil and gas operations in California, an explanation should be provided as to why further consideration of the alternative was rejected.

Response: See response to comment 19-2.

Comment Letter 21	May, Julia
July 23, 2018	Communities for a Better Environment

21-1: The comment urges the Bay Area Air Quality Management District to include a comprehensive health and safety assessment in the Final EIR of Rule 12-16. The comment letter includes findings from a group of independent health experts who estimated in 2017 that communities within 2.5 miles of refineries face a disparately severe fine particulate matter (PM_{2.5}) mortality risk from refinery emissions as much as 8–12 times that of the Bay Area population as a whole.

Response: The comment letter is Attachment C of Docket Item 25 and does not directly pertain to AB 617, nor does it address the adequacy, accuracy, or completeness of the Draft EA and no changes to the Draft EA are required in response to this comment. The comment is noted and will be provided to the Board members for their consideration, but no further response to this comment is required.

Comment Letter 25	May, Julia
July 23, 2018	Communities for a Better Environment

25-1: The comment requests a holistic evaluation of sources such that regulations for individual facilities/sources include considerations for other sources in the area.

Response: As discussed on page C-11 of the proposed Draft Blueprint, air districts will conduct a technical assessment as part of the development of a Community Emission Reduction Program. The assessment will include a description of the air pollution exposure burden in the community, the sensitive receptors located in the community, and the community emissions inventory. As part of this work, the assessment will include a source attribution of the share of mobile, area-wide, and stationary source emissions contributing to the ambient air quality burden in the community..." As discussed on page C-12 of the proposed Draft Blueprint, "[t]his task is necessary for identifying the applicable pollutants, emission sources for these pollutants, and the magnitude of the local pollutant impacts to be addressed by source type within the community emissions reduction programs."

Beyond the recommendation to consider the cumulative impacts of multiple sources of pollution impacting a community, this comment does not address the adequacy, accuracy, or completeness of the Draft EA, and no changes to the Draft EA are required in response to this comment. The comment has been noted and will be provided to the Board members for their consideration, but no further response is required.
Comment Letter 26	Whittick, Janet
July 23, 2018	California Council for Environmental and Economic Balance

26-1: The comment introduces the concept emissions reduction targets include feasible and cost-effective measures and include actual community engagement beyond the recommended five-year planning horizon.

Response: See Response to Comment 26-3.

26-2: The comment provides a summary of key comments that are discussed further within the comment letter. The comment contends that the Draft EA does not conform to the proposed Draft Blueprint and omits analysis of foreseeable impacts from implementation of the proposed Draft Blueprint.

Response: See Master Response 1.

26-3: The comment requests that quantitative emissions reduction targets be developed and include feasible and cost-effective measures and include actual community engagement beyond the recommended five-year planning horizon.

Response: This comment relates to the cost-effectiveness of the emission reduction strategies local air districts will include in community emissions reduction programs in order to meet the targets. The Draft EA analyzed the environmental effects of the measures as discussed in the proposed Draft Blueprint, not economic effects. Therefore, no changes to the Draft EA are required in response to this comment. The proposed Draft Blueprint establishes a process for air districts to develop appropriate numerical targets for each community emissions reduction program based on the air quality objective determined in the program. Cost-effectiveness does not enter into the question of target-setting, which is an air quality and public health question. Consistent with the request of the commenter, the proposed Draft Blueprint (see page C-17) also specifies that air district must consider cost-effectiveness when developing emission reduction strategies for inclusion in community emissions reduction programs.

26-4: The comment requests alternatives to zero-emission technology to allow for effective engagement with the public and stakeholders.

Response: See Response to Comment 4-5.

26-5: The comment states that the Draft EA fails to assess all reasonably foreseeable means of compliance with the proposed Draft Blueprint and that the Draft EA should analyze multitude of local air district and agency compliance measures.

Response: See Master Response 1.

Comment Letter 27	Tsai, Stephanie
July 23, 2018	California Environmental Justice Alliance

27-1: The comment recommends that all community emissions reduction programs be required to result in substantial and quantifiable annual reductions that are above and beyond what is already required by existing law and regulations and ensure no net increase in criteria air pollutant and TAC emissions.

Response: The comment pertains to the community emissions reduction programs, as described in Section VIII of the proposed Draft Blueprint. AB 617 tasks the air districts with developing and implementing community emissions reduction programs. Required elements of the programs include specific air quality objectives for reducing exposure caused by local sources within the community, measurable targets, and near-term deadlines. CARB, air districts, and community members would work together to track and report metrics of progress.

This comment does not address the adequacy, accuracy, or completeness of the Draft EA and no changes to the Draft EA are required in response to this comment. The recommendation to ensure no net increase in criteria pollutant and TAC emissions has been noted and will be provided to the Board members for their consideration, but no further response is required.

27-2: The comment recommends that all AB 617 related actions, funding, regulatory, and permitting decisions require zero-emission solutions wherever possible.

Response: See response to comment 5-1.

27-3: The comment recommends implementation of a statewide setback of 2,500 feet around all oil and gas wells.

Response: See response to comment 19-2.

27-4: The comment requests that CARB update the *Air Quality and Land Use Handbook* to ensure that it provides guidance on specific strategies for addressing cumulative pollution burdens. Example strategies include using Cal EnviroScreen indicators, setting health-based community of census level exposure thresholds for new or expanded facilities, including pollution burdens cause by indirect sources, and prioritization of targeted enforcement activities in areas with high cumulative pollution burdens. The comment recommends that CARB require air districts to consider these strategies in their community emissions reduction programs.

Response: This policy argument will be considered, but does not address the adequacy of the draft EA. At this time CARB is not planning to update the *Air Quality and Land Use Handbook*; which is a guidance document, not a regulation. However additional resources are available on CARB's website including a 2017 CARB technical advisory to supplement the *Air Quality and Land Use Handbook*. CARB is also conducting a study of neighborhood exposure to oil and gas pollution which may inform

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further guidance or regulatory measures. In addition, CARB staff are preparing a freight handbook that identifies best practices for sitting, design, construction, and operation of freight facilities. The proposed Draft Blueprint acknowledges the cumulative air pollution burdens in disadvantaged communities and provides guidelines for the assessment of cumulative air quality impacts on page C-11. Page 18 of the proposed Draft Blueprint states: "identifying effective solutions will require multiple strategies at both the statewide and local level to deliver emission and exposure reductions directly within these communities, as well as the steps necessary to avoid decisions that have the potential to create new burdened communities (e.g., new or expanded warehouses that place warehouses next to homes and result in large volumes of truck traffic through communities)."

This comment does not address the adequacy, accuracy, or completeness of the Draft EA and no changes to the Draft EA are required in response to this comment. The recommendation to require air districts to consider cumulative analysis strategies in their community emissions reduction programs has been noted and will be provided to the Board members for their consideration, but no further response is required.

27-5: The comment suggests that CARB should provide a list of specific prescriptive strategies to reduce emissions and exposure in communities and require air districts to implement them immediately, before community emissions reduction programs are developed and approved.

Response: The proposed Draft Blueprint includes a suite of emission reduction strategies that could be considered by local air districts in consultation with the community steering committee and implemented following the adoption of a community emission reduction program. Due to variation in the topography, meteorology, and emission sources throughout the state, local air districts, in consultation with the community steering committee, would develop programs utilizing appropriate emission reduction strategies to reduce emissions of criteria air pollutants and TACs locally and regionally.

This comment does not address the adequacy, accuracy, or completeness of the Draft EA and no changes to the Draft EA are required in response to this comment. The recommendation to require air districts to implement CARB-prescribed emission reduction measures immediately has been noted and will be provided to the Board members for their consideration, but no further response is required.

Comment Letter 29	Gale, Genevieve
July 23, 2018	San Joaquin Valley's AB 617 Environmental Justice Steering
-	Committee

29-1: The comment pertains to the Community Steering Committees described in the proposed Draft Blueprint. The commenter suggests that public meetings must ensure equal language access for meaningful participation through providing language interpretation services at every meeting, translated materials, and through making information available in a variety of ways and means.

Response: This comment does not address the adequacy, accuracy, or completeness of the Draft EA and no changes to the Draft EA are required in response to this comment. The comment has been noted and will be provided to the Board members for their consideration, but no further response is required

As discussed on pages C-6 through C-10 and E-7 through E-8 of the proposed Draft Blueprint, when developing community air monitoring plans and community emissions reduction programs, air districts are required to have a robust public process, including the establishment of community steering committees that must be comprised primarily of community members. As stated, the purposed of the community steering committee is to support active community involvement and collaboration. As specified in the proposed Draft Blueprint, part of the steering committees responsibility will be to establish the appropriate "use of interpretation services at community steering committee meetings and boarder public outreach efforts." Additional air district requirements specified in the proposed Draft Blueprint in regards to their broader public outreach efforts are also designed to ensure effective community participation (e.g., coordinate with community-based organizations to determine appropriate place and time for meetings, provide interpretation services, designate a contact person, summarize outreach results, etc.).

29-2: The comment pertains to the Community Steering Committees described in the proposed Draft Blueprint. The commenter suggests minimum requirements for community meetings to ensure meaningful engagement (i.e., participatory format, held in the evening, food and childcare provided, located within the community, language-services, materials provided in advance).

Response: This comment does not address the adequacy, accuracy, or completeness of the Draft EA and no changes to the Draft EA are required in response to this comment. The comment has been noted and will be provided to the Board members for their consideration, but no further response is required. See Response to Comment 29-1.

29-3: The comment suggests that CARB should include specific strategies to reduce emissions and exposure from agricultural sources in communities and require air districts to monitor air quality of these sources, and community emission reduction programs to include enforceable strategies to implement them.

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Response: The proposed Draft Blueprint includes a suite of emission reduction strategies that could be considered by local air districts in consultation with the community steering committee and implemented following the adoption of a community emission reduction program. Due to variation in the topography, meteorology, and emission sources throughout the state, local air districts, in consultation with the community steering committee, would develop programs utilizing appropriate emission reduction strategies to reduce emissions of criteria air pollutants and TACs locally and regionally. CARB concurs that agricultural communities have particular air pollution problems that require specific focus as CERPs are developed. CARB notes that some of these issues – such as exposure to pesticides – fall into the jurisdiction of several different agencies, and so cannot be addressed by CARB alone. It may be appropriate to explore coordinated efforts as CERPs are developed.

This comment does not address the adequacy, accuracy, or completeness of the Draft EA and no changes to the Draft EA are required in response to this comment. The recommendation to require air districts to implement CARB-prescribed emission reduction measures immediately has been noted and will be provided to the Board members for their consideration, but no further response is required.

29-4: The comment recommends implementation of a statewide setback of 2,500 feet around all oil and gas wells.

Response: See response to comment 19-2.

Comment Letter 32	Wilson, Michael
July 23, 2018	BlueGreen Alliance

32-1: The comment recommends that the proposed Draft Blueprint include a discussion of the effects of BARCT rules on employment.

Response: Initially, a review and potential update of BARCT regulations is required by AB 617 independent of the proposed Draft Blueprint, would occur with or without this project, and so is outside of its required analytic scope. To the extent that the proposed Draft Blueprint in anyway is deemed to influence this process, the Draft EA evaluates impacts to employment, population, and housing on pages 74 and 75 of Chapter 4 and concludes that implementation of the proposed Draft Blueprint would have a less-than-significant impacts on these resources. In response to comment 32-1, the following text is added to the discussion following paragraph one on page 75 of the Draft EA:

Increased deployment of BARCT regulations, though primarily required by AB 617 independent of the Draft Blueprint, could occur as a result of implementation of the proposed Draft Blueprint, and if so, could introduce additional employment opportunities to California workers as well as increased demand for apprenticeship training; however, use to BARCT regulations potentially could also result in the displacement of employment opportunities in limited circumstances, in the very unlikely event that they changed business production patterns and locations very substantially. It would be expected that use of BARCT regulations would be deployed at a rate such that an adequate local employment base would be available to meet such demand. It would be anticipated that additional employment opportunities associated with BARCT regulations would not adversely affect housing availability in communities within the proximity of stationary sources requiring BARCT regulations.

The additional text would not affect the Draft EA's significance conclusion regarding employment, population, and housing. The analysis performed in the Draft EA has been updated; however, impacts to employment, population, and housing would remain less than significant. No further response is required.

32-2: The comment recommends that the Draft EA include additional language requiring CARB to include an assessment of the potential impacts of selected BARCTs on worker safety and health.

Response: Again, per Response to 32-1, districts will establish BARCT regulations in response to statutory obligations, rendering this comment outside the required analytic scope for the Draft EA; such district rulemaking processes will consider these matters as appropriate. Nonetheless, in response to comment 32-2, the following text is added to the discussion following the additional language provided in response to comment 32-3 below proceeding the paragraph containing the significance conclusion on page 60 of the Draft EA:

Community Air Protection Blueprint Environmental Analysis Response to Comments

Deployment of BARCT rules could result in exposure of workers to hazardous chemicals resulting in toxic and adverse working conditions. However, compliance with laws and policies enforced by state and federal agencies (e.g., Occupational Safety and Health Administration, Division of Occupational Safety and Health [DOSH or Cal/OSHA]) would ensure a safe work environment for employees administering controls or technologies potentially required by BARCT rules for stationary sources. As such, increased use of BARCT rules would not be expected to result in the exposure of workers to hazardous workplace conditions.

The additional text would not alter the significance conclusion regarding hazards and hazardous materials. Also refer to the additional text incorporated in response to comment 3-10 for additional information related to hazards and hazardous materials.

32-3: The comment states that the proposed Draft Blueprint should include discussion of hierarchy of hazard controls and inherent safety measures required under the state's process safety management (PSM) regulations in the context of BARCT.

Response: Again, per Response to 32-1, districts will establish BARCT regulations in response to statutory obligations, rendering this comment outside the required analytic scope for the Draft EA; such district rulemaking processes will consider these matters as appropriate. Nonetheless, in response to comment 32-3, the following text is added to the discussion following paragraph one proceeding the additional text provided in response to comment 32-2 above on page 60 of the Draft EA:

While CARB will provide some guidance on the development of BARCT regulations, including their use in communities selected for emission reduction programs, the regulatory development of BARCT rules for stationary sources would be implemented by local permitting agencies. District permit programs for stationary sources are conditionally authorized by Section 42300 of the California Health and Safety Code. Regulations which just follow Section 42300 provide the minimum standards and constraint of any district permit program. Each air district has its own set of regulations consistent with state requirements that govern the siting process. Further, prior to the issuance of permits, new project siting using BARCT would be required to undergo CEQA evaluation led by an appropriate lead agency (e.g., a local planning department). Compliance with the hierarchy of stationary source regulations would ensure that environmental effects associated with BARCT rules would be mitigated.

The additional text would not alter the significance conclusion regarding hazards and hazardous materials. Also refer to the additional text incorporated in response to comment 3-10 for additional information related to hazards and hazardous materials.

Comment Letter 37	Tsai, Stephanie
August 2, 2018	California Environmental Justice Alliance

The comment letter was received after the close of the public review period, and does not require a response pursuant to PRC Section 21091(d)(1). However, though not required to do so, CARB is choosing to respond to the comment to provide further clarity consistent with the purposes of CEQA.

37-1: The comment recommends that all community emissions reduction programs be required to result in substantial and quantifiable annual reductions that are above and beyond what is already required by existing law and regulations and ensure no net increase in criteria air pollutant and TAC emissions.

Response: See response to comment 27-1.

37-2: The comment recommends that all AB 617 related actions, funding, regulatory, and permitting decisions require zero-emission solutions wherever possible.

Response: See response to comment 27-2..

37-3: The comment recommends implementation of a statewide setback of 2,500 feet around all oil and gas wells.

Response: See response to comment 27-3..

37-4: The comment requests that CARB update the *Air Quality and Land Use Handbook* to ensure that it provides guidance on specific strategies for addressing cumulative pollution burdens. Example strategies include using Cal EnviroScreen indicators, setting health-based community of census level exposure thresholds for new or expanded facilities, including pollution burdens cause by indirect sources, and prioritization of targeted enforcement activities in areas with high cumulative pollution burdens. The comment recommends that CARB require air districts to consider these strategies in their community emissions reduction programs.

Response: See response to comment 27-4.

37-5: The comment suggests that CARB should provide a list of specific prescriptive strategies to reduce emissions and exposure in communities and require air districts to implement them immediately, before community emissions reduction programs are developed and approved.

Response: See response to comment 27-5.

Comment Letter 38	Marquez, Jesse
August 3, 2018	Coalition for a Safe Environment

The comment letter was received after the close of the public review period, and does not require a response pursuant to PRC section 21091(d)(1). However, though not required to do so, CARB is choosing to respond to the comment to provide further clarity consistent with the purposes of CEQA.

38-1: The comment recommends that the proposed Draft Blueprint include new permit requirements and additional CEQA project review for mitigation compliance.

Response: CEQA documents contain mitigation measures which are designed to be specific, enforceable, and to demonstrably reduce impacts to a less-than-significant level. Any mitigation measures adopted are implemented and monitored for the potential impact period, in accordance with an MMRP. MMRPs provide additional information regarding mitigation compliance, as requested by this comment.

The remainder of this comment does not address the adequacy, accuracy, or completeness of the Draft EA and no changes to the Draft EA are required in response to this comment. The recommendation to include new permit requirements and additional CEQA review has been noted and will be provided to the Board members for their consideration, but no further response is required.

38-2: The comment requests that project mitigation requirements to use small businesses which offer zero emission, emission capture and treatment technologies, and BACT and BARCT are enforced.

Response: It is unclear what the commenter is suggesting, which specific projects the commenter is refereeing to, or whether the commenter is referring to mitigation measures within the Draft EA.

The Draft EA discusses the enforceability of mitigation measures on page 1 and states: "[p]otentially significant environmental effects may occur because of compliance actions taken in response to elements of the proposed Draft Blueprint. Mitigation measures are described in this Draft EA that could reduce potentially significant impacts to less-thansignificant levels for individual projects, if agencies with discretionary authority adopt the mitigation measures identified to reduce proposed Draft Blueprint-related impacts. The Draft EA takes a reasonably conservative approach in its post-mitigation significance conclusions (i.e., tending to overstate the risk that feasible mitigation may not be sufficient or may not be implemented by other parties) and discloses, for CEQA compliance purposes, that potentially significant environmental impacts may be unavoidable."

The remainder of this comment does not address the adequacy, accuracy, or completeness of the Draft EA and no changes to the Draft EA are required in response to this comment. The comment has been noted and will be provided to the Board members for their consideration, but no further response is required.

Community Air Protection Blueprint Environmental Analysis Response to Comments

Responses to Comments

38-3: The comment recommends additional actions to be included community emissions reduction programs such as new Title V Permit requirements; enforcement of CEQA project mitigation requirements to use zero emission, emission capture and treatment technologies, BACT and BARCT; and a requirement for air districts to include all major emission source reductions in all future AQMPs.

Response: See response comment 38-1 and 38-2. This comment does not address the adequacy, accuracy, or completeness of the Draft EA and no changes to the Draft EA are required in response to this comment. The comment has been noted and will be provided to the Board members for their consideration, but no further response is required.

38-4: Similar to comment 38-3, the comment recommends additional actions to be included community emissions reduction programs such as new Title V Permit requirements; enforcement of CEQA project mitigation requirements to use zero emission, emission capture and treatment technologies, BACT and BARCT; and a requirement for air districts to include all major emission source reductions in all future AQMPs.

Response: See responses to comments 38-1 and 38-2. This comment does not address the adequacy, accuracy, or completeness of the Draft EA and no changes to the Draft EA are required in response to this comment. The comment has been noted and will be provided to the Board members for their consideration, but no further response is required.

Verbal Comment 1	Anonymous
June 19, 2018	Individual

Verbal1-1: The comment requests that CARB consider whether certain actions would just move the emissions to a different location as opposed to reducing emissions.

Response: This comment does not address the adequacy, accuracy, or completeness of the Draft EA, and no changes to the Draft EA are required in response to this comment. The comment has been noted and will be provided to the Board members for their consideration, but no further response is required.

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ATTACHMENT A

COMMENT LETTERS

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1999 Harrison Street, Suite 650, Oakland, CA 94612 tel 415-346-4179 fax 415-346-8723 1012 Jefferson Street, Delano, CA 93215 tel 661-720-9140 fax 661-720-9483 <u>www.crpe-ej.org</u>

June 19, 2018

California Air Resource Board 1001 I Street Sacramento, CA 95814

VIA EMAIL

cotb@arb.ca.gov communityAir@arb.ca.gov

RE: Public Workshops for the Community Air Protection Program (Program) and Study of Neighborhood Air near Petroleum Sources (SNAPS).

We support monitoring, but the State already has enough information to be able to begin immediately cleaning up the pollution from oil and gas wells with the Community Air Protection Program.

The SNAPS program will take a considerable amount of time, and may not even study our community, before we see any action to protect our public health. There is no need to wait, maybe even years, for those monitoring results; the state is already in possession of scientific information to control local toxic pollution where Kern County and the Air District have failed to act, and, create a *minimum* setback between wells and our schools/homes/parks etc.

The results of the SNAPS program can then inform when and by how much to make that setback *bigger and more protective of public health*.

The Community Air Protection Program should include "early action" or "immediate" strategies for ARB/the Air District to:

1. Establish Buffer Zones/Setbacks

The CCST Report recommends that the State develop policies such as *setbacks* to protect public health by limiting exposures to harmful pollutants.



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The CCST Report also states that, to protect public health, these setbacks are needed *now, while monitoring is happening, and not after.*

Scientific literature supports <u>at least a 2500 feet setback</u> between the surface locations of wells and tanks within an oil and gas site and sensitive receptors, such as schools, parks, clinics, hospitals, long term health care facilities or residences.

2. Limit Production from Oil and Gas Operations

The CCST Report found that even with emission control technologies, local pollution still increases as oil and gas production increases. Emission control technologies will not be effective unless oil and gas production also stops increasing.

3. Implement Other Recommendations from the CCST Report

The CCST Report includes other recommendations within ARB/Air District authority under AB 617. These should also be included in the State Strategy for immediate/early action and include:

- Apply and enforce emission control technologies to limit air pollutant emissions.
- Develop adequate control measures for emissions, leaks and spills.
- Control toxic air emissions from oil and gas production wells.

Sincerely,

/s/

Paulina Torres On behalf of Committee for a Better Arvin Comite Progreso de Lamont Greenfield Walking Group Committee for a Better Shafter Delano Guardians 1-1 cont.



1999 Harrison Street, Suite 650, Oakland, CA 94612 tel 415-346-4179 fax 415-346-8723 1012 Jefferson Street, Delano, CA 93215 tel 661-720-9140 fax 661-720-9483 <u>WWW.CRPE-EJ.ORG</u>

June 19, 2018

California Air Resource Board 1001 I Street Sacramento, CA 95814

VIA EMAIL

cotb@arb.ca.gov communityAir@arb.ca.gov

RE: Public Workshops for the Community Air Protection Program (Program) and Study of Neighborhood Air near Petroleum Sources (SNAPS).

We have reviewed the Draft Community Air Protection Blueprint and are disheartened by ARB's lack of inclusion of the statewide setback for oil and gas operations. The Blueprint only mentions commitments to work with local cities and counties to establish defined setbacks from air pollution sources to protect sensitive populations. This is not enough.

In 2005, CalEPA and ARB released the report Air Quality and Land Use Handbook: A Community Health Perspective. The Handbook provides a clear recommendation for ARB to "consult with local air districts and other local agencies to determine an appropriate separation..." between incompatible land uses and similar industrial activities that emit similar pollutants. This was in 2005, and still, very little progress has been made. We need a statewide buffer zone for oil and gas extraction.

The Community Air Protection Program should include "early action" or "immediate" strategies for ARB/the Air District to:

Establish Buffer Zones/Setbacks

The CCST Report recommends that the State develop policies such as *setbacks* to protect public health by limiting exposures to harmful pollutants.



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The CCST Report also states that, to protect public health, these setbacks are needed *now, while monitoring is happening, and not after.*

Scientific literature supports <u>at least a 2500 feet setback</u> between the surface locations of wells and tanks within an oil and gas site and sensitive receptors, such as schools, parks, clinics, hospitals, long term health care facilities or residences.

Sincerely,

/s/

Paulina Torres On behalf of Committee for a Better Arvin Comite Progreso de Lamont Greenfield Walking Group Committee for a Better Shafter Delano Guardians

Attachment 2 to WSPA Comments on ARB's Draft Community Air Protection Blueprint and Appendices

Comments on Appendix G - Draft Environmental Analysis Prepared for the Proposed Draft Community Air Protection Blueprint

I. <u>The Draft EA</u> Fails to Sufficiently Address CEQA Requirements Because It Does Not Evaluate Reasonably Foreseeable Environmental Impacts from Implementing the Blueprint.

The California Air Resources Board's ("ARB") Draft Environmental Analysis ("Draft EA") fails to fully and fairly disclose all reasonably foreseeable adverse environmental impacts associated with implementing the AB 617 Draft Community Air Protection Blueprint ("Blueprint") in violation of the California Environmental Quality Act ("CEQA") (Cal. Pub. Res. Code ("PRC") §§ 21000 et seq.). CEQA requires lead agencies to consider the significant environmental impacts of their actions, and to the extent feasible, mitigate those impacts to insignificant levels.

Under CEQA, before ARB adopts a regulatory program that will require installation of pollution control equipment or compliance with performance standards or treatment requirements, it must identify and analyze reasonably foreseeable environmental impacts of, mitigation measures for and alternatives to foreseeable methods of compliance with such standards. The environmental analysis must take into account a reasonable range of environmental, economic and technical factors, populations and geographic areas, and specific sites. *See* PRC §§ 21159, 21159.4. Even though the regulatory program envisioned by the Draft Blueprint is intended to benefit the environmental side-effects is required. *POET LLC v. State Air Resources Board* (2012) 218 Cal.App.4th 681.

ARB has attempted to prepare the Draft EA as a high-level programmatic CEQA evaluation, which ARB notes will be followed by more detailed, project-level CEQA review of individual actions undertaken by ARB, the air districts, cities, counties and other agencies in order to implement the strategies outlined in the Blueprint. *See* Draft EA, pp. 3-4. The Draft EA claims that many of the impacts resulting from compliance are "speculative" and on that basis conservatively concludes that, at the program level of analysis, many anticipated adverse impacts must be considered "**potentially significant and unavoidable**." *See*, *e.g.*, Draft EA p. 36 (emphasis in original). ARB repeatedly asserts that such impacts must be considered potentially significant and unavoidable because implementation of the Draft EA's recommended mitigation measures for those impacts is under the jurisdiction of local decision makers, not ARB. *See* Draft EA, p. 35.

While such "tiered" environmental review is encouraged by CEQA, the tiering approach "does not excuse the lead agency from adequately analyzing reasonably foreseeable significant

environmental effects of the project and does not justify deferring such analysis to a later tier." 14 C.C.R. § 15152(b).

- "While proper tiering of environmental review allows an agency to defer analysis of certain details of later phases of long-term linked or complex projects until those phases are up for approval, CEQA's demand for meaningful information is not satisfied by simply stating information will be provided in the future." *Vineyard Area Citizens for Responsible Growth, Inc. v. City of Rancho Cordova* (2007) 40 Cal.4th 412, 431 (internal quotations omitted).
- Deferring CEQA analysis to a later tier is permitted only when the agency makes "no commitment" for the future at the first stage of the project, and there is an "understanding that additional detail will be forthcoming when specific second tier projects are under consideration." In re Bay-Delta Programmatic Environmental Impact Report Coordinated Proceedings (2008) 43 Cal.4th 1143, 1172; see also City of Hayward v. Board of Trustees of the California State University (2015) 242 Cal.App.4th 833, 848-851.
- Conversely, CEQA analysis is required before an agency becomes "committed to a definite course of action." Save Tara v. City of West Hollywood (2008) 45 Cal. 4th 116, 139 (2008). The question is "whether, as a practical matter, the agency has committed itself to the project as a whole or to any particular features, so as to effectively preclude any alternatives or mitigation measures that CEQA would otherwise require to be considered, including the alternative of not going forward with the project." POET, 218 Cal.App.4th at 721-722 (quoting Save Tara, 45 Cal.4th at 138) (emphasis added).

II. <u>ARB Improperly Piecemealed Environmental Review of the Blueprint by Declining</u> to Analyze Impacts of Local Agencies Compliance Actions.

CEQA prohibits lead agencies from conducting "piecemeal" review of a project's significant environmental impacts. Agencies must consider "the whole of an action" (PRC § 15378) rather than "chopping up proposed projects into bite-sized pieces which, when taken individually, may have no significant adverse effect on the environment." *Tuolumne County Citizens for Responsible Growth, Inc. v. City of Sonora* (2007) 155 Cal.App.4th 1214, 1223 (internal quotations omitted); *see also Aptos Council v. County of Santa Cruz* (2017) 10 Cal.App.5th 266, 277-278. California courts have held that lead agencies engage in improper piecemealing "when the reviewed project legally compels or *practically presumes* completion of another action." *Aptos Council*, 10 Cal.App.5th at 280 (emphasis added). To avoid improper piecemealing, a complete programmatic analysis must be prepared covering multiple related actions, rather than subsequently evaluating those for the first time as separate CEQA projects. *See City of Hayward*, 242 Cal.App.4th at 850 (program EIR for university master plan avoided piecemealing by studying cumulative traffic impacts on major intersections in the area).

In analyzing whether the two projects are improperly piecemealed in violation of CEQA. the test set out by the California Supreme Court is as follows: "... an EIR must include an analysis of the environmental effects of [the] ... other action if: (1) *it is a reasonably foreseeable consequence*

3-1 cont.

2

of the initial project; and (2) the future expansion or action will be significant in that it will likely change the scope or nature of the initial project or its environmental effects." Laurel Heights Improvement Assn. v. Regents of University of California (1988) 47 Cal.3d 376 (emphasis added). While the Blueprint commits to the development of Community Emission Reduction Plans by air districts, ARB claims that the only reasonably foreseeable compliance response this will lead to is "CARB staff providing a criteria document for the development of [these] programs." Draft EA, p. 26. ARB asserts that, because the Plans "are not known at this stage and will be developed later by local air districts," ARB is unable to analyze any anticipated impacts associated with the Plans. Id. However, in the Blueprint ARB states that the Plans will result in new rules and regulations for pollution control, incentives to promote accelerated equipment turnover to "cleaner technologies," and "engagement with local agencies on land use and transportation strategies. Blueprint, p. 15.

Here, compliance measures established by the local air districts and/or other local agencies to facilitate compliance with measures set forth in the Draft Blueprint are not only reasonably foreseeable, but will likely change the environmental impacts beyond those contemplated by Blueprint and its environmental analysis. ARB makes no attempt to discuss the adverse environmental impacts of these anticipated actions. CEQA forbids this type of "piecemealing" of a project's foreseeable significant environmental impacts. *See* 14 C.C.R. § 15378. At a minimum, ARB must consider the adverse environmental impacts of anticipated actions under CEQA or alternatively withdraw the blanket statement that the Plans will result in "…new rules and regulations for pollution control…".

III. <u>ARB Fails to Analyze Reasonably Foreseeable Means of Compliance and Impacts</u> From Its Commitments, Which Are Not Speculative.

The Draft EA does address the impacts of new ARB regulations that may be adopted as "statewide strategies" under the Blueprint, including potential new regulations on railyards, locomotives, drayage trucks, cargo handling equipment, commercial harbor craft, heavy-duty engines, etc., as listed in Draft EA Table 2-1. The reasonably foreseeable means of compliance with these ARB regulatory actions include the following (EA, p. 27):

"... increased infrastructure for hydrogen refueling stations and electric charging stations; increased demand for lithium battery manufacturing and increased recycling, refurbishment, or disposal of lithium batteries; [increased] replacement rate [of] vehicles, equipment and engines... requiring that older models are sold outside of California, scrapped, disposed, or recycled; construction and operation of new manufacturing facilities, or, the modification of existing facilities to support zero and near-zero emission equipment and vehicles; ... construction of new, or modification of existing, facilities to add on control equipment; changes to manufacturing processes; and the disposal of spent materials."

However, ARB does not assess all of the reasonably foreseeable means of compliance with the Blueprint. The Draft EA analyzes *only* reasonably foreseeable means of compliance with ARB's *own* proposed regulations in Draft EA Table 2-1, but declines to analyze the multitude of local

3-2 cont. air district and local agency compliance measures that will be required to implement the Blueprint.

The Blueprint is not so limited. In adopting it, ARB is committing itself as a practical matter to a much larger outcome than just this list of its own new regulations. In the Blueprint, ARB commits to a plan of action that **must** be carried out, not only through new ARB regulations, but also through regulatory or approval actions by air districts, cities, counties and other agencies. For actions under the jurisdiction of other agencies, the EA states that those agencies will perform later project-level evaluation of those actions. However, under the Blueprint, the "no project alternative," which must always be considered under CEQA (*see* 14 C.C.R. § 15126.6(e)), will not be a permissible option for air districts when considering actions to implement the Blueprint. Even though some requirements of the Blueprint must be implemented or approved by other agencies, as the oversight agency ARB has "committed itself to the project as a whole or to any particular features, so as to effectively preclude . . . the alternative of not going forward with the project." *POET*, 218 Cal.App.4th at 721-722. Thus, because all locally adopted compliance measures required to carry out the Blueprint were excluded from programmatic review, ARB has improperly piecemealed the CEQA review of the unified Blueprint.

- For example, the Draft EA asserts that no physical environmental impacts could result from "incentive funding to support immediate emission reductions." See Draft EA, p. 27. However, the Blueprint (p. 3) states that those incentive investments will be used to "purchase cleaner vehicles and equipment, with a focus on advancing zero emission technologies within impacted communities." If that is the case, then the results of incentive funding would be similar to those of compliance with new ARB regulations as noted above: increased hydrogen and electric infrastructure and manufacturing facilities; lithium battery demand, recycling and disposal; vehicle scrapping, recycling or sale outside the state; facility modifications, etc., thereby adding to all of the potentially significant impacts attributed to those means of compliance throughout the Draft EA. Those impacts are already identified in the Draft EA only to the extent that they are a consequence of ARB's own regulations. As a result, the Draft EA substantially understates the magnitude of each impact by excluding the additional foreseeable consequences resulting from incentive funding, while at the same time claiming the benefits of incentivized vehicle and equipment turnover.
- The Blueprint also commits to development of Community Emission Reduction Programs by air districts. ARB incorrectly excluded from the Draft EA scope the impacts of air districts imposing foreseeable regulations that also would require cleaner vehicles and equipment, installation of new controls, etc. ARB claims that "it would be speculative for this EA to attempt to analyze the impacts of potential compliance responses associated with the later development of community emission reduction programs by local air districts." Draft EA, p. 26. However, ARB has stated that these strategies will require:

3-3 cont.

- New approaches to accelerate and focus direct reductions in emissions and air pollution exposure within the community to meet the emission reduction targets...
- New rules and regulations including an expedited schedule for retrofitting pollution controls on certain industrial sources, evaluation of more stringent control limits for other types of pollution sources, and consideration of indirect source rules and enforceable agreements; ...
- Incentives to promote accelerated turnover to cleaner technologies; ... [and]
- Engagement with local agencies on land use and transportation strategies such as setbacks, buffer zones, and alternative truck routing. *See* Blueprint, p. 15.

By adopting the Blueprint, ARB is committed as a practical matter to such programs that are also directly subject to review and approval by ARB. Thus, the environmental consequences associated with additional increased infrastructure and manufacturing facilities, lithium battery demand and recycling, vehicle scrapping or recycling, control equipment installation, etc., are additional foreseeable consequences of ARB's commitment.

Again, by addressing only the limited magnitude of impacts resulting from ARB's own new regulations, the Draft EA substantially understates the magnitude of each impact while claiming the benefits of the emission reduction programs.

Even if it was proper for ARB to limit the scope of the Draft EA impact analysis to those of its own regulations, and exclude the environmental consequences of using incentive funding, new air district regulations, and land use and transportation strategies, those additional actions are still reasonably foreseeable – indeed, they are intended and must occur, according to the Blueprint. As such, they should have been included in the cumulative impact analysis, as other reasonably foreseeable future actions that would contribute to cumulative environmental impacts together the ARB regulations under the Blueprint. At a minimum ARB should follow the requirements under CEQA and conduct such an evaluation or alternatively ARB could withdraw such actions and assumptions of future actions from the Blueprint.

IV. <u>ARB Downplays Potential Adverse Environmental Impacts of Compliance</u> <u>Responses to the Blueprint.</u>

Finally, for those selected compliance responses listed in the Draft EA as reasonably foreseeable, ARB fails to describe the full range of potential adverse impacts, or dismisses those impacts as insubstantial. ARB fails to consider the full extent of associated with a number of compliance measures, including but not limited to: (i) land use and transportation strategies; (ii) new and increased waste streams associated with equipment retrofitting and other technological changes; (iii) increased lead acid and lithium ion batteries; and (iv) increased demand of public services and fire protection.

Land Use and Transportation Strategies

3-5 cont.

- The Blueprint simply commits ARB to requiring the air districts to engage with local agencies such as cities, counties and transportation agencies. There is no substantive discussion of impacts from potential land use and transportation strategies to obtain community emission reductions. Instead, the Draft EA's land use section merely cross-references other sections of the Draft EA. *See* Draft EA, p. 64.
- The Draft EA also asserts that, for statewide action on land use and transportation strategies, ARB will only be compiling best practices guidance documents, and that preparing a document has no environmental impact. *See* Draft EA, p. 19. But the Blueprint is not limited to preparing documents. When reviewing and approving community emission reduction programs, ARB will require air districts to engage with local agencies on land use and transportation strategies. *See* Draft EA, p. 15. The Draft EA should consider whether such strategies may have significant environmental impacts, at least at a programmatic level, rather than categorically disregarding the consequences of ARB's commitment.
- For example, pursuant to Senate Bill 375 ("SB 375"), cities, counties and transportation agencies have developed Sustainable Communities Strategies ("SCSs") to encourage "smart" land use patterns, higher density transit-oriented development, and reduced vehicle-miles-traveled, in part by directing new development into priority areas where existing transportation infrastructure is located. In some cases, the SCSs may promote the same outcomes as the Blueprint's community emission reduction programs, such as increased transit use, which would be favored by both programs. In other cases, however, buffer zones and other land use and transportation strategies to reduce local community exposures may foreseeably lead to diverting development to cleaner "greenfield" areas – a potential benefit under AB 617 and the community emission reduction programs, but a form of disfavored "sprawl" growth under SB 375 and the SCSs. In particular, this outcome is an environmental risk in regions not well served by transit. These competing environmental considerations must be evaluated as a reasonably foreseeable consequence of ARB's commitment to the Blueprint, to avoid improperly piecemealing the environmental impacts following from adoption of the unified Blueprint into later separate CEQA reviews of local jurisdiction actions.

Solid Waste and Hazardous Materials

The Draft EA does analyze some specific potentially significant impacts of ARB's new
regulations under the Blueprint, including impacts associated with new waste streams,
e.g., scrapping or recycling existing vehicles, equipment and engines. Generally, the
Draft EA acknowledges that there "may be an increase in the amount of solid waste
diverted to landfills as a result of increased fleet turnover; however, it would not be
substantial enough to result in closure of an existing landfill or development of a new
landfill as much of the vehicles and equipment would be recycled." See Draft EA, p. 81.

 However, there is no support or analysis provided for ARB's conclusory statement. Moreover, as presented in the Draft EA, that conclusion refers only the outcome of ARB regulations and excludes the addition to the waste stream and hazardous materials impacts associated with use of incentive funding and resulting from community emission reduction programs.

Lithium Batteries

- While ARB acknowledges that the Blueprint is likely to lead to increased demand for lead acid and lithium ion batteries (along with risks of igniting and increases in carbonintensive mining for those materials), it largely ignores the adverse impacts this would have on hazardous materials management and the hazardous waste stream
- The Draft EA provides only the conclusory claim that "because lithium-batteries and hydrogen fuel cell systems are designed to reduce the potential for hazardous conditions associated with transport and use, and because regulations exist to ensure that lithium-ion batteries are disposed of appropriately, operational-related effects to hazards and hazardous materials associated with the proposed Draft Blueprint would be less than significant." Draft EA, p. 60.
- There is no analysis of the nature and potential magnitude of impacts to support the conclusion of less-than-significance. Again, as noted above, this conclusion is limited to impacts of ARB regulations, excluding the addition to the waste stream and hazardous materials impacts associated with use of incentive funding and resulting from community emission reduction programs.

Public Services/Fire Protection

- While it may be reasonable to find less than significant demand for residential fire protection from adding those few workers to the local population, the Draft EA ignores increased demand for fire protection associated with the manufacturing facilities, fueling and charging infrastructure, vehicles and equipment.
- Elsewhere, the Draft EA recognizes a degree of fire hazard associated with hydrogen and lithium batteries, but that facts missing from the analysis of public service impacts. *See* Draft EA, p. 59. The effect of increased fire hazard on the demand for fire protection services may or may not be significant; however, instead of making a significance determination, the Draft EA ignores it.

It follows that ARB's consideration of a reasonable range of alternatives which could reduce significant impacts of the Blueprint (*see* 14 C.C.R. § 15126.6) is also flawed by the same omissions and understatement of impacts discussed above.

3-10

3-9

cont.

Correcting the deficiencies discussed in these comments would require the addition of significant new information disclosing new or substantially more severe environmental impacts, thereby triggering recirculation under the CEQA Guidelines. *See* 14 C.C.R. § 15088.5. Accordingly, ARB must revise and recirculate the Draft EA for additional public disclosure and comment.



July 18, 2018

Mr. Richard Corey Executive Officer California Air Resources Board 1001 I Street Sacramento, CA 95814

Subject: WSPA Comments on ARB's Draft Community Air Protection Blueprint and Appendices for Selecting Communities, Preparing Community Emissions Reduction Programs, Identifying Statewide Strategies and Conducting Community Air Monitoring.

Dear Mr. Corey:

The Western States Petroleum Association (WSPA) appreciates this opportunity to comment on the California Air Resources Board's (ARB) Draft Community Air Protection Blueprint and Appendices. WSPA is a non-profit trade association representing companies that explore for, produce, refine, transport and market petroleum, petroleum products, natural gas and other energy supplies in California and four other western states.

ARB's Blueprint documents advance the discussion on AB 617 implementation in several important respects. In particular, the Appendices provide important new information on the criteria used to select communities for AB 617 programs (helping to differentiate monitoring communities from emissions reduction program communities, air quality indicators that will form the basis for emissions reduction program targets, and criteria to inform proper development and application of air quality monitoring data. The Blueprint also includes an Appendix containing a draft Environmental Analysis (EA) of the proposed project under the California Environmental Quality Act (CEQA). However, the Blueprint documents leave many questions unanswered. Absent additional effort to fill these information gaps, the AB 617 program is likely to unfold in a patchwork fashion that does not satisfy the statutory requirements, and may do more harm than good in AB 617 communities.





The following comments and the more detailed matrix and draft EA comments attached to this letter identify areas that require further attention to achieve the intent of the enabling legislation.

Inconsistencies Between Draft Blueprint Summary Document and Appendices

In the course of our review of the documents, we have identified instances where statements in the Blueprint Summary document appear to be at odds with information provided in the Appendices. We are also concerned that some stakeholders will focus only on the Blueprint summary document, which lacks critical information and context contained in the Appendices and may interpret the summary language in a manner that is inconsistent with ARB's intent for program implementation.

The following bullets offer a few examples of conflicting statements in the Blueprint Summary and Appendices:

- <u>Near term emission reduction targets</u> ARB states in Appendix C that "As new strategies are developed and deployed, it may take several years to see significant reductions in exposure that can be measured at the community scale." (C-30). This statement properly reflects the practical realities of achieving additional emissions reductions in settings that are already highly regulated, but it conflicts with the requirement that emissions reduction plans must achieve program targets in 3-5 years (Blueprint Summary, page 15). In addition, neither document clearly describes the difference between program "actions" and "targets."
- <u>New regulations</u> ARB states in the Blueprint Summary that "... communities will see targeted action through new regulations, focused incentive investment, and engagement with local land use authorities ..." (pages 4-5). This statement suggests that all emissions reduction programs will include new regulations. However, Appendix C describes six categories of *potential* emissions reduction strategies and recognizes that some strategies may not be selected in a given community (C-17-C-18). ARB should clarify that the need for new regulations must be considered on a case-by-case basis, and that emissions reduction programs will not always include new regulations. Moreover, ARB should make clear that any new regulations considered as part of a community emissions reduction program will be



subject to and limited by existing requirements under California law applicable to the adoption of ARB and local air district regulations generally.

- Low-cost sensors The Blueprint Summary promotes the idea that "lower cost sensors and other emerging technologies" can be placed in more locations than "more expensive regulatory-grade monitoring systems in place today." (page 4) Appendix E states that "With the advent of low-cost air quality sensors, community members are themselves taking more and more responsibility for measuring the air quality where they live ..." (E-1) and "Community air monitoring may not necessarily require U.S.EPA-designated methods and equipment, which provides the opportunity to utilize next generation air monitoring methods and equipment ... providing greater spatial coverage and faster access to the resulting air quality data ..." (E-2) These statements suggests greater reliance on monitoring methods, technologies and data that may not be adequate for certain uses, such as determining the need for additional control measures on particular sources, or to support compliance determinations and enforcement actions. In contrast to the Blueprint Summary, Appendix E includes statements that appear to address this concern. For example, ARB states that "... more rigorous methods are required to support an enforcement action compared to an air quality awareness program." (E-6) and "limitations of selected air monitoring equipment should be made clear to stakeholders and documented in the plan." (E-11)
- <u>Emissions reduction targets for criteria pollutants</u> Appendix C states that "U.S. EPA and the State of California have set health-protective ambient air quality standards that establish health protective levels" for criteria air pollutants (C-4). However, ARB suggests at C-13 that local air districts may want to go beyond these levels to reduce cumulative exposure burdens in a given community. The absence of a science-based target, such as an ambient air quality standard or a risk-based action level leaves ARB and the agencies open to criticism that any amount of air pollution in a selected community is too much, regardless of whether the air quality meets applicable health-based standards. Moreover, the Blueprint documents fail to mention that any measures adopted by air districts to "go beyond" existing standards will need



to comply with applicable existing state laws requiring consideration of costeffectiveness, feasibility, and other factors, and cannot simply be adopted at the whim of an air district.

We request that the Blueprint document be amended to ensure that the general statements in that document are consistently interpreted relative to the critical supporting details in the Appendices.

Issues Unresolved or Relegated to the Resource Center

While we appreciate that air districts have more detailed knowledge of communitylevel issues and must retain some discretion in the design and implementation of community monitoring and emissions reduction programs, the Blueprint documents leave too many important issues unresolved or relegate them to future development in ARB's online Resource Center. These issues include, but are not limited to the following:

- Identification of methodologies for source attribution and discussion of their proper application. This is perhaps the most critical technical element in selecting communities for emissions reduction programs and in designing those programs.
- Development of methods to "assess cumulative impacts and integrate indicators of community vulnerability," including additional information from research already underway pursuant to contracts administered by ARB and the Department of Toxic Substances Control (DTSC).
- "Additional actions" contemplated for communities not selected in the initial years of AB 617 implementation.
- How ARB and the Districts will identify facilities for "facility-specific risk reduction audits," how those audits will be conducted and what may be required of affected facilities.
- Mechanisms for removing communities from the AB 617 candidate list, or for sun setting community monitoring and emissions reduction programs once program objectives are achieved.
- Methodology and criteria for determining appropriate uses for various monitoring technologies.



- How ARB and air districts will communicate the meaning and implications of air quality monitoring data derived from various sources and technologies.
- Identification of next-generation emissions control technologies and how this information will be considered in the context of facility permits and BARCT reviews.
- Land use strategies and measures that appear to contemplate retroactive land use decisions affecting existing sources.
- Mechanisms to ensure accountability for expenditure of state grant funding intended to support greater community involvement.

These and other issues should be discussed in the Blueprint documents in sufficient detail that stakeholders have a clear understanding of how they will be addressed in the context of AB 617 implementation at the community level and an opportunity to shape draft proposals through public review and comment. Failure to address these issues in the Blueprint documents undermines the transparency of the AB 617 implementation process.

Technical Feasibility and Cost-Effectiveness

The Blueprint Appendices use language that is suggestive of extreme emissions reduction measures that do not consider technical feasibility or cost-effectiveness. Some examples include: "Commitments to achieve numerical goals ... that provide the greatest emission reduction potential" (C-14); "even with the cleanest technologies deployed, proximity to emissions sources may continue to pose health risks (C-15); and "The community emissions reduction program must evaluate the most stringent control limits" (C-18). In addition, figure 16 (C-16) states that the emission reduction target should be equal to the emission reduction potential (i.e., the target should be a 100% emissions reduction). Such a goal is neither technically feasible nor cost-effective. These statements conflict with the statutory requirement for evaluation of cost-effectiveness at Health and Safety Code 44391.2(c)(2), which ARB cites at C-17: "Per statute, community emissions reduction programs must identify cost-effective measures to achieve the emissions and exposure targets." Further, such statements clearly indicate ARB's intent to mandate control requirements and regulations which require not only cost-effectiveness and feasibility evaluations, but also must be considered in the required CEQA analysis.



The regulatory strategies section starting at C-18 is lacking any discussion of how multiple new regulatory strategies will work in concert to achieve emissions reduction program targets without imposing overlapping or conflicting requirements and runaway compliance costs. Programs that fail to address these issues are likely to depress local and regional economies, trading minor gains in air quality for greater socio-economic impacts. Such tradeoffs will not improve overall conditions in disadvantaged communities.

As we indicated in our comments on ARB's draft AB 617 Concept Paper, evaluation of technical feasibility and cost-effectiveness in all phases of AB 617 implementation is critical to the success and sustainability of the program because inefficient allocation of resources will diminish program benefits at the community level and on a statewide basis. Additional references to cost-effectiveness should be added to both the Blueprint Summary and the Appendices, especially in the context of new regulations, control technologies and mitigation strategies that involve expenditures of program and private party resources.

Implementation of BARCT and BARCT Clearinghouse

WSPA is concerned that the Blueprint documents provide no meaningful guidance on how districts are to "expedite" the BARCT determination process, how to develop a feasible BARCT implementation schedule for all affected sources in less than six months, or how such a schedule could adequately accommodate the unique individual feasibility and cost-effectiveness concerns that drive BARCT determinations for multiple industries.

Existing California law defines BARCT as "an emission limitation that is based on the maximum degree of reduction achievable, taking into account environmental, energy, and economic impacts by each class or category of source." CA Health & Safety Code § 40406. Further, Health & Safety Code Section 40920.6 specifically requires air districts to evaluate the incremental cost-effectiveness of potential control options prior to determining BARCT. Accounting for and balancing the many environmental, energy and economic impacts that apply across multiple categories of sources in each district is an extremely time- and resource-intensive task – both for the air districts and the regulated parties themselves. Districts with more stringent nonattainment areas, larger and more varied industrial sources, and greater implementation of novel technologies may face unique challenges not present in other



districts. For these reasons, BARCT determinations typically are established and refined over periods of years, not months.

As air districts consistently note in their staff reports, public workshops and other rulemaking proceedings, the BARCT process requires a district to undertake individual investigations, workshops and public hearings for each source category to ensure that it considers all of the relevant facts unique to potentially regulated sources. The actual timeframe for any category will necessarily reflect such factual considerations as the availability, feasibility and incremental cost-effectiveness of any control option, the lead time required for permit modifications and other district review procedures, contractor availability, material availability and delivery constraints, among other significant factors. To avoid creating the misimpression that such a process can be rushed or somehow truncated, an appropriate section of the Blueprint (e.g., Appendix C) should describe the steps involved in the BARCT process.

The Blueprint documents also do not explain how or when air districts should rely on the newly created statewide BARCT clearinghouse in individual BARCT decisions for categories of sources in their districts. Indeed, the very definition of BARCT makes clear that BARCT determinations can and do differ significantly from district to district, and from category to category of source. The environmental, energy and/or economic impacts of adopting new control technologies often are very different in different districts. WSPA believes ARB must clarify the purpose and proper use of the BARCT clearinghouse. Attempting to use the clearinghouse as a mandatory "one size fits all" solution to setting BARCT in different air districts contradicts the very definition of BARCT and could be a recipe for confusion and conflict among air districts and the regulated community alike.

Role of Health Indicators in AB 617 Implementation

WSPA agrees with ARB that the appropriate role for public health indicators is only in the initial screening process for community selection, as described in the six factors ARB proposes to characterize cumulative exposure impacts within each community. (Blueprint Summary, page 11; Appendix B-6) It is unclear why the Blueprint documents omit the important analyses ARB provided in the draft Concept Paper identifying the impediments to use of health indicator data for other aspects of AB 617 implementation. Both the Blueprint Summary and the Appendices should specify that other uses of health indicator information, such as measuring changes in



health outcomes as an indicator of emissions reduction program performance, are not appropriate because the available data is not sufficient to support such uses.

As local air district officials have explained to ARB, public health indicators are no substitute for actual emissions data in terms of tracking the performance of air emissions reduction programs. Public health data are influenced by a multitude of genetic, environmental and other individual risk factors. Even the Blueprint documents concede that existing air quality standards at the federal and state levels are already set at levels broadly designed to ensure protection of health, and that assessing more direct and synergistic relationships between multiple types of air pollutants and health impacts is "still an emerging field of research" (Appendix C-4). ARB should continue to use emissions reductions as the more direct, applicable and statutorily relevant metric for measuring the performance of community emissions reduction plans. We also support ARB's intent to engage local Public Health Officers in the Community Steering Committee process. They have the necessary subject matter expertise and experience to educate stakeholders on the role of air quality as a determinant of community health relative to many other factors that contribute to community health outcomes. However, since public health impacts are not just an air quality issue, research and regulatory engagement should not be confined to the AB 617 program. A siloed approach increases the possibility that resources will be invested in ways that do not measurably improve health outcomes in the most highly burdened communities. (Blueprint Summary, page 5)

Community Assessment and Selection

ARB lists a number of data sources it will use in the selection of monitoring and emissions reduction program communities (B-7). These include ARB's Environmental Justice Screening Method, the California Healthy Places Index, ARB's Pollution Mapping Tool and the U.S.EPA Environmental Justice Screening and Mapping Tool. Without an external scientific peer review of the methodology, limitations and proper application of these tools, it is premature to conclude that they are fit for purpose in selecting AB 617 communities. It is possible that the "consortium of researchers" under contract to ARB and the Department of Toxic Substances Control (DTSC) noted at B-7 could serve this purpose, but the details of this contract are not disclosed in the Blueprint documents.

The Blueprint documents also conflate exposure and health risk in the community assessment process. It remains unclear what metrics ARB and the districts will use to



determine whether a community is "overburdened." For example, emissions that do not result in a significant increase in cancer or non-cancer health risk (as defined by air district rules) in the candidate community should not be targeted for reductions. Community technical assessments should focus first on community health risk and then work backwards to characterize exposure, and finally to identify the emissions (and sources) driving the significant health risk.

Moreover, the Blueprint should provide more explicit direction about the use of existing air quality indicators to determine what areas may have a "high cumulative exposure burden." Existing Federal and California air quality laws already target environmental and health benefits by requiring attainment of ambient air quality standards in defined geographical regions, and by limiting exposures to toxic air contaminants above harmful thresholds. Areas with elevated levels of criteria and toxic pollutants are already required to enforce stringent controls, and higher levels of pollutant exposure usually trigger even more stringent limitations. Accordingly, ARB should clarify that the goal in community assessment and selection should be to identify those communities statewide with local toxic or criteria pollutant levels that pose *disproportionate* risks not already adequately addressed under the existing comprehensive scheme of Federal and state air quality regulation. Selection criteria should be limited to factors that differentiate communities with the highest cumulative air pollution exposure burden from other communities. ARB's proposed additional selection criteria – "geographic variety" and "source variety" – are beyond the scope of the statute, will dilute program focus and resources by implicating lower priority communities and will limit program benefits in the most burdened communities.

Also, burden assessment and community selection should be based on the air quality indicators that will be the focus of the emissions reduction programs (PM 2.5 and risk-driving toxic air contaminants), consistent with ARB's determination that these are the only pollutants that can be addressed at the community level. In addition, and consistent with the statute, priority communities should be limited to those identified areas of disproportionate pollution burden within existing cities and counties, and not become over-inclusive "super-regions" designed primarily to funnel more funding and resources under AB 617.

While ARB does recommend minimum factors that should be considered by each air district in community selection, it does not define the process by which air districts should refine their preliminary lists to support final recommendations to ARB. There



should be some uniformity in this process across all air districts to ensure consistent quality, scientific rigor and allocation of resources to the most highly burdened communities.

ARB still needs to define what "near term actions" it is contemplating for communities "not yet selected" (B-1, B-10), or at a minimum provide some examples of such measures. On the surface, this concept exceeds the scope of authority provided by AB 617 (i.e., to "reduce emissions in communities with high cumulative exposure burdens"), and is unnecessary because all communities will benefit from the many other air quality regulatory programs and plans that will continue to operate independently of AB 617. Given the number of candidate communities identified by air districts and self-selected, the resource and workload burden of this undefined concept will be substantial and is likely to distract from efforts to reduce emissions in the most highly burdened communities.

Community Air Quality Monitoring and Data Validation

Air monitoring and technical assessment must serve as the foundation for an emissions reduction program to confirm first that the program is needed, and then ensure that the program is designed around a science-based understanding of the emissions affecting each community, source attribution and identification of measures that will most cost-effectively reduce the air pollution burden. This approach seems implied in Appendices C & E but is not clearly stated in the Blueprint Summary. Language should be added, particularly in Section VIII emphasizing air monitoring and technical assessment as the first steps in a potential community emissions reduction program, and that much of the rest of the program (including emission reduction strategy, actions, metrics, etc.) depends on this work.

Public access to community monitoring data must be coupled to a comprehensive community education program that addresses the technical factors discussed in Appendix E (e.g., roles and responsibilities, data quality objectives, applicability and limitations of various technologies, proper interpretation of results, etc.). The air districts should be required to include an education component in every monitoring plan to ensure that Community Steering Committee members understand these issues and their role in implementing the monitoring plan elements described in section III. In addition, it is critical that ARB define a much more specific process than is currently reflected in the Blueprint documents for the quality, validation and transparency of community data developed in the implementation of AB 617. ARB


requires consideration of existing data in the air district and communities and suggests that "lower cost sensors and other emerging technologies can be located in more locations within communities than more expensive regulatory-grade monitoring systems in place today." (Blueprint Summary, p. 4). However, the Blueprint documents provide no other guidance on when such lower cost and lower grade monitoring might be implemented. Expanding the scope of community-based monitoring, while offering potential short-term cost savings and increased geographic coverage, can introduce serious concerns of data reliability and quality unless that monitoring is subject to similarly rigorous requirements as the monitoring currently mandated by oversight agencies.¹

Raw data should not be released to the public, as is suggested at F-21. If ARB and the air districts intend to introduce real time community monitoring and low cost technologies which may produce results that conflict with U.S. EPA-approved technologies, it is critical that all data collected pursuant to AB 617 monitoring programs be screened through the processes described in Appendix E and properly characterized before it is made publicly available. This step will be necessary to prevent misinterpretation and misuse of the data.

The Blueprint Summary document refers to "community-operated … regulatory monitoring" (page 4). Just as ARB and the air districts are solely responsible for enforcement (C-25), "regulatory monitoring," which carries potential enforcement consequences, should not be delegated to community representatives.

Emission Reduction Program Focus

WSPA supports ARB's position that the need for additional emissions reductions must be demonstrated before undertaking an emissions reduction program, including requirements for monitoring results that characterize the "high air pollution exposure burden … well enough to inform … emission reduction program development," and

¹ Appendix C even suggests that "community ground-truthing exercises can be useful to validate and enhance emissions and exposure analyses." (C-11). It is unclear what "ground-truthing" ARB believes would better validate data collected in accordance with established EPA, CARB and air district methodologies. Such statements raise the concern that community data collection may fail to meet established requirements for verification and validation, or risks that otherwise scientifically rigorous data collection and validation could be susceptible to attack by politically motivated interest groups.



sufficient data and resources "to produce source attribution results for use in strategy development" (Appendix B-9).

WSPA supports clear statements in both documents that emissions reduction programs will focus on air quality indicators - reducing exposure to PM 2.5 and toxic air contaminants (TAC) that contribute to cumulative exposure burden (e.g., Appendix C-5). To further ensure that program focus is confined to pollutants emitted in the selected community, PM precursors that drive regional air quality impacts should be differentiated from localized PM 2.5 emissions. The need for further TAC reductions should be evaluated on a health risk basis, not an emissions basis, as the latter approach could capture TACs that do not drive local health risk and would dilute risk reduction benefits. In addition, the potential co-benefits that could be derived from other regulations should not be used as surrogate justification for the measures included in community risk reduction programs.

The approach for risk reduction audits at C-19 should rely on existing state and district air toxics policies and regulations, consistent with statutory requirements. This means that only when a community is selected as having a high cumulative exposure burden, <u>and</u> a facility operating within that community has been determined to "cause or significantly contribute to a material impact" on said community, <u>then</u> the air district will determine whether to reopen and update the risk reduction audit and emissions reduction plan for that facility. The language at C-29 is unclear and implies that risk reduction audits can be reopened and updated regardless of the facility's impact on the selected community.

With regard to minimum data requirements, ARB states at C-12 that "high resolution data" may be unavailable at the community-level or unnecessary in communities with a small number of source types. This language could be misinterpreted to direct all emission reduction efforts toward stationary sources - because data is readily available for those sources – without first doing the work to understand contributions of area and mobile sources. This approach would conflict with the requirements at Health and Safety Code § 44391.2(b)(2) and diminish program benefits. Communities should not be selected for emissions reduction programs unless high-resolution data is available for those communities.

Both documents should discuss how ARB and the districts will satisfy the statutory requirement to ensure that emissions reductions are "commensurate with (a source's) relative contribution" (Health and Safety Code § 44391.2 (b)). The source



apportionment in initial community technical assessments is an important first step, but is not likely to be adequate in most communities without additional data gathering and analysis. Comprehensive community emissions inventories that capture small stationary, area and mobile sources and regional background contributions outside the community (E-11), and effective source attribution methodologies will also be critical for this purpose.

The Blueprint Summary document states that the majority of communities selected in the first year of the program will be selected for emission reduction programs (page 5). This statement seems to presume that the criteria for differentiating monitoring communities from emissions reduction communities will not change from the current draft, which suggests a pre-determined outcome without the benefit of additional stakeholder feedback on the document.

Local Planning Measures

WSPA appreciates ARB's recognition of the impact that land use decisions have had and continue to have on community exposure burdens (Blueprint Summary, pages 6 and 18), particularly where sensitive land uses have been allowed to encroach on facilities operating in industrial zones. The Blueprint documents also acknowledge that ARB and the air districts are prohibited from infringing on city, county and regional planning agencies' existing jurisdiction to plan and control land use. However, the documents contain no substantive discussion of the impacts from potential land use and transportation strategies that might be adopted by these local agencies, or alternatively, the impacts that could result from those agencies refusing to adopt such strategies. Indeed, by promising that "communities will see targeted action" through (among other things) local land use decisions outside ARB's jurisdiction, the Blueprint documents seem to mistakenly suggest that ARB and the districts can compel those decisions as they see fit. ARB should clarify this apparent suggestion and address the reasonably foreseeable impacts from local land use planning decisions resulting from Blueprint implementation.

Moreover, proposed local planning measures in Appendix C, such as "requiring increased setbacks for specific source types" and "processes to terminate existing incompatible land uses" (C-21) may not be possible for existing facilities. ARB should also address the legality of retroactive application of such requirements, since they would constitute a taking of property rights from a legally established business.

4-4

ARB Should Not Prioritize Zero Emission Technologies

The Blueprint documents repeatedly emphasize an intention to promote and require zero-emission technologies (ZET) over other potentially feasible emission reduction strategies. (e.g., Blueprint Summary, pp. 3, 9). ARB even suggests that ZET implementation **itself** be a goal of the Program, rather than one possible means to achieve the goal of reducing emissions. (e.g., Blueprint Summary, p. 15). WSPA appreciates the additional emphasis in the Blueprint documents on feasibility in the context of deployment of ZET (e.g., Appendix C-3), but that term is not defined in the documents.

Moreover, AB 617 does not mandate the prioritization of ZET over other equally or more effective emission reduction strategies. Rather, AB 617, like other California law, requires consideration of multiple emissions control options or strategies that may accomplish the emission reduction objective(s) in a cost-effective manner. (CA Health & Safety Code §§ 40926.6(a), 44391.2). ARB's statewide strategy to reduce criteria and toxic pollutants from high cumulative exposure communities also must include a full assessment of available, achievable and cost-effective measures for reducing emissions, including but not limited to technologies qualifying as BARCT, BACT and BACT for toxics. (§44391.2(b)(4)).

WSPA is concerned that preordaining ZET as the "priority" or "focus" control measure is inconsistent with AB 617 and with existing California law. By making ZET a "priority," the Blueprint documents increase the probability that other more cost-effective and immediately feasible low-emission or near-zero technologies could be discounted or ignored, even if those technologies would be as effective or more effective in immediately and substantially reducing emissions in impacted areas. Fewer communities will realize program benefits and the extent of the benefits in a given community will be more limited. It is unlikely that the Legislature intended this outcome. ARB should clarify that the feasibility determination for deployment of ZETs will also include consideration of cost-effectiveness and other factors, and that the control technologies ultimately promoted or required as a result of the AB 617 program will obtain full and equal consideration based on the merits of their feasibility and cost-effectiveness.



Program Efficacy and Sustainability

ARB has expressed the view that the statute requires emissions reduction plans to identify some actions that can achieve specific emissions reduction targets within three-to-five-year timeframes (e.g., Blueprint Summary, page 15). Such timeframes may be feasible for certain incentive-based programs, or to achieve reductions from sources that are subject to previously-adopted rules which prescribe implementation timeframes that fall within these windows. However, these timeframes will not be feasible for any measures that will require new rulemaking or permitting for new emissions control equipment. It will be incumbent on ARB and the air districts to ensure that Community Steering Committee members understand the practical limitations inherent in meeting near term deadlines for some measures, and that those measures reflect achievable implementation periods.

ARB is proposing to do technical assessments for all self-nominated communities, even if they are not selected for near term action (Appendix B-3). Given the large number of self-nominated communities, the detailed technical assessments described at C-11 (e.g., community-level emissions inventory, source attribution, compliance assessment, etc.) will divert program resources from actions that can achieve air quality benefits in selected communities.

Enforcement

WSPA supports the discussion at C-25 on enforcement roles and responsibilities, and the clarification that enforcement is the sole province of ARB and the local air districts. We also agree that "increased enforcement of existing rules and regulations can be implemented without requiring new regulatory processes" (C-20). In addition to these principles, any enhanced enforcement should focus on instances of non-compliance that result in emissions exceedances above permitted levels for those emissions impacting the community emissions reduction plan, not on minor violations (e.g., recordkeeping or reporting issues) that may occur at some facilities as a function of facility complexity but have no material impact on air emissions in the community. ARB should also explicitly require consideration of the gravity of a violation, and whether complaints and NOVs are valid in the first instance, rather than simply focusing on the number of NOVs (C-27), which may have no bearing on the facility's impact on community air quality.



Certain Annual Implementation Metrics proposed at C-29, such as number of inspections, notices of violation issued and number of complaints received, are not appropriate for tracking emissions reduction program progress because they do not reflect any direct impact on community health risk, and achieving these arbitrary numeric metrics is unlikely to change the air quality burden in the selected communities.

Enhancement of complaint reporting, discussed at C-27, should focus on more than increasing complaint frequency. Community enforcement training should focus on how to properly identify and report potential emissions-related issues at a given source and should actively discourage participation in social-media-based complaint campaigns.

The idea of using supplemental environmental projects (SEP) to offset penalties (C-26) would create a perverse incentive for greater enforcement against facilities in AB 617 communities. While this type of offsetting is not a new practice, the fact that communities would be directly or indirectly involved in the enforcement process (see C-28 regarding deputizing the public to "help develop solutions to community issues") creates a conflict of interest, in which they would be the beneficiaries of the SEPs.

Community Steering Committee Makeup

WSPA appreciates emphasis in both Blueprint documents on participation in Community Steering Committees by "individuals who live, work, or own businesses within each community" (e.g., Blueprint Summary, page 14; Appendix C-7). We request further clarification that the reference to those who "work" in the community includes employees of facilities that may be subject to monitoring or emissions reduction requirements pursuant to AB 617 programs. These individuals have valuable knowledge and experience to contribute to program design and implementation and should be included in the Community Steering Committee process.

ARB should play a more prominent role in the Community Steering Committee process than merely as "observer" and "technical support." Given that mobile sources are likely to be a dominant contributor in most if not all selected communities, ARB's role as the oversight agency for the statewide emissions reduction strategy, and the technical resources ARB will need to invest in community program development and



implementation, ARB should have a standing in the process that is comparable to that of the air districts.

Draft Environmental Assessment

The Blueprint documents outline numerous potential changes to air quality policy and regulation at multiple levels, some of which may have far-reaching consequences for California's environment, its economy, and for all Californians. Accordingly, WSPA believes it is critical for ARB to conduct a full and fair evaluation of the potential impacts of the Blueprint, and not to understate or dismiss adverse impacts associated with adoption of the Blueprint's proposals. ARB has included a Draft Environmental Assessment (EA) of the draft Blueprint documents in Appendix G. WSPA's detailed comments on the Draft EA are attached to this letter. The Draft EA fails to address the full range of foreseeable impacts that would result from implementation of the draft Blueprint, improperly "piecemeal" review of the Blueprint by leaving consideration of reasonably foreseeable impacts to local agencies and downplays the potential adverse environmental impacts of the reasonably foreseeable impacts the Draft EA for additional public review and comment with respect to these issues, as is required by California law. (14 C.C.R. § 15088.5).

WSPA looks forward to ARB's responses to our comments and to our ongoing dialogue on AB 617 Implementation. If you have any questions, please contact me at this office, or Tiffany Roberts of my staff at troberts@wspa.org.

Sincerely,

Catherine Reheis-Boyd President

Attachments

cc: Tiffany Roberts, WSPA Catherine Dunwoody, ARB Heather Arias, ARB 4-6

Letter 4.1

Attachment 1

Page #	Document Text	Comment	Recommendation
BP-2	Most importantly, underpinning AB 617 is the understanding that community residents must be active partners in envisioning, developing, and implementing actions to clean up the air in their communities.	This language uses the term "community resident" which does not seem to include businesses that operate in the community.	ARB should use the term "community members" instead of "community residents".
BP-3	Figure 2: Partnerships with community members in Program development through community assistance grants and community steering committees, where community members and local air districts will work together to craft solutions for each selected community.	ARB is also a critical partner in the AB 617 implementation process even after the Blueprint is finalized in September. ARB should continue to be a partner in the process and be deeply imbedded in each Community Steering Committee due to the significant impact of mobile sources on overburdened communities.	ARB should include itself in this box as it is a critical partner in the AB 617 process.
BP-4	For example, lower cost sensors and other emerging technologies can be located in more locations within communities than more expensive regulatory-grade monitoring systems in place today.	While there are significant upsides to low- cost sensors there are also significant limitations. ARB needs to manage expectations around low-cost sensors by discussing their limitations in more detail especially when promoting them this early in the Blueprint. This is especially true where low-cost sensors cannot be effectively used to measure air toxics, which are one of the two main program targets.	ARB should include a discussion of the limitations of low-cost sensors (e.g. limited timeframes for usage due to the inability to calibrate any model, lower accuracy, lower precision, lower ability to limit tampering, etc.) alongside this statement.
BP-4	Under AB 617, air quality data from community-operated and agency- operated regulatory monitoring will be made available to the public through easily accessible online tools.	If ARB is committed to putting community monitoring on the same webpages as district run monitoring, it needs to ensure that monitoring is accurate and equivalent to district run monitoring. Without this critical oversight community members will be confused, especially if the monitoring by community members does not	ARB should either eliminate this sentence or add minimum requirements for any community monitoring data posted alongside district monitoring data. The minimum requirements should follow the checklist required of districts in the Statewide Air Monitoring Plan. Additionally, it is critical that ARB include

		produce the same results as that done by the district.	language in the Blueprint Summary document and Appendix E stipulating that a public education component will be developed to ensure that any monitoring data released/posted to the public is accompanied by an explanation of what the data means and what it doesn't mean, the accuracy level and what is appropriate from a regulatory standpoint as opposed to what is used for general informational purposes.
BP-4	Similarly, CARB will be providing greater access to community-level source and emissions data. California is already taking its detailed regional-scale inventories down to the community level so that the public can easily see the emissions sources near where they live.	WSPA supports more detailed reporting from small stationary sources, area sources, and mobile sources in communities selected for monitoring or emission reductions. Detailed community emission inventories are critical to ensure that large stationary sources are not disproportionately targeted in emission reduction plans simply because the district has inventory data for those sources.	N/A
BP-5	We expect to select up to 10 communities in the first year of the Program, with the majority selected for community emissions reduction programs, many of which may also include an associated monitoring component.	The requirements differentiating monitoring communities from emission reduction communities were released for the first time in the Blueprint Appendices. ARB should not prejudge decisions about whether communities will be selected for monitoring or emissions reduction programs until ARB has considered public comments on the criteria differentiating the two.	Remove all text after the first comma. ("with the majority selected for community emissions reduction programs, many of which may also include an associated monitoring component.")
BP-5	Selecting initial communities impacted by a range of pollution sources will drive the	Community selection should only be based on criteria that helps define the	Remove this sentence and these criteria from the selection process.

	development of strategies that can serve	most overburdened communities across	
	as models for action in other communities.	the state pursuant to AB 617.	
		Communities should not be selected on	
		the basis of capturing a "variety" of	
		sources in the programs.	
BP-6	AB 617 will help community members	This language raises the concern that even	ARB should clarify that the intent is not to
	work with local agencies that have land	sources operating in compliance with	shut down legally operating facilities in
	use authority to address the impacts of	existing zoning laws and other applicable	order to correct past land use decisions.
	past land use decisions and to avoid bad	regulations could be subject to revocation	
	land use decisions in the future	of land use authority.	
B-6	3. Cancer risk estimates based on existing	ARB should not include cancer risk	ARB should also use the term "regional" in
	or new air quality modeling that	assessments under AB 2588 in this step as	front of "cancer risk estimates" in this
	characterizes the burden faced by the	it would essentially be double counting	bullet to provide clarity as to the types of
	community.	for large industrial sources which are	cancer risk estimates included in this step
		already taken into account in bullet #2.	to avoid double counting for large
			industrial sources.
BP-6,	CARB staff will participate as observers	ARB should not be simply an observer in	ARB should remove this sentence and
C-7,	and provide technical support and other	the Community Steering Committee	include itself in the list of participating
E-7	input, as appropriate.	process. ARB should have role equivalent	members of the Community Steering
		to the air districts as the air quality	Committee.
		challenge in many overburdened	
		communities will be driven by mobile	
		sources for which ARB has sole	
		jurisdiction. This is especially true as ARB	
		will have the expertise and information on	
		all of the actions being undertaken in the	
		Statewide strategy.	
BP-8,	These include projects that focus on	Without committing to any clear oversight	ARB needs to take ownership for
E-1	community-driven air monitoring,	of the community grant programs, it is	oversight around these grant projects.
	dissemination of information on local	unclear how ARB intends to ensure that	ARB should include oversight
	emission sources, as well as the	the money given to these community	requirements (including financial
	development of actions to reduce	organizations is spent within the	reporting requirements) in the Blueprint
	community exposure to pollution, and to	boundaries of the grant application.	documents that grant recipients should
	track progress.		be required to meet to ensure that the

			money awarded under the AB 617 grant program is used appropriately and for the intended purpose.
B-8	Statute implemented by both CARB and DTSC require method development to assess cumulative impacts and integrate indicators of community vulnerability for the implementation of regulatory programs and community monitoring.	Stakeholders need more information on DTSC activities and how they will link with ARB assessments of community vulnerability.	N/A
B-8	Based on this analysis, air district submittals will include specific recommendations for selection of annual communities for air monitoring and/or emissions reduction programs.	The Blueprint documents remain unclear about what criteria will be used to determine when a community is selected for monitoring or an emissions reduction plan.	ARB should specify whether the monitoring is intended to fill a data gap for a community with known sensitive receptors but limited or low-quality data.
BP-9	Common themes expressed during the public engagement process to date are	ARB does not list many of the themes raised by business representatives. Most critically, ARB does not reference the need for cost-effective and feasible solutions for emission reduction plans.	ARB should add a bullet to discuss the criticality of ensuring that emission reduction measures in communities and throughout the state are developed and implemented in a cost-effective and feasible manner consistent with statutory language in AB 617.
BP-10	Ensure that emissions do not increase in communities that are already heavily impacted.	It is difficult to "ensure" that emissions will not increase.	ARB needs to provide greater specificity regarding the baseline for this determination and specify that this baseline should take into account typical business cycle fluctuations and avoid no- growth redlining within selected communities.
BP-10	Implement measures to reduce the impacts of emissions sources that sit close to sensitive populations, such as	Mandatory setbacks may not be possible for existing sources, especially where local planning decisions have allowed	ARB needs to specify how it would implement mandatory setbacks for existing land uses.
	mandatory setbacks.	encroachment of other uses.	
BP-10, B-	1. Concentrations of ozone, particle	As ozone is a regional pollutant and	Remove ozone from consideration when

6	pollution, and toxic air pollutants from	unlikely to be addressed under AB 617,	selecting communities for monitoring or
	measurements, air quality modeling, or	ARB should not include it in the analysis to	emissions reduction programs.
	other information quantifying air pollution	determine which locations are selected	
	exposure burden.	for community monitoring or emissions	
		reduction programs. Additionally, this	
		element is confusing as other regional	
		criteria pollutants are not included in the	
		analysis and ARB provides no explanation	
		why certain pollutants were included	
		while others were not.	
BP 11	Other measures of vulnerability to air	The listed factors do not always corollate	N/A
	pollution –	well with air pollution as demonstrated by	
	5. Public health indicators that are	CalEnviroScreen.	
	representative of the incidence or		
	worsening of disease related to air quality		
	such as the prevalence of asthma, heart		
	disease, and low birth weights.		
BP-12,	CARB staff is proposing additional	Community selection should only be	ARB should remove this section from the
B-10	considerations to recommend to the CARB	based on criteria that help define the	Blueprint and eliminate the additional
	Governing Board in defining a list of up to	most overburdened communities across	considerations for regional diversity and
	10 communities for action in the first year	the state pursuant to AB 617. Neither	variety of sources.
	of the Program's implementation. Along	regional diversity nor a variety of sources	
	with air district and community-based	will help determine which communities	
	recommendations for first-year	across the state are most overburdened	
	communities, these considerations	by air pollution. ARB should follow the	
	include:	statute and ensure resources are directed	
		to those communities most in need.	
BP-13	VIII. EQUIREMENTS FOR COMMUNITY	ARB does not mention two critical	ARB should include a significant
	EMISSIONS REDUCTION PROGRAMS	requirements for community emissions	discussion addressing many of the
		reduction plans: 1) the requirement that	concerns raised in WSPA's primary
		all emissions reductions should be done in	comment letter for these two critical
		a cost-effective and feasible manner, and	elements in this section.
		2) the requirement that emissions	
		reductions should be commensurate with	1

		source contribution.	
BP-13	Once CARB selects communities for focused action, air districts must develop local community emissions reduction programs in partnership with community members, CARB, and other stakeholders, based on criteria set by CARB.	Using the term "communities selected for focused action" is confusing. It is unclear if this is referencing just communities selected for emissions reduction or communities selected for monitoring or both.	ARB should only use the terms "communities selected for monitoring" or "communities selected for emissions reductions."
BP-15	Enforcement strategies to ensure rules and regulations achieve their expected reductions.	ARB should not assume that non- compliance or a lack of enforcement are the only reasons a rule will not achieve its intended emissions reductions. Other reasons may include, but are not limited to, changes in markets, inaccurate predictions of available technology, or poor performance of technology relative to predictions.	ARB should remove this sentence or reword it so it does not imply that noncompliance is the sole reason a regulation does not achieve its intended emissions reductions.
BP-16	Each community emissions reduction program will also include	Without an assessment of planned future actions (such as ARB's statewide measures), communities may require emission reductions which are not needed to ensure a community is no longer overburdened by air pollution.	ARB should include a requirement for emissions reduction programs to assess the impact of all future emission reductions that will result from plans already on the books.
BP-20	For communities heavily impacted by freight sources – o Expanded standards for clean operation for ships while they are in port.	ARB should not specify reliance on regulations that are still under development.	Remove references to specific rulemakings still pending adoption and not yet available for inclusion in community emissions reduction programs.
BP-21	At the local level, AB 617 also requires air districts to develop expedited schedules to implement retrofit pollution controls on certain industrial sources by 2023 which will reduce emissions in communities located near these sources.	ARB should be clear that the requirement in AB 617 is for air districts to complete rulemaking for BARCT by 2023.	ARB should include the word "regulations" after "controls" to ensure clarity around the requirements for BARCT in AB 617.
BP-23	However, CARB is developing a number of	ARB provides very little information on	ARB should expand the discussion of this

	tools and resources to better support engagement on land use and transportation strategies in impacted communities. These include: Developing updated guidance on conducting risk assessments for gas stations	the process for updating risk assessment guidelines for gasoline dispensing facilities.	action in Appendix F-18.
BP-25	We will collaborate with work being done by the South Coast Air Quality Management District and the U.S. EPA to evaluate new low-cost air pollution sensors. The monitoring toolbox will be available by October 1, 2018 and CARB will regularly update the toolbox with new information.	WSPA supports coordination between ARB, SCAQMD, and EPA so that information on air monitoring technologies is consistently communicated to the public across California and the US.	N/A
BP-26	Table 2 Checklist for Developing Community Air Monitoring	Data accessibility is not sufficient and significant work needs to be invested in educating members of the community on what are expected to be very complex monitoring campaigns.	All districts should be required to include an educational component in every community monitoring plan. This component should include an outreach element to ensure that members of the community understand monitoring results.
A-3	Developing a statewide strategy, including measures to reduce emissions and exposure, methods for identifying contributing sources, and criteria to serve as the benchmark that air districts must meet when developing and implementing community emissions reduction	ARB does not discuss any of the methods for identifying contributing sources (source attribution) or criteria for how districts should choose among those methods in the Blueprint.	ARB should add a new subsection to the community emissions reduction section to discuss the various available methods and how districts should approach choosing the correct method for source attribution. ARB should post this new language and take public comments on it prior to finalizing the Blueprint.
B-1	Step 2: Assessment – CARB staff will work with air districts to assess the cumulative air pollution exposure burden in each community on the list based on the factors	WSPA supports a full and transparent assessment of each community being assessed to ensure that the most overburdened communities are selected	ARB should not only post the list but also the analysis showing how each community compares according to the 6 criteria listed in Blueprint. This process

	outlined throughout this appendix. CARB will publicly post this statewide assessment in early summer each year.	on a statewide basis.	will ensure that communities in different districts are being assessed against the same criteria and that the most impacted communities are selected on a statewide basis.
B-1, B-10	The selection of priority communities will also include a description of near-term actions to be taken in communities not selected to underscore efforts that will be taken to reduce emissions and exposure in all communities, not just those selected that year.	ARB appears to be committing communities which are not selected to "mini" community emissions reduction plans which would conflict with AB 617 requirements.	ARB should remove this sentence as it could be interpreted to require actions that would be taken outside of the AB 617 process. The process is critical to ensure that program resources are directed toward the most overburdened communities and that AB 617 programs are cost effective and feasible.
B-2	In February 2018, CARB staff released a Draft Process to guide first year community self-nominations and the air district recommendation process.	ARB has not posted the comments it received nor its responses to those comments for this document or the draft Concept Paper.	ARB should be transparent in the development of the Blueprint and publish all comments it has received as well as ARB's response to comments on all previously released documents.
B-8	Coordinate with community leaders and community-based organizations to determine the appropriate place and time for the meetings.	ARB has not included local businesses among the groups identified for determining the appropriate places and times for meetings. Local businesses also have challenges in attending meetings at certain times and locations. This is especially true for small local businesses.	ARB should revise the language to ensure coordination with local business is also part of the process for setting meeting times and locations.
B-8	 Air districts should also consider additional factors in recommending specific communities for community air monitoring and/or community emissions reduction program preparation that year, including but not limited to: Existing community air monitoring and/or emissions reduction efforts. Community organization administrative 	While WSPA understands the challenges in implementing AB 617 community monitoring or emission reduction programs in communities with less capacity, "readiness" of the community should not be a factor in deciding which communities are selected. ARB should ensure that the most overburdened communities are selected as they are the	ARB should remove this section and eliminate this consideration from the selection process.

	 and technical resources. Anticipated community, government, and business stakeholder resource needs for capacity building, mitigation, public process, etc. 	ones with the greatest need.	
В-9	•If the communities are recommended for community emissions reduction programs, provide the following information	While WSPA supports inclusion of criteria to differentiate between communities selected for monitoring and communities selected for emissions reduction programs, absent greater specificity it is unclear how ARB will ensure that these criteria are satisfied for a given community.	ARB should propose more specific minimum requirements which can be assessed prior to selecting a community for emissions reduction. Example 1: Providing a definition of "well- characterized" would be helpful in ensuring that communities selected for emissions reduction programs are truly ready to advance to that part of the process instead of entering the process as a monitoring community. Example 2: ARB should not place a community into an emission reduction program unless it has speciated PM data across the community. Without this data it will be impossible to determine the source(s) of the PM. Example 3: The district should have information on area sources (such as number or percentage of residential properties with a specific piece of equipment like a wood-burning fireplace) such that it can accurately model the extent of the impact from that activity.
B-10	Communities included in the statewide assessment, but not selected for the preparation of an emissions reduction	ARB must have a mechanism for removing communities from the candidate list (perhaps based on findings from technical	ARB should specify the circumstances by which communities are removed from the candidate list.
	program or community air monitoring system in the current year, will remain candidates on the list for selection in	assessments) in order to ensure that sufficient program resources are directed to the communities with the greatest	

	future years.	need over the life of the program.	
C-3	 Develop a strong technical foundation 	WSPA supports a full assessment and	N/A
	for understanding the sources of air	characterization of all sources in	
	pollution impacting the community.	communities selected for community	
		emissions reduction programs.	
C-3,	• Characterize the current of indicators of	Characterizing health indicators as part of	ARB should clarify that health indicators
C-10	public health in the community related to	the community profile has the potential	are included in the community profile
	air pollution.	to confuse Community Steering	only to help identify pollutants of concern
		Communities by leading them to conclude	and that they will not be used as metrics
		that health indicators can be used as a	or targets. We recommend ARB reinstate
		metric or target in the emissions	the footnote reference in the Framework
		reduction program.	document that cites not only air pollution,
			but other factors which contribute to
			overall health outcomes.
C-3	 Identify applicable regulatory, 	ARB's use of the term "most stringent	ARB should modify the sentence by
	enforcement, incentive, and permitting	approaches" will lead communities to	including a reference to ensure that the
	strategies to implement the most	believe that cost-effectiveness and	selected approaches are both cost
	stringent approaches for reducing	feasibility are not factors in determining	effective and feasible.
	emissions, with a focus on zero emission	which approaches will be included in	
	technologies where feasible.	emissions reduction programs.	
C-4	Ozone is a regional air pollutant that is	WSPA supports the exclusion of ozone	N/A
	formed through complex chemical	from community emissions reduction	
	reactions in the atmosphere. While	programs as it is a regional pollutant and	
	significant work remains to meet ozone	local changes are unlikely to impact ozone	
	standards in many areas of the State,	levels in a specific community.	
	ozone pollution is driven by regional		
	rather than localized source contributions		
	and is most appropriately addressed		
	through regional air quality improvement		
	efforts like the State Implementation Plan.		
C-5	Although reference exposure levels	As WSPA indicated in our comments on	ARB should remove this statement from
	represent safe exposure levels for non-	the draft Concept Paper, this statement	Appendix C.
	cancer health effects, there are no safe	assumes that all carcinogens operate by	
	exposure thresholds for carcinogens.	the same basic (mutagenic) mechanism of	

		action. This statement is not universally	
		true and must be evaluated on a case-by-	
		case basis. Continuing to promote this	
		outdated, overly-broad and unscientific	
		point of view is misleading and a	
		disservice to AB 617 stakeholders.	
C-5	Efforts to significantly reduce exposure to	Whenever ARB discusses "maximizing	ARB should modify the sentence by
	toxic air contaminants therefore rely on	emission reductions" without a discussion	including a reference to ensure that the
	identifying technologies and practices that	of cost-effectiveness and feasibility, it will	approaches selected are cost effective
	offer the maximum level of emissions	only serve to confuse communities about	and feasible.
	reductions achievable.	the requirements for including control	
		measures in emissions reduction	
		programs. Community members need to	
		understand that the requirement is not to	
		drive to zero emissions but rather to	
		pursue reductions that make sense and	
		will achieve meaningful air quality	
		benefits in selected communities.	
C-5	In addition to reducing PM2.5 and toxic	It is misleading to include greenhouse	This language should be removed from
	air contaminant emissions, many of the	gases (GHG) in this statement. GHG	Appendix C.
	strategies included in community	emissions are addressed through the AB	
	emissions reduction programs may deliver	32 Scoping Plan and related control	
	reductions in other pollutants, including	measures. Incidental GHG reductions	
	greenhouse gases and ozone precursors.	achieved as a co-benefit of AB 617	
	These co-benefits can contribute to	emissions reduction programs, even in	
	statewide and regional emissions	several California communities, will not	
	reduction efforts, delivering additional	affect climate change enough to deliver	
	local health benefits.	local health benefits.	
C-5	Diesel particulate matter continues to be a	Benzene and Toluene can come from	ARB should remove the reference to
	concern in many communities; however,	other sources outside of fossil fuel	"fossil fuel production" in this sentence,
	other toxic air contaminants can also	production. ARB's reference will lead	or revise it to include the broad range of
	contribute to localized health risk	community members to conclude that	sources that may contribute to benzene
		•	

	fossil fuel production such as benzene and toluene, and compounds associated with combustion including polycyclic aromatic hydrocarbons and dioxins.	toluene is a pollutant of concern.	
C-5	 To address disproportionate localized air quality impacts, community emissions reduction programs will focus on two objectives: Reducing exposure caused by local sources to achieve healthful levels of PM2.5 within the community. Maximizing progress on reducing exposure to toxic air contaminants that contribute to the cumulative exposure burden. 	WSPA supports the focus on PM2.5 and toxic air contaminants as they are pollutants which can have impacts at the local level. However, air districts should determine when PM precursors are regional and separate regional precursors from local precursors. If regional contributions are the primary source, local sources should not be burdened with additional controls just because they are located in an emissions reduction program community.	ARB should discuss how the air districts should distinguish between regional and local contributors to PM2.5.
C-7	To ensure that the committee members can inform the early stages of community emissions reduction program development, the air district should hold the first meeting of the community steering committee within 60 days of a community being selected by the CARB Governing Board for community emissions reduction program preparation.	With the short amount of time given to districts to develop and prepare a community emissions reduction program, 60 days is simply to long to set up and convene the Community Steering Committee.	ARB should revise the requirement to set up Community Steering Committees within 30 days.
C-7	The community steering committee must be comprised primarily of community members, which includes participants who live, work, or own businesses within the community.	WSPA supports the involvement of only those that live and work within selected communities and believe this is critical to program success. Ensuring that organizations outside the community do not hijack the process is critical to ensuring a fair and equitable process. Additionally, those in the community are most knowledgeable on the issues and	N/A

		most impacted by the outcomes.	
C-9	• A designated contact person at the air district for each community emissions reduction program – Each air district should identify a contact person to address general questions regarding community emissions reduction programs and Community Air Protection Program implementation for each selected community.	ARB is a critical participant in the Community Steering Committees. A single point of contact between community members and ARB is critical.	ARB should also provide a designated contact for each Community Steering Committee.
C-11	Conducting a technical assessment is a necessary step in community emissions reduction program development.	One of the most important functions of the technical assessment is to identify any data gaps that may need to be filled to properly characterize the nature and extent of the air quality burden in a candidate community. Here ARB has relegated this critical issue to the last paragraph of the "Required Analytical Tasks" section.	The data gap issue should be addressed in the opening paragraph.
C-11	• An assessment and description of the existing high cumulative air quality exposure burden within the community. This assessment includes a list of the key pollutants driving the exposure burden in the community and how exposure may change over time due to existing air quality policies or programs.	With ARB committing to such a large array of future rule changes in its Statewide Strategy, it will be critical to include those measures in a description of how exposure will change over time as part of the technical assessment.	ARB should include both "existing" and "future" air quality programs and regulations in the assessment.
C-11	• A community-level emissions inventory, which estimates pollutant emissions of the mobile sources (e.g., cars, heavy-duty trucks, locomotives), area-wide sources (e.g., fireplaces, charbroilers, fugitive dust), and stationary sources (e.g., oil refineries, auto body shops,	WSPA supports specific community emission inventories that capture small and mobile sources. These will be necessary to ensure program success. Community level emission inventories for those communities selected for monitoring and emissions reduction	ARB should also include community emission inventories in communities selected for monitoring as this will help inform selection of proper monitoring technologies and locations.

	manufacturing facilities) contributing to the high cumulative air quality exposure burden within the community. CARB will provide guidance for development of emissions inventories in the online Resource Center. Developing more granular community-scale emissions inventories is critical for understanding existing baseline emissions and tracking future emission reductions within a community.	programs will be critical to ensure that all sources are properly characterized and sufficient data is available to determine source attribution so that emissions reduction strategies are commensurate with relative source contributions.	
C-12	•This task is necessary for identifying the applicable pollutants, emission sources for these pollutants, and the magnitude of the local pollutant impacts to be addressed by source type within the community emissions reduction programs. The community emissions reduction program needs to describe the source attribution methodology or methodologies used and explain why each methodology was selected.	The Blueprint documents do not include sufficient discussion regarding the statutory requirement that emission reductions must be "commensurate with a source's contribution." While there is discussion of the need for source attribution the documents do not address how that information should be used for emissions reduction. It is critical that source attribution be employed in every emissions reduction program to ensure sources are only required to reduce emission commensurate with their relative contribution to the community air quality burden.	ARB should include language which links the source attribution work required to be performed by the districts to the specific measures included in the emissions reduction programs. For example, ARB could include the following: "After conducting source attribution as required in the technical assessment, districts should identify the relative contributions from various sources. In selecting emission reduction strategies, no source should be required to reduce emissions beyond their relative contribution."
C-12	• An assessment of compliance with air quality rules and regulations for sources impacting the community, consistent with the enforcement plan.	It makes no sense that the enforcement assessment be consistent with the enforcement plan, when the assessment should come first and form the basis for the enforcement plan.	ARB should reword this sentence to eliminate confusion regarding how the assessment of compliance leads to an enforcement plan.
C-12	As part of their submittal of the community emissions reduction program to CARB, air districts are to include	ARB is indicating that in some cases assessment of data gaps and actions to fill them would occur <u>after</u> a community has	ARB should include this requirement earlier in the process as part of the initial determination as to whether a

	documentation of data sources and methods and a discussion of any data gaps, the implications of these data gaps, and potential opportunities to improve technical analysis in the future.	been selected for emissions reduction program development. If there are data gaps that still need to be filled, the community should not be selected in the first instance, as selection for emissions reduction programs requires well-	community should be selected for an emissions reduction program or for a monitoring program.
C-12	Several air districts have already conducted detailed analytical work at the community level and have granular, robust data on community-level emissions and exposure. These high-resolution datasets can support detailed source attribution analysis for strategy development. In other cases, high- resolution data may be unavailable at the community-level, and community emissions reduction program strategies will be focused on broader source categories.	characterized emissions sources. Similar to the comment above, communities should not be selected for emission reductions unless high- resolution data is already available.	ARB should not select communities for emission reductions unless the sources and emission are already "well- characterized". The last sentence should be reworded to indicate that communities without high-resolution data should not be selected as communities for emission reductions.
C-13	Reducing PM2.5 concentrations beyond what the federal or State PM2.5 standard require can deliver additional health benefits. In communities where PM2.5 levels are already at or below the standards, air districts may want to consider establishing targets to further improve PM2.5 levels if doing so would reduce the cumulative exposure burden.	Direction to reduce pollutants below the CAAQS/NAAQS is concerning, especially given statutory direction that this program must focus on overburdened communities. While most overburdened communities will be above the NAAQS for PM2.5 and PM10, that will not always be the case. ARB should not require additional reductions beyond the CAAQS/NAAQS because meeting these standards will likely ensure the community is no longer overburdened.	In the interest of program sustainability, ARB should strike any language from the document, including the referenced sentence, that would allow air districts to establish targets below the NAAQS or CAAQS.
C-14	To establish the emissions reduction targets, community emissions reduction	It is unclear if emissions reduction targets will be set based on the technology	ARB should clarify that while evaluating technology for cost-effectiveness and

	programs first establish specific,	desired by the district or based on what is	feasibility is a critical step, measure
	numerical goals for compliance and for	necessary to address a high exposure	selection should not be based on a desire
	the deployment or implementation of	burden from PM 2.5 and TACs.	by the district or community to see a
	control technology and techniques that		specific technology installed.
	can deliver emissions reductions for the		
	identified pollutants and associated		
	precursors contributing to the cumulative		
	exposure burden. The community		
	emissions reduction programs will then		
	calculate the emissions reductions		
	associated with the compliance and		
	technology goals to establish emissions		
	reduction targets that ensure steady		
	progress towards meeting the air quality		
	objectives.		
C-14	 The community emissions reduction programs include: Commitments to achieve compliance goals for the identified mobile, stationary, and area-wide sources. Commitments to achieve numerical goals for deploying or implementing available technologies or operational practices that provide the greatest emissions reduction potential for the identified mobile, stationary, and areawide sources. 	Once again it is concerning that ARB discusses control options without also discussing cost-effectiveness and feasibility. Technology should not be required simply because it is available or has the greatest emissions reduction potential.	ARB should modify this statement to stipulate that selected technologies must be cost effective and feasible.
C-14	Ibid	ARB does not clearly describe the difference between a compliance goal and a numerical goal. An emissions reduction program should be tied to the latter. A compliance goal should only be related to compliance with the emissions reduction identified in the program and not all air	ARB should clairfy this section to more clearly differentiate between a compliance goal and a numerical goal.

		quality regulations. For example, compliance with reporting requirements for unrelated regulations has no bearing on the emissions impact in the community.	
C-15	The community emissions reduction program must draw from the Technology Clearinghouse in identifying technologies but may also use other sources.	The description of the technology deployment goals being tied to the BARCT clearinghouse seems like a new interaction between these two requirements. Technology deployment should be tied to actions that achieve the necessary emissions reduction to address the disproportionate burden – not to maximize deployment of control technology for the sake of the technology.	ARB should revise this section to tie technology selection to actions that will achieve the necessary emissions reduction in the selected community.
C-16	 To determine proximity-based goals, the community emissions reduction program will: Identify the sensitive receptor locations that are exposed to elevated levels of air pollution because of their proximity to emissions sources. 	Proximity alone is not a sufficient basis for establishing emissions reduction goals or for deploying or implementing exposure reduction measures at particular sources, especially if the risk to the sensitive receptors is driven by other sources.	ARB should include an additional bullet(s) in this section stipulating that proximity- based goals should be tied to air quality modeling/monitoring and robust source attribution.
C-17	The scope of strategies included in each community emissions reduction program will be informed by the technical assessment and the types of sources contributing to elevated pollution levels and the nature of the goals and targets.	ARB is missing a critical step in the process for establishing emissions reduction strategies. Strategies need to be based on the source attribution to ensure they reduce emissions commensurate with source contribution.	ARB should include a discussion in this paragraph describing how source attribution results should be used in establishing emissions reduction strategies commensurate with a source's contribution to the overall emission burden.
C-18	Statute requires that any air district in nonattainment for at least one criteria air pollutant adopt an expedited BARCT implementation schedule for certain	WSPA agrees that ARB and the districts should consider the BARCT implementation requirement and impacts from other rules on facilities operating in	N/A

	industrial sources. The community emissions reduction programs must identify which sources in the community	communities subject to emissions reduction programs. We are concerned, however, that requirements to consider	
	will be subject to these requirements and ensure deployment of BARCT measures as applicable within the community.	certain other measures, such as activity limits and indirect source regulations have the potential to chill economic growth in emissions reduction program	
C-19	Review facility risk reduction audits for selected facilities and identify and list facilities that will be required to update their emissions reduction plans – Statute requires an assessment of which facilities' risk reduction audits and emission reduction plans an air district should review and update and authorizes air districts to reopen existing plans to strengthen them as appropriate. In the technical assessment, air districts will have identified the major sources contributing to health risk in the community.	communities. This section seems to focus only on those facilities that trigger HRAs under district regulations, despite the fact that the health risk may be driven by other sources. In order to reduce health risks to acceptable levels, all risk-driving sources must be identified and controlled.	ARB should stipulate that health risk evaluations will not be limited just to those sources subject to district risk reduction audit and plan requirements.
C-20	 Identify and include near-term enforcement strategies to improve compliance with existing rules – Identify any non-compliance issues within the community and include near-term enforcement strategies. Enforcement of rules and regulations is critical to ensuring that CARB and air district policies achieve the anticipated benefits. Increased enforcement of existing rules and regulations can be implemented without requiring new regulatory processes, 	Enforcement strategies should be based on a clear and documented lack of compliance with a given rule or regulation instead of a community or air district "hunch" that there is potential non- compliance.	ARB should adjust this language to better reflect the 3-year enforcement history evaluation in the enforcement plan (C- 26). This will ensure that the enforcement strategy is based on a documented lack of compliance with a specific rule or regulation.

	presenting an opportunity to rapidly address community concerns and quickly deliver emissions reductions.		
C-21, C-40	o Processes to terminate existing incompatible land uses within selected communities.	WSPA is extremely concerned with the precedent this might set in seizing property rights from owners who are operating facilities in compliance with all applicable laws and regulations. It is also important to note that often the facility existed at the location prior to the sensitive receptor and should not be forced to shut down simply because the local land use authority allowed sensitive uses to encroach on the facility.	ARB should remove this bullet from the list.
C-24	After assessing and selecting new strategies, development of an implementation schedule for those strategies is next.	Understanding the implementation schedule for a given strategy is critical to understanding its cost-effectiveness and feasibility.	ARB should require that potential implementation schedules be analyzed earlier in the process before specific strategies are selected.
C-24-C28	Enforcement Plan	While WSPA appreciates the delineation of enforcement roles at C-25, the whole enforcement plan section goes well beyond enforcing new requirements imposed in the emissions reduction programs and enlists the community in ways that will be combative and detrimental to business.	ARB should limit the enforcement plan to the requirements established in the emissions reduction program.
C-29	 Additional enforcement activities such as: Inspections conducted including type, date, and location. Notices of violations issued including date, recipient, and regulation cited. Number of complaints received by type and their resolution. 	Using the number of Notices of Violation issued as an annual implementation metric is inappropriate. This approach could lead to pressure on the air district to issue NOVs in situations where an NOV is not warranted. These metrics should be compliance-oriented, not punitive in nature.	ARB should clarify this section such that any metrics for NOVs do not encourage air districts or ARB to increase the number of NOVs issued. A more appropriate metric might be the percentage of NOVs resolved or the average time to resolution for NOVs.

	o Any additional compliance metrics relevant to enforcement issues in the community.		
C-31	CARB and the air districts are required to comply with CEQA insofar as activities required by statute are projects subject to CEQA. In its development and approval of a community emissions reduction program, air districts (as CEQA lead agencies) will need to determine the appropriate CEQA analysis required and consult with CARB. For every project that is not exempt, CEQA requires the appropriate level of environmental review be conducted before that project may be considered for approval.	The CEQA analysis for emissions reduction programs (C-31) must not be done in a piecemeal fashion. The approach taken by the Bay Area AQMD for the suite of rules to implement its Refinery Emissions Reductions Strategy – separate CEQA analysis of individual rules that are part of a comprehensive regulatory package – diminishes the actual economic impact of the full suite of measures. This approach subverts the intent of CEQA analysis and is an example that should not be replicated in future programs.	Any regulations developed pursuant to AB 617 emissions reduction programs must be grouped together for purposes of CEQA analysis to ensure a more accurate identification and evaluation of the true environmental and economic impacts.
C-33	Annual Progress Reports	There should be an opportunity for public comment on the annual report ahead of the ARB Board meeting.	ARB should include this step as a requirement in the annual report process.
C-34	o Characterized health-related benefits of any strategies under development or implemented.	Including a characterization of the health benefits associated with strategies under development or implemented will only serve to further blur the lines between health indicators and AB 617 air quality indicators. Requiring this as part of the annual report, especially when health impacts from reducing air pollution will often be many years into the future, will further serve to confuse the public.	ARB should remove this bullet from the list.
C-35	• Planned changes based on progress to- date – In developing the annual progress report, the air districts will identify any programmatic changes based on progress to- date. This could include any number of	Air districts should not be able to change the community emissions reduction program in the annual report without first gaining approval from the district Board. This would be similar to what is required	ARB should clarify that air districts need to gain approval from their Boards prior to requesting changes in their annual reports to ARB. ARB should also commit to bringing those changes before the ARB

	modifications such as updating implementation schedules based on new data analysis, revising public outreach, or pursuing new enforcement activities. The annual progress report will identify if an update is needed to address any additional issues with implementation. This includes identification of how any updates will still ensure the emissions reduction targets will be achieved.	upon initial development of the program. Similarly, ARB's Board should be required to approve any changes to the requirements in a community emissions reduction program.	Board for approval.
C-36	VI. CHECKLIST FOR COMMUNITY EMISSIONS REDUCTION PROGRAM EVALUATION	The section on community emission reduction plans contains no requirement or clear criteria for completing and sunsetting community emissions reduction programs. Absent this feature, communities will continue to push for further reductions even when all of the emissions reduction program actions are completed.	ARB should add a subsection describing what is required to complete a community emission reduction plan.
C-36	VI. CHECKLIST FOR COMMUNITY EMISSIONS REDUCTION PROGRAM EVALUATION III. CHECKLIST FOR COMMUNITY AIR MONITORING EVALUATION	WSPA supports the extensive checklists and clear requirements for both monitoring and emissions reduction programs to ensure fairness, transparency, and that corners are not cut in the implementation process. This detail will ensure that programs are well thought out and that critical elements can be easily are verified by ARB.	N/A
C-38	• The share of pollution contributed by sources within the community, as well as the portion driven by regional or background pollution.	WSPA supports the assessment of emissions coming from regional background. This is a critical element of community profiles. As AB 617 is focused on local sources of emissions, it will be important for districts to understand the	N/A

C-38	For the mobile, stationary, and area-wide sources of applicable criteria air pollutants	background levels for regional pollutants (especially PM2.5 and PM10) so that sources are not overly-controlled when emissions are actually coming from outside the local community. WSPA supports the inclusion of area sources (wood burning, cleaning products,	Districts must address area sources as part of a community profile and
	and toxic air contaminants impacting the community, specify:	etc.) in emissions reduction programs. Depending on the local meteorology and community makeup, area sources can be significant contributors to overall emissions.	assessment.
D-4, D-6, D-7	"Some of the strategies focused on reducing climate pollutants will also provide opportunities to reduce criteria air pollutants and toxic air contaminants".	The Post-2020 Cap and Trade program is included at the end of the Table 6. It seems unlikely that this measure, which is intended to influence reductions of global greenhouse gas emissions, will contribute meaningfully to community-level PM 2.5 and TAC emissions reductions.	N/A
D-12	Prior to adopting the schedule, the air district must hold a public meeting and take into account: (1) the local public health and clean air benefits to the surrounding community; (2) the cost-effectiveness of each control option; and (3) the air quality and attainment benefits of each control option.	Assessment of regional air quality and attainment benefits of potential control options are beyond the scope of AB 617.	ARB should revise the third criterion to focus on the air quality benefits to the selected community.
E-4	<i>II. COMMUNITY AIR MONITORING PLAN ELEMENTS AND REQUIRED CRITERIA</i>	There is a need for an educational component in every monitoring program to ensure proper interpretation and use of the data generated by the program. Data accessibility without context will lead to misinterpretation and misdirected	ARB should include a requirement for air districts to develop an educational component in every monitoring program to ensure monitoring data is properly interpreted and properly used to inform future community program decisions.

		actions. ARB and the districts need to educate community members on what are expected to be very complex monitoring campaigns.	
E-6	For example, in some communities residents may take an active role in leading or conducting air monitoring while in other communities residents may be involved in selecting monitoring locations with air monitoring conducted by air district staff.	While there may be a role for community residents to conduct air monitoring for screening purposes, air districts should not delegate any monitoring linked to emissions reduction, source attribution or enforcement.	ARB should clarify that air districts are responsible for conducting or directly overseeing any monitoring linked to emission reduction programs or source attribution work.
E-7	Defining the quality of data that is needed for the proposed actions supports the selection of methods and equipment that are capable of producing data of appropriate quality.	WSPA supports the idea that ARB identify appropriate uses for various monitoring technologies but is concerned that ARB is largely relegating this information to the online Resource Center.	Given the potential applications ARB envisions for various monitoring technologies, and the considerable emphasis placed on emerging and low- cost technologies, the Blueprint documents should include additional discussion of appropriate applications.
E-11	Methods and equipment must be capable of meeting the data quality objectives defined in the "Define Data Quality Objectives" section above.	WSPA supports the criteria listed in the previous section and the requirement that monitoring must meet defined data quality objectives. Data quality indicators should be aligned with the goals of the community monitoring program.	N/A
E-20	To address this requirement, a data portal will be available on CARB's webpage, which will allow reporting of both real- time preliminary data and validated final data.	WSPA supports the idea of posting both preliminary data and validated final data in separate locations. We remain concerned however, that preliminary data could cause confusion and be misunderstood by the public.	ARB should ensure that preliminary data is presented with appropriate context to prevent confusion and misinterpretation.
F-13	It will be a useful tool to identify the best control technologies, rules, and measures for use in controlling emissions and will foster continued technology advancement	By placing next generation technologies into the clearinghouse, ARB is creating an unreasonable expectation that those technologies are going to be installed	ARB should separate all forward-looking or next generation technologies in the Technology Clearinghouse from technologies that are cost-effective and

	by highlighting next generation	when often they will be cost-ineffective or	achieved in practice.
	technologies.	infeasible. This expectation will lead to	
		confusion and frustration among	
		communities when these technologies are	
		not selected in emission reduction	
		programs or future rulemakings.	
F-13	Prior to issuing a permit, air districts	This statement is a mischaracterization of	ARB should revise the sentence to provide
	confirm that the facility and all emitting	the air quality permitting process and	needed clarity around the extent and
	equipment are in compliance with	gives the impression that all equipment	nature of changes during a permit
	applicable rules and regulations. Permit	and limits are updated each time the	modification.
	limits are usually updated every time a	permit is updated. This will only serve to	
	facility installs new equipment or modifies	confuse the public as new permits only	
	their existing equipment.	change limits for new or modified	
		equipment.	
F-14	Air districts determine the best-achievable	This is a mischaracterization of BACT	ARB should revise the sentence to
	emissions limit for each class and category	which will only serve to confuse	accurately describe what is required as
	of source over these emissions thresholds	communities. BACT requires an	part of a BACT review. Specifically, this
	based on the cleanest technology	assessment of feasibility and is not simply	should include the assessment of
	available at that time (this is BACT).	the selection of the cleanest technology.	feasibility which also includes costs.
F-24	ASSESS CURRENT AIR MONITORING	ARB previously offered its initial thoughts	ARB should propose this approach as part
	TECHNOLOGIES AND PROVIDE	to the AB 617 Consultation Group on how	of the Blueprint so that stakeholders have
	INFORMATION	it would categorize the uses of various	an opportunity to comment on the
		monitoring technologies.	criteria and thresholds for appropriate
			use of various monitoring technologies.
F-27	EXPLORE COMMUNITY HEALTH	ARB is stating its intention to be the	ARB should leave this work to public
	INDICATORS	implementing agency for additional work	health agencies. Having ARB lead this
		to explore community health indicators.	effort will only serve to further confuse
	Implementing Agency: CARB		the public about the scope of AB 617.

Attachment 2 to WSPA Comments on ARB's Draft Community Air Protection Blueprint and Appendices

Comments on Appendix G - Draft Environmental Analysis Prepared for the Proposed Draft Community Air Protection Blueprint

I. <u>The Draft EA</u> Fails to Sufficiently Address CEQA Requirements Because It Does Not Evaluate Reasonably Foreseeable Environmental Impacts from Implementing the Blueprint.

The California Air Resources Board's ("ARB") Draft Environmental Analysis ("Draft EA") fails to fully and fairly disclose all reasonably foreseeable adverse environmental impacts associated with implementing the AB 617 Draft Community Air Protection Blueprint ("Blueprint") in violation of the California Environmental Quality Act ("CEQA") (Cal. Pub. Res. Code ("PRC") §§ 21000 et seq.). CEQA requires lead agencies to consider the significant environmental impacts of their actions, and to the extent feasible, mitigate those impacts to insignificant levels.

Under CEQA, before ARB adopts a regulatory program that will require installation of pollution control equipment or compliance with performance standards or treatment requirements, it must identify and analyze reasonably foreseeable environmental impacts of, mitigation measures for and alternatives to foreseeable methods of compliance with such standards. The environmental analysis must take into account a reasonable range of environmental, economic and technical factors, populations and geographic areas, and specific sites. *See* PRC §§ 21159, 21159.4. Even though the regulatory program envisioned by the Draft Blueprint is intended to benefit the environmental side-effects is required. *POET LLC v. State Air Resources Board* (2012) 218 Cal.App.4th 681.

ARB has attempted to prepare the Draft EA as a high-level programmatic CEQA evaluation, which ARB notes will be followed by more detailed, project-level CEQA review of individual actions undertaken by ARB, the air districts, cities, counties and other agencies in order to implement the strategies outlined in the Blueprint. *See* Draft EA, pp. 3-4. The Draft EA claims that many of the impacts resulting from compliance are "speculative" and on that basis conservatively concludes that, at the program level of analysis, many anticipated adverse impacts must be considered "**potentially significant and unavoidable**." *See*, *e.g.*, Draft EA p. 36 (emphasis in original). ARB repeatedly asserts that such impacts must be considered potentially significant and unavoidable because implementation of the Draft EA's recommended mitigation measures for those impacts is under the jurisdiction of local decision makers, not ARB. *See* Draft EA, p. 35.

While such "tiered" environmental review is encouraged by CEQA, the tiering approach "does not excuse the lead agency from adequately analyzing reasonably foreseeable significant

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environmental effects of the project and does not justify deferring such analysis to a later tier." 14 C.C.R. § 15152(b).

- "While proper tiering of environmental review allows an agency to defer analysis of certain details of later phases of long-term linked or complex projects until those phases are up for approval, CEQA's demand for meaningful information is not satisfied by simply stating information will be provided in the future." Vineyard Area Citizens for Responsible Growth, Inc. v. City of Rancho Cordova (2007) 40 Cal.4th 412, 431 (internal quotations omitted).
- Deferring CEQA analysis to a later tier is permitted only when the agency makes "no commitment" for the future at the first stage of the project, and there is an "understanding that additional detail will be forthcoming when specific second tier projects are under consideration." In re Bay-Delta Programmatic Environmental Impact Report Coordinated Proceedings (2008) 43 Cal.4th 1143, 1172; see also City of Hayward v. Board of Trustees of the California State University (2015) 242 Cal.App.4th 833, 848-851.
- Conversely, CEQA analysis is required before an agency becomes "committed to a definite course of action." *Save Tara v. City of West Hollywood* (2008) 45 Cal. 4th 116, 139 (2008). The question is "whether, as a practical matter, the agency has *committed itself to the project as a whole or to any particular features*, so as to effectively preclude any alternatives or mitigation measures that CEQA would otherwise require to be considered, *including the alternative of not going forward with the project." POET*, 218 Cal.App.4th at 721-722 (*quoting Save Tara*, 45 Cal.4th at 138) (emphasis added).

II. <u>ARB Improperly Piecemealed Environmental Review of the Blueprint by Declining</u> to Analyze Impacts of Local Agencies Compliance Actions.

CEQA prohibits lead agencies from conducting "piecemeal" review of a project's significant environmental impacts. Agencies must consider "the whole of an action" (PRC § 15378) rather than "chopping up proposed projects into bite-sized pieces which, when taken individually, may have no significant adverse effect on the environment." *Tuolumne County Citizens for Responsible Growth, Inc. v. City of Sonora* (2007) 155 Cal.App.4th 1214, 1223 (internal quotations omitted); *see also Aptos Council v. County of Santa Cruz* (2017) 10 Cal.App.5th 266, 277-278. California courts have held that lead agencies engage in improper piecemealing "when the reviewed project legally compels or *practically presumes* completion of another action." *Aptos Council*, 10 Cal.App.5th at 280 (emphasis added). To avoid improper piecemealing, a complete programmatic analysis must be prepared covering multiple related actions, rather than subsequently evaluating those for the first time as separate CEQA projects. *See City of Hayward*, 242 Cal.App.4th at 850 (program EIR for university master plan avoided piecemealing by studying cumulative traffic impacts on major intersections in the area).

In analyzing whether the two projects are improperly piecemealed in violation of CEQA. the test set out by the California Supreme Court is as follows: "... an EIR must include an analysis of the environmental effects of [the] ... other action if: (1) *it is a reasonably foreseeable consequence*

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of the initial project; and (2) the future expansion or action will be significant in that it will likely change the scope or nature of the initial project or its environmental effects." Laurel Heights Improvement Assn. v. Regents of University of California (1988) 47 Cal.3d 376 (emphasis added). While the Blueprint commits to the development of Community Emission Reduction Plans by air districts, ARB claims that the only reasonably foreseeable compliance response this will lead to is "CARB staff providing a criteria document for the development of [these] programs." Draft EA, p. 26. ARB asserts that, because the Plans "are not known at this stage and will be developed later by local air districts," ARB is unable to analyze any anticipated impacts associated with the Plans. Id. However, in the Blueprint ARB states that the Plans will result in new rules and regulations for pollution control, incentives to promote accelerated equipment turnover to "cleaner technologies," and "engagement with local agencies on land use and transportation strategies. Blueprint, p. 15.

Here, compliance measures established by the local air districts and/or other local agencies to facilitate compliance with measures set forth in the Draft Blueprint are not only reasonably foreseeable, but will likely change the environmental impacts beyond those contemplated by Blueprint and its environmental analysis. ARB makes no attempt to discuss the adverse environmental impacts of these anticipated actions. CEQA forbids this type of "piecemealing" of a project's foreseeable significant environmental impacts. *See* 14 C.C.R. § 15378. At a minimum, ARB must consider the adverse environmental impacts of anticipated actions under CEQA or alternatively withdraw the blanket statement that the Plans will result in "…new rules and regulations for pollution control…".

III. <u>ARB Fails to Analyze Reasonably Foreseeable Means of Compliance and Impacts</u> <u>From Its Commitments, Which Are Not Speculative.</u>

The Draft EA does address the impacts of new ARB regulations that may be adopted as "statewide strategies" under the Blueprint, including potential new regulations on railyards, locomotives, drayage trucks, cargo handling equipment, commercial harbor craft, heavy-duty engines, etc., as listed in Draft EA Table 2-1. The reasonably foreseeable means of compliance with these ARB regulatory actions include the following (EA, p. 27):

"... increased infrastructure for hydrogen refueling stations and electric charging stations; increased demand for lithium battery manufacturing and increased recycling, refurbishment, or disposal of lithium batteries; [increased] replacement rate [of] vehicles, equipment and engines... requiring that older models are sold outside of California, scrapped, disposed, or recycled; construction and operation of new manufacturing facilities, or, the modification of existing facilities to support zero and near-zero emission equipment and vehicles; construction of new, or modification of existing, facilities to add on control equipment; changes to manufacturing processes; and the disposal of spent materials."

However, ARB does not assess all of the reasonably foreseeable means of compliance with the Blueprint. The Draft EA analyzes *only* reasonably foreseeable means of compliance with ARB's *own* proposed regulations in Draft EA Table 2-1, but declines to analyze the multitude of local

4-8 cont. air district and local agency compliance measures that will be required to implement the Blueprint.

The Blueprint is not so limited. In adopting it, ARB is committing itself as a practical matter to a much larger outcome than just this list of its own new regulations. In the Blueprint, ARB commits to a plan of action that **must** be carried out, not only through new ARB regulations, but also through regulatory or approval actions by air districts, cities, counties and other agencies. For actions under the jurisdiction of other agencies, the EA states that those agencies will perform later project-level evaluation of those actions. However, under the Blueprint, the "no project alternative," which must always be considered under CEQA (*see* 14 C.C.R. § 15126.6(e)), will not be a permissible option for air districts when considering actions to implement the Blueprint. Even though some requirements of the Blueprint must be implemented or approved by other agencies, as the oversight agency ARB has "committed itself to the project as a whole or to any particular features, so as to effectively preclude . . . the alternative of not going forward with the project." *POET*, 218 Cal.App.4th at 721-722. Thus, because all locally adopted compliance measures required to carry out the Blueprint were excluded from programmatic review, ARB has improperly piecemealed the CEQA review of the unified Blueprint.

- For example, the Draft EA asserts that no physical environmental impacts could result from "incentive funding to support immediate emission reductions." See Draft EA, p. 27. However, the Blueprint (p. 3) states that those incentive investments will be used to "purchase cleaner vehicles and equipment, with a focus on advancing zero emission technologies within impacted communities." If that is the case, then the results of incentive funding would be similar to those of compliance with new ARB regulations as noted above: increased hydrogen and electric infrastructure and manufacturing facilities; lithium battery demand, recycling and disposal; vehicle scrapping, recycling or sale outside the state; facility modifications, etc., thereby adding to all of the potentially significant impacts attributed to those means of compliance throughout the Draft EA. Those impacts are already identified in the Draft EA only to the extent that they are a consequence of ARB's own regulations. As a result, the Draft EA substantially understates the magnitude of each impact by excluding the additional foreseeable consequences resulting from incentive funding, while at the same time claiming the benefits of incentivized vehicle and equipment turnover.
- The Blueprint also commits to development of Community Emission Reduction Programs by air districts. ARB incorrectly excluded from the Draft EA scope the impacts of air districts imposing foreseeable regulations that also would require cleaner vehicles and equipment, installation of new controls, etc. ARB claims that "it would be speculative for this EA to attempt to analyze the impacts of potential compliance responses associated with the later development of community emission reduction programs by local air districts." Draft EA, p. 26. However, ARB has stated that these strategies will require:

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New approaches to accelerate and focus direct reductions in emissions and air pollution exposure within the community to meet the emission reduction targets... New rules and regulations including an expedited schedule for retrofitting pollution controls on certain industrial sources, evaluation of more stringent control limits for other types of pollution sources, and consideration of indirect source rules and enforceable agreements; ... Incentives to promote accelerated turnover to cleaner technologies; ... [and] 4-11 Engagement with local agencies on land use and transportation strategies such as cont. setbacks, buffer zones, and alternative truck routing. See Blueprint, p. 15. By adopting the Blueprint, ARB is committed as a practical matter to such programs that are also directly subject to review and approval by ARB. Thus, the environmental consequences associated with additional increased infrastructure and manufacturing facilities, lithium battery demand and recycling, vehicle scrapping or recycling, control equipment installation, etc., are additional foreseeable consequences of ARB's commitment. Again, by addressing only the limited magnitude of impacts resulting from ARB's own new regulations, the Draft EA substantially understates the magnitude of each impact while claiming the benefits of the emission reduction programs. Even if it was proper for ARB to limit the scope of the Draft EA impact analysis to those of its own regulations, and exclude the environmental consequences of using incentive funding, new air district regulations, and land use and transportation strategies, those additional actions are still reasonably foreseeable - indeed, they are intended and must occur, according to the 4-12 Blueprint. As such, they should have been included in the cumulative impact analysis, as other reasonably foreseeable future actions that would contribute to cumulative environmental impacts together the ARB regulations under the Blueprint. At a minimum ARB should follow the requirements under CEQA and conduct such an evaluation or alternatively ARB could withdraw such actions and assumptions of future actions from the Blueprint. IV. ARB Downplays Potential Adverse Environmental Impacts of Compliance Responses to the Blueprint.

Finally, for those selected compliance responses listed in the Draft EA as reasonably foreseeable, ARB fails to describe the full range of potential adverse impacts, or dismisses those impacts as insubstantial. ARB fails to consider the full extent of associated with a number of compliance measures, including but not limited to: (i) land use and transportation strategies; (ii) new and increased waste streams associated with equipment retrofitting and other technological changes; (iii) increased lead acid and lithium ion batteries; and (iv) increased demand of public services and fire protection.

Land Use and Transportation Strategies

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- The Blueprint simply commits ARB to requiring the air districts to engage with local agencies such as cities, counties and transportation agencies. There is no substantive discussion of impacts from potential land use and transportation strategies to obtain community emission reductions. Instead, the Draft EA's land use section merely cross-references other sections of the Draft EA. *See* Draft EA, p. 64.
- The Draft EA also asserts that, for statewide action on land use and transportation strategies, ARB will only be compiling best practices guidance documents, and that preparing a document has no environmental impact. *See* Draft EA, p. 19. But the Blueprint is not limited to preparing documents. When reviewing and approving community emission reduction programs, ARB will require air districts to engage with local agencies on land use and transportation strategies. *See* Draft EA, p. 15. The Draft EA should consider whether such strategies may have significant environmental impacts, at least at a programmatic level, rather than categorically disregarding the consequences of ARB's commitment.
- For example, pursuant to Senate Bill 375 ("SB 375"), cities, counties and transportation agencies have developed Sustainable Communities Strategies ("SCSs") to encourage "smart" land use patterns, higher density transit-oriented development, and reduced vehicle-miles-traveled, in part by directing new development into priority areas where existing transportation infrastructure is located. In some cases, the SCSs may promote the same outcomes as the Blueprint's community emission reduction programs, such as increased transit use, which would be favored by both programs. In other cases, however, buffer zones and other land use and transportation strategies to reduce local community exposures may foreseeably lead to diverting development to cleaner "greenfield" areas – a potential benefit under AB 617 and the community emission reduction programs, but a form of disfavored "sprawl" growth under SB 375 and the SCSs. In particular, this outcome is an environmental risk in regions not well served by transit. These competing environmental considerations must be evaluated as a reasonably foreseeable consequence of ARB's commitment to the Blueprint, to avoid improperly piecemealing the environmental impacts following from adoption of the unified Blueprint into later separate CEQA reviews of local jurisdiction actions.

Solid Waste and Hazardous Materials

 The Draft EA does analyze some specific potentially significant impacts of ARB's new regulations under the Blueprint, including impacts associated with new waste streams, e.g., scrapping or recycling existing vehicles, equipment and engines. Generally, the Draft EA acknowledges that there "may be an increase in the amount of solid waste diverted to landfills as a result of increased fleet turnover; however, it would not be substantial enough to result in closure of an existing landfill or development of a new landfill as much of the vehicles and equipment would be recycled." See Draft EA, p. 81. However, there is no support or analysis provided for ARB's conclusory statement. Moreover, as presented in the Draft EA, that conclusion refers only the outcome of ARB regulations and excludes the addition to the waste stream and hazardous materials impacts associated with use of incentive funding and resulting from community emission reduction programs.

Lithium Batteries

- While ARB acknowledges that the Blueprint is likely to lead to increased demand for lead acid and lithium ion batteries (along with risks of igniting and increases in carbonintensive mining for those materials), it largely ignores the adverse impacts this would have on hazardous materials management and the hazardous waste stream
- The Draft EA provides only the conclusory claim that "because lithium-batteries and hydrogen fuel cell systems are designed to reduce the potential for hazardous conditions associated with transport and use, and because regulations exist to ensure that lithium-ion batteries are disposed of appropriately, operational-related effects to hazards and hazardous materials associated with the proposed Draft Blueprint would be less than significant." Draft EA, p. 60.
- There is no analysis of the nature and potential magnitude of impacts to support the conclusion of less-than-significance. Again, as noted above, this conclusion is limited to impacts of ARB regulations, excluding the addition to the waste stream and hazardous materials impacts associated with use of incentive funding and resulting from community emission reduction programs.

Public Services/Fire Protection

- While it may be reasonable to find less than significant demand for residential fire protection from adding those few workers to the local population, the Draft EA ignores increased demand for fire protection associated with the manufacturing facilities, fueling and charging infrastructure, vehicles and equipment.
- Elsewhere, the Draft EA recognizes a degree of fire hazard associated with hydrogen and lithium batteries, but that facts missing from the analysis of public service impacts. *See* Draft EA, p. 59. The effect of increased fire hazard on the demand for fire protection services may or may not be significant; however, instead of making a significance determination, the Draft EA ignores it.

It follows that ARB's consideration of a reasonable range of alternatives which could reduce significant impacts of the Blueprint (*see* 14 C.C.R. § 15126.6) is also flawed by the same omissions and understatement of impacts discussed above.

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cont.

Correcting the deficiencies discussed in these comments would require the addition of significant new information disclosing new or substantially more severe environmental impacts, thereby triggering recirculation under the CEQA Guidelines. *See* 14 C.C.R. § 15088.5. Accordingly, ARB must revise and recirculate the Draft EA for additional public disclosure and comment.

Letter 5



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BELOW IS THE COMMENT YOU SELECTED TO DISPLAY. COMMENT 5 FOR AB 617 COMMUNITY AIR PROTECTION PROGRAM DRAFT BLUEPRINT (AB6170CAP18) - NON-REG.

First Name: Mary Last Name: Valdemar Email Address: mvaldema@valleycollege.edu Affiliation: SBVC Sustainability Committee

Subject: Public comment on the Community Air Protection Blueprint Comment:

As a taxpaying resident of this community for over 20 years, I have been to many AQMD & CARB public comment forums and meetings over the years. Most of the rhetoric I hear in these meetings puts an overemphasis on residential solutions versus industry solutions which is disporportionate when compared to the impact of residential vs industry polluters. Based on the data we already have from existing studies & air monitoring, we know that the Lion's share of pollutants come from industry. We need the Community Air Protection Blueprint to clearly indicate where that priority should be in terms of both solutions and better policies for enforcement of industry causes such as diesel trucks, equipment and even railyards. We need this blueprint to priortize zero emmissions technology NOW, especially in our community colleges where students are eager to be the next generation of zero emission mechanics, engineers and workers who support completely renewable industry in the IE! With our youth missing over a million days of school due to asthma and our elders suffering chronic health issues due to bad air quality, we need mitigation projects that immediately address the public health of residents surrounded by freeways filled with polluting trucks every single day! We all know the rich are not buying homes next to freeways, its the poor and the marginalized who end up forced to buy these homes or become a part of our growing homeless population. This is a health crisis that is bigger than gun violence and takes more lives every day. The blueprint needs to convey that sense of urgency and accountability that has been missing from our decision making bodies and bring public awareness to our communties about this issue. The blueprint also needs to demonstrate the severe consequences for industry polluters by implementing more policy that protects our community along with penalties for those industry

polluters who do not heed this warning. Communities need to be empowered by this blueprint, especially those that have been fighting, mostly unsuccessfully, the over proliferation of warehouses across the IE. We all breathe this air, but the reality the lives that will be taken by it, will mostly be the poor, the uneducated, the marginalized and unheard voices of most vulnerable community members. Please make sure the priority is clear and that the solutions are focused on the real problem, industry pollution.

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2018-07-21 18:00:05

If you have any questions or comments please contact Clerk of the Board at (916) 322-5594.

Board Comments Home



July 23, 2018

Clerk of the Board Air Resources Board 1001 I Street Sacramento, California 95814

Re: Comments on Draft Community Air Protection Blueprint

Dear Clerk of the Board:

Headquartered in Modesto, the Manufacturers' Council of the Central Valley ("MCCV") represents various food and wine processors, packaging and container manufacturers, fabricators, power generators, warehousing and distribution firms, environmental consultants, and other related businesses and industries located in California's San Joaquin Valley and whose markets are local, state, national and international. As such, the members of the MCCV are interested in the ARB's implementation of AB 617 in a manner that is consistent with AB 617 but in a manner that is fair, equitable and that complies with other State and Federal laws.

This letter constitutes the Manufacturers' Council comments to the CARB Draft Community Air Protection Blueprint dated June 7, 2018.

A. <u>General Section.</u>

1. Any monitoring in the Central Valley under AB 617 should be directly managed by the San Joaquin Valley Air Pollution Control District ("SJVAPCD"). This is necessary to assure the integrity of the data, avoid additional expenses, and to avoid potential conflicts with existing District monitoring.

2. Funding for monitoring should be provided to alleged sources in "identified communities."

3. There needs to be stakeholder and business representation on the Community Steering Committees. Consideration should be made to including SJVAPCD Citizens 'Advisory Committee ("CAC") representation on the steering committees.

B. <u>Implementation Strategies.</u>

1. Economic factors similar to those used under the BACT program should be applied to any retrofit or additional emission control requirements. CARB has identified California Health & Safety Code § 44391.2(c)(2) with respect to economic review:

(2) Within one year of the state board's selection, the district encompassing any location selected pursuant to this subdivision shall adopt, in consultation with the state board, individuals, community-based organizations, affected sources, and local governmental bodies in the affected community, a community emissions reduction program to achieve emissions reductions for the location selected using <u>cost-effective measures</u> identified pursuant to paragraph (4) of subdivision (b). The <u>technical feasibility</u> of any proposed measures should also be taken into account.

- 2. Facility audits under AB 617 should be kept confidential.
- 3. Any land use measures that are adopted should not be retroactive.
- 4. Incentive programs should also provide incentives and outreach to alleged contributors.

5. Given their limited jurisdiction over land use issues, CARB and the local Air Districts should avoid interjecting themselves into the local planning process.

C. <u>Appendices.</u>

1. Any zero emission requirements should be limited to mobile sources.

2. Health protective standards should not be any more stringent than standards that have already been described under federal, state or local regulations.

3. The Community Steering Committees and their members should be subject to the Brown Act and open hearing requirements with notice to the public.

4. Emission monitoring under AB 617 should not be duplicative of existing Air District monitoring.

5. Any changes that are suggested for existing facilities should not be retroactive, and/or funds should be provided for such changes.

D. <u>Regulatory Steps.</u>

1. Any potential regulations promulgated to promote AB 617 goals must go through the full regulatory process provided under state law and agencies' protocol.

E. Land Use.

1. Any local agency strategies must go through the process required by other such proposals at that local level. None of these strategies should be applied retroactively.

2. There is a limit to which CEQA applies to health-related issues, and the issue of enhancing the CEQA process needs to be reviewed in more depth.

3. Any land use strategies that involve agency or committee monitors meetings with local agencies must be done publicly and comply with the Brown Act, and must include potentially affected facility owners.

F. Enforcement Plan.

1. Enforcement should not be delegated to Community Steering Committees.

2. The current Air District enforcement programs are sufficient, and no "enhanced" enforcement is required.

3. It is not appropriate to involve the community in enforcement efforts. The Air District in the San Joaquin Valley already has a robust complaint process. Any monitoring used for enforcement purposes should be done through District monitors. Individual monitoring will not stand up to required evidentiary standards and should not be used for any purpose.

4. It should be recognized that Local Districts are not authorized to regulate mobile sources nor are they authorized to regulate land use.

5. CARB may only enforce regulations in those areas it has jurisdiction. The other areas must be managed by local Air Districts and/or the USEPA.

6. The concept of encouraging citizens to submit complaints must be supplemented by establishing, through the public process a procedure for managing intake and responding to complaints. We would submit that the Air District's current rules are not designed to handle the due process requirements for sources to respond to citizen complaints.

G. Appendix E (11) – Community Air Monitoring Plan.

1. All monitoring needs to meet the same evidentiary requirements required by a District enforcement level program in order to preserve the due process rights of those being monitored. <u>All</u> such monitoring should be under the supervision of the local Air District.

2. The confidentiality rights of the stakeholders being monitored must be considered.

Thank you for providing us with the opportunity to comment. If you have any questions we can be reached at (209) 523-0886.

Respectfully,

Christopher J. Savage President Manufacturers Council of the Central Valley

Public comment on ab617ocap18

There is one important element missing in my opinion and a place should be made for it in this program.

Every major construction project in the LA/OC basin has to prepare an EIR a portion of which includes the impact of the project on air quality to the surrounding community. For example in my community, the 405 improvement project that is now just getting started, and the LA DPW demolition of two old electric generating stations and their oil tanks, and the AES Alamitos electric power generating station construction near Seal Beach. Every one of these projects submits an EIR that confidently claims there will be no negative impact to the air quality both during and after the project is concluded. However, no one ever checks after the project is completed if in fact the claims of the EIR were in fact met. There is no requirement that the project owner report on how the air quality was monitored during the project and how the data lined up with their predictions within the EIR. I have personally asked the folks who created the EIRs for the 405 Improvement Project and the AES construction project if they are required or even volunteer to reconcile their EIR claims to the actual outcome and they all said they don't have to and don't intend to. How are we to know if these EIR plans are worth more than the paper they are written upon if there is no follow up after the work is done.

So I suggest that an element be added to the program in question that will require any major project within a community that is required to get an EIR approved for the project to do a follow up study and show that the claims of the EIR held true. This is a no cost to ARB item and a way to hold a project owner accountable so that for example if they do not meet their EIR claims then their next project knows about it.

Thank you, Nick Massetti 13650 Del Monte Dr. Unit 24B, Seal Beach CA (408) 406-6315





CENTER ON RACE, POVERTY & THE ENVIRONMENT 1999 HARRISON STREET, SUITE 650, OAKLAND, CA 94612 TEL 415-346-4179 FAX 415-346-8723 1012 JEFFERSON STREET, DELANO, CA 93215 TEL 661-720-9140 FAX 661-720-9483 WWW.CRPE-EJ.ORG

July 23, 2018

California Air Resources Board 1001 "I" Street Sacramento, CA 95814

Re: Public Comment on the AB 617 Community Air Protection Program Draft Blueprint

Dear Chair Nichols and Members of the Board:

The Center on Race, Poverty & the Environment ("CRPE") submits these comments regarding the Draft Community Air Protection Blueprint ("Draft Blueprint") and the Functional Equivalent Document ("FED") under the California Environmental Quality Act.

CRPE represents low-income communities and communities of color throughout California, primarily in the southern San Joaquin Valley. These communities are the disadvantaged communities AB 617 intends to address as they bear a disproportionate share of California's environmental and public health burdens.

This letter addresses the California Air Resources Board's ("ARB's") failure to adequately analyze a reasonable range of alternatives in the Draft Blueprint and ARB's failure to include an accurate description of the Project's environmental setting. CRPE requests ARB to analyze an alternative that includes the implementation of a statewide setback on all oil and gas operations in California.

I. ARB Failed to Adequately Analyze Alternatives to the Draft Blueprint

ARB's certified regulatory program requires that where a contemplated action may have a significant effect on the environment, a staff report shall be prepared in a manner consistent with the environmental protection purposes of ARB's regulatory program and with the goals and policies of the California Environmental Quality Act ("CEQA").¹ CEQA requires that a certified regulatory program preparing a functional equivalent document include "a description of the proposed activity with alternatives to the activity, [and] mitigation measures to minimize any significant adverse effect on the environment of the activity."² CEQA Guidelines Section

19-1

¹ See 17 C.C.R. §§ 60000-08

² Cal. Pub. Res. Code § 21080.5(d)(3)(A)

15126.6(a) requires an evaluation of "a range of reasonable alternatives to the project, or the location of the project, which would feasibly attain most of the basic project objectives but would avoid or substantially lessen any of the significant effects, and evaluate the comparative merits of the alternatives."

ARB's alternatives analysis fails to comply with CEQA. ARB presents a cursory range of alternatives, none of which achieve the objectives of the Project. The alternatives analyzed must attain most of the basic objectives of the Project.³ ARB identified only three alternatives: (1) No-Project Alternative (2) Remove Regulatory-Based Measures (3) Remove Port-Related Regulatory-Based Measures. ARB limited its alternative analysis to three alternatives that have no possibility of achieving the objectives set forth by ARB. A court will find an alternatives analysis to be legally inadequate if it contains an overly narrow range of alternatives.⁴ By limiting its analysis, ARB failed to analyze viable and reasonable alternatives that meet the objectives of the Project.

The fundamental purpose of the Draft Blueprint is to map out how ARB is going to implement the goals of AB 617 by including community-focused and community-driven action to reduce air pollution and improve public health in communities that experience disproportionate burdens from exposure to air pollutants.⁵ The goal of AB 617 is to reduce exposure to criteria air pollutants and toxic air contaminants in communities most impacted by air pollution.⁶ Oil and gas extraction produces air toxics, including volatile organic compounds ("VOCs") like benzene and formaldehyde, particulate matter ("PM"), and hydrogen sulfide. Approximately 5.4 million California residents live within a mile of one or more oil and gas wells.⁷ One third of these residents live in areas of the State most burdened by environmental pollution, and 92 percent of Californians living in these heavily burdened neighborhoods are people of color.⁸ Living near oil and gas extraction activities, and specifically actively producing wells, increases risks of various health impacts - including asthma and other respiratory diseases, cardiovascular disease, cancer, birth defects, nervous disorders and dermal irritation, among others. Thus, ARB cannot meaningfully address the reduction of criteria air pollutants and toxic air contaminants in California's most disadvantaged communities without considering regulations to reduce the impacts of oil and gas operations in the state.

The range of alternatives that an agency must analyze is governed by the rule of reason.⁹ The rule of reason requires the EIR to examine in detail the alternatives that the lead agency determines could feasibly attain *most* of the basic objectives of the project.¹⁰ Subsequently, a

19-2 cont.

³ 14 Cal Code Regs 5126.6(a)

⁴ Watsonville Pilots Ass'n v. City of Watsonville, 183 Cal.App.4th 1059, 1087 (2010).

⁵ Seth B.C., Shonkoff, Jake Hays, *Toward an Understanding of the Environmental and Public Health Impacts of Shale Gas Development: An Analysis of the Peer-Reviewed Scientific Literature*, 11 PLoS ONE (Apr. 20, 2016), http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0154164

⁶California Air Resources Board, Community Air Protection Program Framework, (Feb. 7, 2018), (concept paper). ⁷ Tanja Srebotnjak and Miriam Rotkin-Ellman, Drilling in California: Who's at risk?, NATURAL RESOURCES DEFENSE COUNCIL, (Oct. 2014, 4:00 PM), https://www.nrdc.org/sites/default/files/california-fracking-risksreport.pdf.

⁸ Id.

⁹ 14 C.C.R. § 15126.6(a)

¹⁰ 14 C.C.R. § 15126.6(f)

court will reject an alternatives analysis when an alternative that would reduce significant impacts and achieve most project objectives is excluded from the analysis and fails to include a reasonable explanation of the decision to exclude that alternative.¹¹

Below are a few of the stated objectives listed in the Draft Blueprint. These objectives can be achieved with the implementation of a statewide setback for all oil and gas operations in the state.

- 1. Provide the criteria necessary for community emissions reduction programs to achieve the requirements of AB 617 as set out in the Health and Safety Code;¹²
- 2. Provide other measures to ensure the success of the Program, which include regulatory measures that CARB could undertake using its authorities, funding programs, a statewide emission reporting system, a technology clearinghouse, and other resources as described in Chapter 2, Section C of this Draft EA;
- 3. Further the objectives set forth in AB 617 to support a reduction of emissions of Toxic Air Contaminates ("TACs") and criteria air pollutants in communities affected by a high cumulative exposure burden; and
- 4. Develop a strategy that is consistent with and meets the goals of AB 617.

Most significantly, the implementation of a statewide setback on all oil and gas operation fits squarely within the objective to provide regulatory measures that ARB could undertake using its authorities. As mentioned in detail in CRPE's letter to ARB to implement recommendations of the California Council on Science and Technology regarding oil and gas extraction operations, the implementation of a statewide setback is within ARB's legal authority. ARB has the authority given the inaction of local and regional authorities to protect public health from the impacts of oil and gas extraction operations.¹³ Moreover, implementation is consistent with ARB's mission: to promote and protect public health, welfare and ecological resources through the effective and efficient reduction of air pollutants.

Additionally, the implementation of a statewide setback furthers the objective set forth in AB 617 to support a reduction of emission of TACs and criteria air pollutants in communities affected by a high cumulative exposure burden. A variety of TACs are released from well stimulation activities. Key TACs include VOCs or fugitive hydrocarbon emissions, PM, and emission of substances used in hydraulic fracturing fluids.¹⁴ Emissions of VOCs from oil and gas facilities are causing elevated ozone levels and exposures to toxic pollutants like benzene – a carcinogen classified as a TAC.¹² Research links pollution from fracking to unhealthy levels of

¹¹ Ctr. for Biological Diversity v. Cty. of San Bernardino (2010) 185 Cal.App.4th 866

¹² See Cal. Health & Safety Code § 44391.2

¹³ Cal. Health and Safety Code § 39002

¹⁴ An Independent Scientific Assessment of Well Stimulation in California: An Examination of Hydraulic Fracturing and Acid Stimulations in the Oil and Gas Industry, CALIFORNIA COUNCIL ON SCIENCE & TECHNOLOGY, http://ccst.us/publications/2015/2015SB4summary.pdf

 $^{^{12} \} Just the Fracking Facts, SIERRA CLUB, https://www.sierraclub.org/sites/www.sierraclub.org/files/sce/sierra-club-california/PDFs/CA%20JustTheFrackingFacts.pdf$

toxic air contaminants. Exposure to this pollution can cause eye, nose, and throat irritation, respiratory illnesses, central nervous system damage, birth defects, cancer, or premature death.¹³

II. The EA Fails to Include an Adequate Description of the Environmental Setting

ARB failed to include an adequate description of the environmental setting because it failed to discuss such a large pollution source that disproportionately impacts disadvantaged communities. Once a lead agency determines that an EIR is required, two tasks are fundamental — preparing an accurate, stable, and finite description of the proposed project, and describing the environmental setting. When describing a project's environmental setting, CEQA mandates that a description of the physical environmental conditions in the vicinity of the project, as they exist at the time ... environmental analysis is commenced.¹⁵ This environmental setting will normally constitute the baseline physical conditions by which a Lead Agency determines whether an impact is significant.

CEQA states the baseline for determining the significance of environmental impacts would normally be the existing conditions at the time the environmental review is initiated.¹⁴ In order to deliver an accurate description of the baseline conditions, ARB must include an accurate description of the oil and gas operations in California, specifically focusing on the impact on communities AB 617 intends to improve.

A study done by the Natural Resources Defense Council found 84,434 active and new oil and gas wells in California.¹⁶ More than a third of the 5.4 million people living within a mile of one or more oil and gas wells, 1.8 million (mainly in Los Angeles and Kern Counties), also live in areas identified by CalEnviroScreen 2.0 as most burdened by environmental pollution. Excluding the predominant polluters in Los Angeles and Kern Counties is especially egregious since these two areas are the areas in California with the most disadvantaged census tracks as measured by CalEnviroScreen 2.0. Kern County and Los Angeles County top the charts with total well counts of 63,430 and 6,065, respectively.¹⁷

In Los Angeles County, 580,000 people live within a quarter and gas well(s) are mile of 5,715 active and 350 newly permitted oil and gas wells. At a one mile distance the number grows to 3.5 million (i.e., one third of the County's population), nearly half are Hispanic/Latino. Ninety-seven of Los Angeles County's 855 census tracts with the highest environmental pollution burden have at least one well for a total number of 1,723 wells (28 percent of the total number of wells in Los Angeles County).¹⁸

19-2 cont.

¹³ John L. Adgate et al., *Potential Public Health Hazards, Exposures and Health Effects from Unconventional Natural Gas Development*, ENVTL. SCI. AND TECH., (2014).

¹⁵ 14 C.C.R. § 15125(a)

^{16 14} C.C.R. § 15125(a)

¹⁷ Tanja Srebotnjak and Miriam Rotkin-Ellman, Drilling in California: Who's at risk?, NATURAL RESOURCES DEFENSE COUNCIL, (Oct. 2014, 4:00 PM), https://www.nrdc.org/sites/default/files/california-fracking-risks-report.pdf.

 $^{^{18}}$ Id.

Kern County produces approximately 75 percent of California's oil and about 58 percent of its natural gas.¹⁹ CalEnviroScreen 2.0 ranks 55 Kern County census tracts, with a population of 330,000, as among the most vulnerable to pollution and this includes many tracts with a high well density. Thirty five percent of people living in Kern County live within one mile of one of the 63,430 oil and gas wells. Hispanic/Latino and African American communities carry a disproportionate environmental pollution burden. Of the approximately 122,000 people living close to oil and gas wells and suffering the most health threats from pollution as measured by CalEnviroScreen 2.0, nearly 92,000 (76 percent) are people of color. In contrast, the communities less impacted by environmental pollution and not near oil and gas wells are majority white (49 percent).

ARB must include the aforementioned facts regarding oil and gas operations in California in order to give a complete and accurate description of the environmental setting of the Draft Blueprint.

Conclusion

For the reasons set forth above, CRPE urges ARB to remedy the deficiencies in the Draft Environmental Analysis. Further, should ARB decline to consider the proposed alternative above, CRPE expects ARB to explain why further consideration of the alternative was rejected or provide an evaluation of the proposed alternative.²⁰

Thank you for the opportunity to provide comments on this important matter. If you have any questions or concerns, please do not hesitate to contact me. I can be reached at ptorres@crpe-ej.org or at (415) 346-4179 x307.

Sincerely, 11

Paulina'Torres Staff Attorney

¹⁹ GREATER BAKERSFIELD CHAMBER OF COMMERCE, OIL AND GAS INDUSTRY (September 8, 2014) www.bakersfieldchamber.org/section.asp/csasp/DepartmentID.537/cs/SectionID.1171/csasp.html

19-3 cont.

²⁰ California Native Plant Society v. City of Santa Cruz (2009) 177 Cal.App.4th 957

Bay Area Air Quality Management District 375 Beale Street, Suite 600 San Francisco CA 94105

VIA EMAIL vdouglas@baaqmd.gov Victor Douglas

May 8, 2017

Re: Health impacts and implications should be included in the No Project and alternative scenarios and the environmental and regulatory settings sections of the EIR for BAAQMD Rule 12-16

We are writing to encourage the Air District to include a comprehensive health and safety assessment in the final EIR of Rule 12-16, as detailed in the following submission. In particular, by providing a preliminary assessment of potential mortality impacts in the absence of Rule 12-16's preventive measures, this submission demonstrates the feasibility and importance of including a health assessment in the EIR. It is important that such an assessment account for:

- the preventive nature of Rule 12-16
- the influx of heavier crude oil feedstock that is projected in the absence of emissions caps
- resulting exposures and impacts on vulnerable populations, including people who live in proximity to the refineries, have low socio economic standing and / or disadvantaged racial identity, are infants, young children or the elderly, live in already polluted settings, and/or have underlying health conditions

Respectfully Signatures, listed alphabetically on the following page, 21-1

Letter 21

Claire V Broome MD	Adjunct Professor, Rollins School of Public Health Emory University Assistant Surgeon General, US Public Health Service (retired)						
Wendel Brunner MD, PhD, MPHFormer Director of Public Health, Contra Costa Health Services							
Robert M. Gould, MD	President, Physicians for Social Responsibility, San Francisco Bay Area Chapter Associate Adjunct Professor, Program on Reproductive Health and the Environment, Dept. of Obstetrics, Gynecology & Reproductive Sciences UCSF School of Medicine (for identification purposes only)						
Jonathan Heller PhD	Co-Director and Co-Founder, Human Impact Partners Oakland CA						
Richard J Jackson MD MPH	Former California State Public Health Officer Director, CDC National Center for Environmental Health (retired)						
Janice L Kirsch MD MPH	Medical oncologist and hematologist						
Raymond Neutra MD DrPH	Chief Division of Environmental and Occupational Disease Control, California Department of Public Health (retired)						
Thomas B Newman MD MPH	Professor Emeritus of Epidemiology & Biostatistics and Pediatrics, University of California, San Francisco (for identification purposes only)						
Bart Ostro PHD	Former Chief of Air Pollution Epidemiology Section, California EPA, currently Research Faculty, Air Quality Research Center, UC Davis						
Linda Rudolph MD MPH	Director, Center for Climate Change and Health, Public Health Institute Oakland, CA						
Seth BC Shonkoff PhD, MPH	Executive Director PSE Healthy Energy Visiting Scholar Dept. Environmental Science, Policy, & Management, UCB Affiliate Energy Technologies Area, Lawrence Berkeley National Lab						
Patrice Sutton, MPH	Research Scientist, Program on Reproductive Health and the Environment, University of California, San Francisco (for identification purposes only)						
Coordinated by							
Heather Kuiper DrPH MPH	Public Health Consultant, Oakland CA						

May 8, 2012

To the Bay Area Air Quality Management District Board:

This submission alerts the Air District that the Rule 12-16 draft EIR does not adequately analyze or discuss the health impacts that were identified in a letter submitted December 2, 2016 during the Notice of Preparation and Initial Study for the Rule 12-16 DEIR. In particular, the draft EIR does not adequately recognize the preventive nature of Rule 12-16, thus omitting health implications from the "No Project" alternative.

Preventing increases in harmful exposures is a well-established health protection measure. (Curie 2011, Pope 2009, Goodman 2002, Hedley 2002, Dominici 2006). A preventive approach to air quality is important, due to an otherwise anticipated increase in Bay Area refineries' use of heavier, dirtier oil feedstock, ¹ (BAAQMD 2012a) which will lead to higher exposures to fine particulate matter (PM2.5). PM2.5 is definitively established as a cause of adverse health impacts, including mortality. Given the dense population of the Bay Area, increased PM2.5 will have large population impacts, presenting a major public health threat. Rule 12-16 is an important public health tool as it caps refinery emissions at current levels, thereby preventing increases in exposure to PM2.5.

Omission of the No Project Alternative (not implementing Rule 12-16) and its health impact

Because Rule 12-16 is a preventive measure, the Air District can anticipate that the "No Project" scenario will increase mortality in the Bay Area population, especially among the disadvantaged. The assessment,² detailed in Appendix A, measures the impact of long-term exposure to increased PM2.5 resulting from transitions to heavier oil feedstock. Adjusting for other exposures, it finds that:

- Rule 12-16 could cumulatively prevent 800 to 3000 deaths of Bay Area residents given a refinery facility lifetime of 40 years following conversion to heavier crude
- The additional mortality burden for the Bay Area's disadvantaged residents could be 8 12 times that of the Bay Area's general population
- Annual monetary valuation of these deaths alone could reach up to \$123.2 million, or cumulatively, up to \$4.84 billion dollars. (CAP, 2017 p C/7)

This assessment is conservative in its parameters and many of the model parameters are drawn from BAAQMD's own work. For example, it does not consider indoor air exposures, which may be higher, (Brody, 2009), impacts of ultrafine particulates (Ostro, 2015), or increased combustion, production, and handling of pet coke (US EPA). The submitted analysis is also conservative in scope: It does not include PM2.5-related morbidity, neurological, cognitive, and developmental impairment, (especially of children), hospitalizations, lost productivity, reduced activity, and health-related socio-economic impacts. Significantly, the analysis does not include health impacts associated with flares and other acute PM2.5 exposures, including mortality, cardiac events, hospitalizations, and increased susceptibility to adverse health conditions from the underlying stressors of living in proximity to pollution sources (DeFur 2007, Cutchin 2008, Luginaah 202). It also does not include the significant local climate-related

¹ This assessment is predicated on a finding that, without 12-16, Bay Area refineries will likely undergo large-scale capital conversions for refining heavier crude oils and natural bitumen (including and especially tar sands crude), resulting in increased PM2.5 emissions and toxicity, and increased greenhouse gas emissions. (BAAQMD 2012a, Karras, 2016)

² This assessment draws from calculations of emissions increases attributable to heavier crude oil feedstock produced by Greg Karras of Communities for a Better Environment (Karras, 2016) It was conducted in collaboration with CBE.

health hazards and impacts that will be attributable to the Bay Area's increased refining of heavier crude feedstock.

Even so, this analysis demonstrates that is reasonable and feasible for the District to develop and consider health impact projections in its final EIR. The signatories request that the Air District include the attached assessment (Appendix A) in its final EIR and also supplement it with estimates of additional health impacts attributable to increased PM2.5 and greenhouse gas emissions, especially for vulnerable populations. See also Appendices B, and C for information that can support such additional analysis.

Modify the draft EIR's assessment of alternatives

Emission intensity caps (Rule 13-1) and mass emission caps (Rule 12-16) are complementary measures and their combination could protect health better than Rule 12-16 alone. This alternative is not considered in the draft EIR although Rule 13-1 is discussed in combination with Rule 11-18. CEQA requires an alternative to accomplish the main objectives of the project at hand, yet Rules 13-1 and 11-18 do not provide health protection equivalent to 12-16. Rule 11-18 targets various toxic air contaminants but not greenhouse gases and particulate matter and is fundamentally different in terms of health protection strategy and outcome. Rule 13-1, *as currently drafted*, omits direct control of PM2.5 and could allow facility-wide refinery emissions to increase; it is does not provide protections comparable to Rule 12-16. Regardless, it is premature to consider Rule 13-1 in the Rule 12-16 EIR.

Expand the existing environmental and regulatory settings assessments

The following considerations should be included in the environmental settings assessment:

- Cities in the San Francisco Bay Area are among the most polluted in the U.S. (ALA, 2017) High baseline air pollution augments susceptibility to adverse health threats. Due to this baseline condition, Bay Area residents will likely experience augmented health risk and burden from increased emissions. Further, the Air District, Cal EPA, the US EPA and the World Health Organization, all find that, "people exposed to PM at levels below the current EPA standards may still experience negative health effects." (BAAQMD, 2012 p 17). There are no safe levels of particulate matter, and given high baseline pollution, every PM2.5 exposure increment will contribute to increased risk of mortality, morbidity, and lost productivity for Bay Area residents.
- This high baseline pollution is not uniformly or fairly distributed, "PM concentrations and population exposure to PM can vary significantly at the local scale... People who live or work near major roadways, ports, distribution centers, or other major emission sources... may be disproportionately exposed to certain types of PM (e.g. ultrafine particles)..." (BAAQMD, 2012, p 14) There is growing evidence that proximity to oil refineries places residents at disproportionate risk for adverse health outcomes. Appendix C provides a partial list of this evidence base. There is also documentation that residents in proximity to refineries are disproportionately vulnerable by virtue of race, economic standing, and higher prevalence of underlying health conditions (Cushing 2016, Pastor 2010). The final EIR should recognize as part of the current landscape that failure to prevent increased refinery emissions will have environmental justice repercussions since they will predominantly occur in communities where residents are low income and/or are people of color and already disproportionately burdened by poor underlying health and multiple-source pollution exposures.
- The draft EIR should recognize that state and local policy specifically precludes placing disproportionate burden on impacted, disadvantaged populations. Senate Bill 32 and Assembly

Bill 197 recognize and protect these populations by requiring consideration of equity and social costs in reducing greenhouse gases and equitable resolution of them, prioritizing direct emissions reductions at large stationary sources. CEQA and the District's own mission also affirm a health mandate. Protecting public health and eliminating health disparities are stated goals of the 2017 Clean Air Plan. Rule 12-16 should be understood in light of this state-level policy framework for environmental health protection and the District's own mission.

- Current conditions with regards to Bay Area emissions are not static. Instead, the setting for Rule 12-16 is trending toward increases in the processing of heavier, higher-emitting, lower quality crude oils, expansion of projects to do so, and expanding fossil fuel export. (BAAQMD, 2013) Switching to heavier crudes will inherently increase emissions of PM2.5 and greenhouse gases, making it imperative that measures be put in place to prevent these future increases in emissions, *in addition to* measures decreasing current emissions. Without the preventive caps offered by Rule 12-16, other District measures will be limited by a context of rising emissions.
- The corresponding increase in fossil fuel exports will lead to an increase in exogenous air pollution in the Bay Area since a portion of the byproducts of combustion of fossil fuels exported from the Bay Area will return to us from Asia through transpacific atmospheric transport. This exogenous air pollution will directly threaten health and also impede progress toward the targets and goals of the Clean Air Plan, 2017. Exogenous / overseas sources of pollution are of increasing concern as they have been directly implicated in deaths in local populations and documented as a greater proportion of exposure than locally-sourced pollution in some settings. (Annenberg 2014, Christensen 2015, Zhang 2007, 2008, 2009).

Lastly, the health comments submitted to the District in December 2016 were omitted from Appendix A of the draft EIR and we ask that they be included.

The signatories believe these adjustments are necessary for the EIR to be complete and accurate and respectfully request they be made in time for Rule 12-16's potential adoption in September.

APPENDIX A:

Impact of Rule 12-16 on mortality associated with exposure to PM2.5 from processing heavier oil in Bay Area refineries

	Regional Population (9 Bay Area Counties)			Impacted Population*			
				(<=2.5 miles from refinery)			
	Low	Med	High	Low	Med	High	
PARAMETERS							
Risk							
a. Risk of all-cause death for adults (>30 yrs) per 1µg/m ³ PM2.5 increase in long-term exposure	1.008	1.01	1.012	1.008	1.01	1.012	
b. Incremental Risk: risk of all-cause death for adults attributable to increment in long-term PM2.5 exposure (risk/ per $1\mu g/m^3$ PM2.5 increase)	0.008 0.01		0.012	0.008	0.01	0.012	
Exposure							
c. Baseline anthropogenic ^{**} exposure (μ g/m ³ PM _{2.5})		5.7		5.1			
d. Proportion of baseline anthropogenic exposure attributable to baseline refinery activity	.05		0.5				
e. Percent change from baseline anthropogenic emissions due to higher emitting oil emissions	40%	70%	100%	40%	70%	100%	
f. Conversion factor (change in PM2.5 exposure per change in PM2.5 emissions)		0.5		0.4	0.5	0.6	
g. Averted exposure: the annual increased PM2.5 concentration attributed to heavier oil that is averted by Rule 12-16 (μ g/m ³ PM _{2.5})	0.057	0.10	0.143	0.408	0.893	1.53	
Population and Mortality							
h. Adult Population (>25)	5,144,345			81,666			
i. Base all-cause adult death rate / person / year	<i>0.00</i> 83403		0.0091899				
ІМРАСТ							
j. Prevented adult all-cause deaths due to 12-16 averting increases in heavier oil PM2.5 emissions***	20	43	73	2	7	14	
k. Rate of prevented adult all-cause death due to 12- 16 averting increases in heavier oil PM2.5 emissions /100,000 population /yr	0.38	0.83	1.43	3.00	8.21	16.88	
I. Cumulative prevented deaths due to 12-16 (40 yrs)	800	1700	2900	98	270	550	

Table 1 Potential health impact of 12-16: Averted all-cause deaths attributable to chronic exposuresto oil refinery PM2.5 (see Appendix for calculations)

* The distance of 2.5 miles was selected to correspond with findings from Brody (2009) and Pastor (2010). Those living < 2.5 miles of refineries (Table 5) can roughly be interpreted as a proxy for impacted, vulnerable, and/or Environmental Justice populations. The Air District's CARE program prioritizes communities and populations most impacted by air pollution, i.e., those with higher air pollution levels and worse health outcomes for diseases affected by air pollutions. Vulnerable populations also include those with heightened vulnerability to PM due to age (<5, elderly), low SES, minority race/ethnic status, and underlying health conditions. This proxy is conservative because *disparate impacts on vulnerable populations may occur beyond 2.5 miles*.

** Anthropogenic exposure is the ambient PM2.5 concentration above background levels (e.g., from sea salt).

*** Annual and cumulative deaths are presented as whole numbers. The resulting rounding error explains any discrepancy between presented deaths and rate.

Notes for Table 1

a. For every 1µg/m3 PM2.5 increase in exposure there is x% increased risk of all-cause mortality, e.g., a 1% increased risk of all-cause death per 1µg/m3 PM2.5 exposure increase. Risk estimates are from BAAQMD's literature review, of for example Pope et. al (2002), Krewsk et. al, (2000), and others. Risk may be underestimated as it does not account for 1) greater energy intensity and toxicity of PM2.5 associated with heavy oil and natural refining, 2) ultrafine PM, and 3) greater vulnerability of impacted populations.

b. Calculated as (all cause death risk in exposed) – (all cause death risk in unexposed), i.e, (risk per increase of $1\mu g/m^3 PM2.5$) – (no increase in exposure) = 1.01 - 1 = .01. For every exposure change of $1\mu g/m^3 PM2.5$ there is a corresponding 1% change in all-cause mortality attributable to PM2.5

c. *Regional*: CAP 2017 p C/7

<u>Impacted Population</u> (<2/5 miles from refinery): From Brody et. al.(2009) baseline PM2.5 exposure was directly measured in Richmond at distances approximately 2.5 miles from the dominant PM_{2.5} source in the refinery. To isolate exposure above background, control site measures in Bolinas were subtracted from Richmond measures, yielding μ g/m3 PM2.5. The PM2.5 was chemically fingerprinted to the refinery finding, for example, high levels, of vanadium and nickel, which in this setting are isolated to refinery emissions (versus traffic). Validating this measure, CARB "ADAM" data for 2013 subtracts annual mean PM2.5 measures at Pt. Reyes from measures at the monitoring station nearest to the refinery, yielding 5.04 μ g/m3 PM2.5. A baseline exposure of 4.5 μ g/m3 PM2.5 likely underestimates annual exposure because 1) the Brody study was conducted during the summer when PM2.5 concentrations are lowest and 2) Due to wind patterns, and refinery distribution, populations near the other refineries may experience a concentrating of PM2.5. For these reasons, a conservative adjustment was made to factor in higher wintertime concentrations. The annual median concentration was divided by the median concentration Apr–Sep for three years of monitoring at the three closes sites (San Pablo, Vallejo, Concord). The mean of the resulting ratios was multiplied by the Brody measure (2009) such that 4.5 x 1.13 = 5.1 μ g/m3 PM2.5 anthropogenic [].

d. Portion of the baseline anthropogenic exposure that is attributable to baseline refinery activity *Regional:* CAP, 2017 p 2/20

<u>Impacted Population</u>: We set the portion at .5 since Brody et. al. (2009) used chemical fingerprinting to find that heavy oil combustion (refineries being the predominant source in the study area) is the most important contributor, more important than traffic, to elevated anthropogenic PM2.5 concentrations in the study area (<2.5 miles from refinery). We consider this measure reasonable in light of 1) BAAQMD grid modeling that ranged from .2 - .6, 2) an independent assessment of the Districts aerial emissions intensity data (2015) found that, on a mass/mile² basis, within 2.5 miles of the refineries, the areal source strength is more than twice (0.7) the regional average for all sources (CBE, 2015), and 3) accommodation of some lofting of emissions from hot stacks (2017 Staff Report). These parameters nevertheless likely underestimate, since downwind refinery communities could experience consolidation of PM2.5 from multiple refineries. Further, statewide analyses link high exposure to refinery proximity (<2.5 miles) (Pastor et. al. 2010).

e. Karras (2016) estimated a range of annual tons of PM2.5 emissions that Rule 12-16 would avert, such that, meaning that annually, Rule 12-16 would prevent increases of 364, 728, or 1090 short tons PM2.5 / yr of heavier oil-associated emission, or 40%, 70%, and 100% from current refinery emission rates could be averted through Rule 12-16. Medium Case (0.7) is the midpoint of the 0.4 - 1.0 range

f. The conversion factor translates emissions into exposure. It is derived from the regional weighted average change in $PM_{2.5}$ exposure for a given change in direct emissions of $PM_{2.5}$. Verified by measurements and assuming a 24 hour "backyard exposure," BAAQMD modeled PM2.5 exposure change on a region-wide 4x4km grid relative to a 20% reduction in all-source PM2.5 emissions finding a range from .2 - .6. (CAP, 2017 D/13),

<u>Regional</u>: We applied .5 as the central measure to recognize that the location of population, emission sources, and meteorological conditions coincide. BAAQMD also applied approximately .5 for their regional average conversion. The conversion factor may underestimate impacted population exposures since refineries are strong PM2.5 emission sources near densely populated communities. <u>Impacted Population</u>: For the <2.5 miles group, given population density and proximity to refineries, which are strong emitters, we used .4 for the lower bound. The upper bound, .6, may underestimate exposure for this group, given monitoring station locations.

g. The increased concentration of PM2.5 (exposure) attributed to heavier oil refining that is averted by Rule 12-16 (μ g/m³ PM_{2.5}). Calculated as (baseline total anthropogenic exposure) x (portion of baseline anthropogenic exposure attributable to baseline refinery emissions) x (Portion change from baseline anthropogenic emissions due to higher emitting oil emissions that is averted by 12-16) x (conversion factor). For the Medium regional case: 5.7 μ g/m3 PM2.5 x .05 x .7 x .5 = 0.10 μ g/m3 PM2.5. The attributable exposure may be underestimated because it does not account for: 1). NOx and SO2 PM-precursor emissions, and 2) the greater concentration of toxics associated with refining of heavy crude feedstock.

h. See Tables 2 and 3

i. Calculated as (annual deaths / total population) / yr. May overestimate or underestimate death rate over time should risk factors systematically improve or worsen.

j. Prevented deaths calculated as Attributable Risk x Attributable Exposure x all-cause per cap death rate x population. For middle regional scenario: $.01 \times .1 \times .00589 \times 7,447,686 = 44$ deaths prevented by Rule 12-16.

k. Calculated as (deaths prevented / population) x 100,000 population / year.

I. Cumulative Impact calculated as deaths prevented x 40 years, since capital projects to accommodate heavier crude feedstock generally operate for 30 - 50 years. This number underestimates cumulative impact if population increases, as is anticipated.

Census	Refinery ^b	Tract distance t (miles)		Fraction ^c	Population		
Tract	≤ 2.5 miles	closest	furthest	≤ 2.5 miles	Total	≤ 2.5 miles	
3650.02	Chevron	0.5	2.5	1.00	5,462	5,462	
3660.02	Chevron	2.3	3.3	0.20	6,093	1,219	
3680.01	Chevron	1.5	2.5	1.00	5,327	5,32	
3680.02	Chevron	2.0	2.7	0.71	3,404	2,43	
3720	Chevron	1.8	3.1	0.54	7,353	3,959	
3740	Chevron	2.0	2.8	0.63	4,506	2,810	
3750	Chevron	1.3	1.8	1.00	4,389	4,389	
3760	Chevron	0.4	1.5	1.00	5,962	5,962	
3770	Chevron	0.4	2.4	1.00	6,962	6,962	
3780	Chevron	0.0	3.1	0.81	3,435	2,770	
3790	Chevron	1.1	3.1	0.70	6,117	4,282	
2506.04	Phillips 66	2.1	3.7	0.25	3,842	96:	
3560.01	Phillips 66	0.0	3.5	0.71	3,759	2,68	
3570	Phillips 66	1.0	5.5	0.33	3,018	1,000	
3580	Phillips 66	0.0	2.0	1.00	5,298	5,29	
3591.04	Phillips 66	2.0	3.0	0.50	1,932	96	
3591.05	Phillips 66	2.0	3.0	0.50	4,542	2,27	
3592.03	Phillips 66	1.0	3.3	0.65	6,726	4,38	
3923	Phillips 66	1.0	2.0	1.00	3,102	3,102	
3150	Shell &/or Tesoro	0.0	7.0	0.36	3,281	1,172	
3160	Shell &/or Tesoro	0.5	2.0	1.00	1,483	1,48	
3170	Shell &/or Tesoro	0.1	1.0	1.00	2,144	2,14	
3180	Shell &/or Tesoro	0.7	4.7	0.45	3,267	1,470	
3190	Shell &/or Tesoro	0.2	2.0	1.00	7,412	7,412	
3200.01	Shell &/or Tesoro	0.0	2.0	1.00	3,615	3,61	
3200.03	Shell &/or Tesoro	0.7	1.6	1.00	2,805	2,80	
3200.04	Shell &/or Tesoro	0.2	2.0	1.00	6,216	6,210	
3211.01	Shell &/or Tesoro	1.4	2.5	1.00	6,549	6,549	
3270	Shell &/or Tesoro	2.0	6.0	0.13	6,695	83	
3290	Shell &/or Tesoro	2.0	3.6	0.31	6,309	1,972	
2520	Valero	1.8	3.5	0.41	4,157	1,71	
2521.02	Valero	0.0	6.0	0.42	3,874	1,61	
2521.04	Valero	0.0	4.0	0.63	5,536	3,46	
2521.05	Valero	1.7	3.0	0.62	3,256	2,004	
2521.06	Valero	0.5	2.0	1.00	4,132	4,13	
2521.07	Valero	0.0	1.5	1.00	3,592	3,59	
2521.08	Valero	1.0	2.0	1.00	3,165	3,16	
		Sum of these tract	1		168,717	121,608	

Table 2. Bay Area communities \leq 2.5 miles from refineries; local-scale population data ^a

a) 2010 Census: <u>https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?fpt=table</u>

b) Plant or plants within 2.5 miles of part or all of the census tract, identified by current owner/operator. c) Estimation of population for tracts partly within a 2.5-mile radius: Tract fraction \leq 2.5 miles = (2.5 - distance of bisection with radius in miles) \div (furthest distance – bisection distance in miles). Results are used to estimate the fraction of the total tract population \leq 2.5 miles from a refinery. This method's simplifying assumption that population is distributed evenly within each tract despite geography and distance from refineries may result in overestimates or underestimates of local-scale population for those tracts that are partly within 2.5 miles of a refinery.

Table 3. Demographic and Vital Statistics for Bay Area Counties, 2013

						Age Grou	ıp (years)					
Counties	<1	1-4	5-14	15-24	25-34	35-44	45-54	55-64	65-74	75-84	85+	TOT
Alameda												
Deaths	88	10	21	117	160	260	647	1,270	1,604	2,041	3,376	9,59
Population	19,493	76,842	190,900	203,954	232,027	231,327	222,525	191,268	111,600	55,333	28,101	1,563,37
Death Rate*	451.4	13.0	11.0	57.4	69.0	112.4	290.8	664.0	1437.3	3688.6	12013.8	613
Contra Costa												
Deaths	50	8	9	77	110	162	439	835	1,235	1,647	2,576	7,14
Population	12,240	49,755	146,153	145,402	129,256	143,616	163,677	140,700	86,747	42,739	21,577	1,081,86
Death Rate	408.5	16.1	6.2	53.0	85.1	112.8	268.2	593.5	1423.7	3853.6	11938.6	660
Marin												
Deaths	13	3	3	15	16	32	96	169	269	422	849	1,88
Population	2,334	9,858	30,334	26,078	23,766	32,876	41,089	40,325	28,899	13,245	7,460	256,26
Death Rate	557.0	30.4	9.9	57.5	67.3	97.3	233.6	419.1	930.8	3186.1	11380.7	736
Napa			••••									
Deaths	6	1	1	9	10	23	51	125	188	269	511	1,19
Population	1,412	6,196	17,164	19,139	17,225	17,305	19,546	18,767	12,674	6,715	3,688	139,83
Death Rate	424.9	16.1	5.8	47.0	58.1	132.9	260.9	666.1	1483.4	4006.0	13855.7	853
San Francisco	12 1.0	10.1	0.0	11.0	00.1	102.0	200.0	000.1	1100.1	1000.0	10000.1	000
Deaths	30	4	6	40	91	172	351	749	809	1,268	2,134	5,65
Population	9,034	32,463	58,301	78,811	172,506	144,989	112,817	102,892	63,511	38,509	19,994	833,82
Death Rate	332.1	12.3	10.3	50.8	52.8	144,909	311.1	727.9	1273.8	3292.7	10673.2	678
San Mateo	JJZ. I	12.5	10.5	50.0	JZ.0	110.0	J11.1	121.5	1275.0	JZJZ.1	10073.2	070
Deaths	19	2	5	35	52	94	257	477	673	1,102	1,920	4,63
										,		
Population	9,031	36,415	90,434 5.5	83,106	96,589	107,539	110,625	97,585	60,491	32,391	17,651	741,85
Death Rate	210.4	5.5	5.5	42.1	53.8	87.4	232.3	488.8	1112.6	3402.2	10877.6	624
Santa Clara	00	40	40	00	447	000	F7 4	4.044	4 000	0.044	0.504	0.45
Deaths	83	12	16	99	117	232	571	1,041	1,388	2,314	3,584	9,45
Population	24,112	95,493	245,789	228,340	264,949	282,446	270,707	211,136	126,347	68,609	32,667	1,850,59
Death Rate	344.2	12.6	6.5	43.4	44.2	82.1	210.9	493.0	1098.6	3372.7	10971.3	511
Solano		_	_	10								
Deaths	29	5	7	48	68	93	187	442	520	722	851	2,97
Population	5,127	20,641	55,419	59,872	56,830	53,419	61,449	56,360	32,286	15,914	6,731	424,04
Death Rate	565.6	24.2	12.6	80.2	119.7	174.1	304.3	784.2	1610.6	4536.9	12643.0	700
Sonoma												
Deaths	17	5	7	30	47	67	215	519	626	893	1,606	4,03
Population	5,070	21,413	58,627	65,627	64,121	59,350	69,251	71,808	45,050	20,879	11,874	493,07
Death Rate	335.3	23.4	11.9	45.7	73.3	112.9	310.5	722.8	1389.6	4277.0	13525.3	817.
Bay Area												
Deaths	335	50	75	470	671	1135	2814	5627	7312	10678	17407	4657
Population	87853	349076	893121	910329	1057269	1072867	1071686	930841	567605	294334	149743	738472
Death Rate	381.3	14.3	8.4	51.6	63.5	105.8	262.6	604.5	1288.2	3627.9	11624.6	630
<2.5 miles from refin	ery**											
Deaths	6	1	1	10	14	21	51	103	142	191	277	81
Population	1,402	5,685	16,278	16,577	15,027	15,911	18,180	15,913	9,612	4,736	2,286	121,60
Death Rate	454.9	18.5	7.9	60.9	95.7	129.4	278.1	648.0	1474.4	4039.0	12106.1	672
2 0411 1440		10.0	1.5			.20.1	_, , , ,	0.00				012
				Region					<2.5miles			
			eath	Рор		Rt.	Dea		Рор	R		
Adu	lts >25 yr**	* 42	2905	5,144,345	83	34.03	75	1	81,666	918.	992	

*Death rates are age-specific expressed per 100,000 population. Age-adjusted rates are calculated using the 2000 U.S. Standard Population.

** Deaths in the Impacted Population (<2.5 miles from refinery) were derived using a death rate that divided Contra Costa and Solano Counties' combined deaths by their combined populations and applying this rate to the population living within 2.5 miles of a refinery for one year (from Table 2) (9,521 ÷ 1,518,002) x 121,608 = 763. This estimate may underestimate refinery effects on impacted populations because baseline death rates in communities near refineries may be greater than county-wide average rates. The age specific populations and deaths for the <2.5 miles group were arrived at by multiplying the total population by the age-specific death and population distribution of the combined Contra Costa and Solano Counties .

***The total adult deaths were adjusted to remove suicides and accidents by multiplying the unadjusted total by 6%, which represented the average and most frequent percent of deaths by suicide/accident for each county.

Population ≤ 2.5 miles from refinery fence lines estimated from census tract data. See Table 2

Source: State of California, Department of Public Health, Death Records. State of California, Department of Finance, Race/Ethnic Population with Age and Sex Detail, 2010-2060. Sacramento, CA, December 2014

State of California, Department of Finance, Race/Ethnic Population with Age and Sex Detail, 2010-2060. Sacramento, CA, December 2014.

APPENDIX B

Summary of pollutant – health outcome pairs to inform fuller health assessment of the No-Project Alternative

Pollutant metric	Haalth autaama	Casua	RR (95 % CI) per 10 µg/m ³
Pollutant metric	Health outcome	Group	KK (95 % CI) per 10 µg/iii
PM _{2.5} , annual mean	Mortality, all-cause (natural), age 30+ years	A*	1.062 (1.040–1.083)
PM _{2.5} , annual mean	Mortality, cerebrovascular disease (includes stroke), ischaemic heart disease, COPD and trachea, bronchus and lung cancer, age 30+ years	А	GBD 2010 study (IHME 2013) ^a
PM ₁₀ , annual mean	Postneonatal (age 1–12 months) infant mortality, all-cause	В*	1.04 (1.02, 1.07)
PM ₁₀ , annual mean	Prevalence of bronchitis in children, age 6–12 (or 6–18) years	B*	1.08 (0.98–1.19)
PM ₁₀ , annual mean	Incidence of chronic bronchitis in adults (age 18+ years)	В*	1.117 (1.040–1.189)
PM _{2.5} , daily mean	Mortality, all-cause, all ages	А	1.0123 (1.0045-1.0201)
PM _{2.5} , daily mean	Hospital admissions, CVDs (including stroke), all ages	A*	1.0091 (1.0017–1.0166)
PM _{2.5} , daily mean	Hospital admissions, respiratory diseases, all ages	A*	1.0190 (0.9982-1.0402)
PM _{2.5} , 2-week average, converted to PM _{2.5} , annual average	RADs, all ages	B**	1.047 (1.042–1.053)
PM _{2.5} , 2-week average, converted to PM _{2.5} , annual average	Work days lost, working-age population (age 20–65 years)	В*	1.046 (1.039–1.053)
PM ₁₀ , daily mean	Incidence of asthma symptoms in asthmatic children aged 5–19 years	B*	1.028 (1.006–1.051)
O ₃ , summer months (April–September), average of daily maximum 8-h mean over 35 ppb	Mortality, respiratory diseases, age 30+ years	В	1.014 (1.005–1.024)
O ₃ , daily maximum 8-h mean over 35 ppb	Mortality, all (natural) causes, all ages	A*	1.0029 (1.0014–1.0043)
O ₃ , daily maximum 8-h mean over 10 ppb	Mortality, all (natural) causes, all ages	А	1.0029 (1.0014–1.0043)
O ₃ , daily maximum 8-h mean over 35 ppb	Mortality, CVDs and respiratory diseases, all ages	А	CVD: 1.0049 (1.0013–1.0085); respiratory: 1.0029 (0.9989–1.0070)
O ₃ , daily maximum 8-h mean over 10 ppb	Mortality, CVDs and respiratory diseases, all ages	А	CVD: 1.0049 (1.0013–1.0085); respiratory: 1.0029 (0.9989–1.0070)
O ₃ , daily maximum 8-h mean over 35 ppb	Hospital admissions, CVDs (excluding stroke) and respiratory diseases, age 65+ years	A*	CVD: 1.0089 (1.0050–1.0127); respiratory: 1.0044 (1.0007–1.0083)
O ₃ , daily maximum 8-h mean over 10 ppb	Hospital admissions, CVDs (excluding stroke) and respiratory diseases, age 65+ years	А	CVD: 1.0089 (1.0050–1.0127); respiratory: 1.0044 (1.0007–1.0083)
O ₃ , daily maximum 8-h mean over 35 ppb	MRADs, all ages	В*	1.0154 (1.0060–1.0249)
O ₃ , daily maximum 8-h mean over 10 ppb	MRADs, all ages	В	1.0154 (1.0060–1.0249)
NO ₂ , annual mean over 20 μ g/m ³	Mortality, all (natural) causes, age 30+ years	B*	1.055 (1.031–1.080)
NO ₂ , annual mean	Prevalence of bronchitic symptoms in asthmatic children aged 5–14 years	В*	1.021 (0.990–1.060) per 1 μ g/m ³ change in annual mean NO ₂
NO ₂ , daily maximum 1-h mean	Mortality, all (natural) causes, all ages	A*	1.0027 (1.0016-1.0038)
NO ₂ , daily maximum 1-h mean	Hospital admissions, respiratory diseases, all ages	А	1.0015 (0.9992-1.0038)

 Table 1
 Pollutant-health outcome pairs for which HRAPIE project recommends concentration-response functions (modified from WHO 2013b)

APPENDIX C:

Partial listing of evidence establishing association between residential proximity to refineries and adverse health outcomes

Barregard L, E Holmberg and G Sallsten. 2009. Leukaemia incidence in people living close to an oil refinery. Environmental Research 109:985-990 Accessed on the internet November 21, 2016 at: http://www.sciencedirect.com/science/article/pii/S0013935109001698

http://www.ncbi.nlm.nih.gov/pubmed/19781695

Belli S, Benedetti M, Comba P, Lagravinese D, Martucci V, Martuzzi M, Morleo D, Trinca S, Viviano G. 2004. Case-control study on cancer risk associated to residence in the neighbourhood of a petrochemical plant European Journal of Epidemiology 19: 49–54 Accessed on the internet at:

http://www.iss.it/binary/hibp/cont/Belli%20et%20al%202004.1095850023.pdf

Brand A, McLean KE, Henderson SB, Fournier M, Liu L, Kosatsky T, Smargiassi A. 2016. Respiratory hospital admissions in young children living near metal smelters, pulp mills and oil refineries in two Canadian provinces. Environ Int. Sep;94:24-32. doi: 10.1016/j.envint.2016.05.002. Epub 2016 May 18

Brody JG, Morello-Frosch R, Zota A, Brown P, Perez C, Rudel RA. 2009. Linking exposure assessment science with policy objectives for environmental justice and breast cancer advocacy: the Northern California household exposure study. Am. J. Public Health 99(Suppl. 3):S600-9

Bulka C1, Nastoupil LJ, McClellan W, Ambinder A, Phillips A, Ward K, Bayakly AR, Switchenko JM, Waller L, Flowers CR. 2013. Residence proximity to benzene release sites is associated with increased incidence of non-Hodgkin lymphoma. Cancer. Sep 15;119(18):3309-17. doi: 10.1002/cncr.28083. Epub 2013 Jul 29. Accessed from the internet on November 21, 2016 at: https://www.ncbi.nlm.nih.gov/pubmed/23896932

Choi H. 2006. Potential residential exposure to toxics release inventory chemicals during pregnancy and childhood brain cancer. Environmental health perspectives. http://www.jstor.org/stable/3651785

Cipolla, Bruzzone, Stagnaro, Ceppi, Izzotti, Culotta, Piccardo. 2016. Health Issues of Primary School Students Residing in Proximity of an Oil Terminal with Environmental Exposure to Volatile Organic Compounds.Biomed Res Int. 2016:4574138. doi: 10.1155/2016/4574138. Epub 2016Jul 3.

Cutchin M, Remmes Martin K, Owen SV, Goodwin JS. 2008. Concern About Petrochemical Health Risk Before and After a Refinery Explosion. Risk Anal. 2008 Jun; 28(3): 589-601. doi: 10.1111/j.1539-6924.2008.01050.x Accessed on the internet at: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4018192/

D'Andrea, Reddy. 2016. Adverse Health Effects of Benzene Exposure Among Children Following a Flaring Incident at the British Petroleum Refinery in Texas City. Clin Pediatr (Phila). Mar;55(3):219-27. doi: 10.1177/0009922815594358. Epub 2015 Aug 11.

Dayal HH, Baranowski T, Li YH, Morris R. 1994. Hazardous chemicals: psychological dimensions of the health sequelae of a community exposure in Texas. J Epidemiol Community Health. Dec; 48(6):560-8.

DeFur PL, Evans GW, Hubal EA, Kyle AD, Morello-Frosch RA, Williams DA. 2007. Vulnerability as a function of individual and group resources in cumulative risk assessment. Environ Health Perspect. 115:817-824.

Deger L, Plante C, Jacques L, Goudreau S, Perron S, Hicks J, Kosatsky T, Smargiassi A. 2012. Active and uncontrolled asthma among children exposed to air stack emissions of sulphur dioxide from petroleum refineries in Montreal, Quebec: a cross-sectional study. Can Respir J. Mar-Apr;19(2):97-102.

Fernández-Comacho et al., 2012. Ultrafine Particle and Fine Trace Metal (As, Cd, Cu, Pb and Zn) Pollution Episodes Induced by Industrial Emissions in Huelva, SW Spain. Atmospheric Environment 61: 507–517; http://dx.doi.org/10.1016/j.atmosenv.2012.08.003.;

Langlois, P, Texas Department of State Health Services. 2010. A Case-Control Study of the Association Between Birth Defects Elevated in Nueces County and Sites of Concern to Citizens for Environmental Justice. ATSDR, January. Progress Report on Agency Activities in Corpus Christi, http://www.atsdr.cdc.gov/sites/corpuschristi/final report.html

Lavaine E, Leidell M. 2013. Energy production and health externalities: Evidence from oil refinery strikes in France. Working Paper 18974. Working Paper Series, National Bureau of Economic Research, Cambridge, Massachusetts. © 2013 by Emmanuelle Lavaine and Matthew J. Neidell. http://www.nber.org/papers/w18974

Lim SS, Vos T, Flaxman AD, Danaei G, Shibuya K, et al. 2012. A comparative risk assessment of burden of disease and injury attributable to 67 risk factor clusters in 21 regions, 1990–2010: a systematic analysis for the Global Burden of Disease Study 2010. Lancet. 380:2224–60

Lin MC1, Chiu HF, Yu HS, Tsai SS, Cheng BH, Wu TN, Sung FC, Yang CY. 2001. Increased risk of preterm delivery in areas with air pollution from a petroleum refinery plant in Taiwan. J Toxicol Environ Health A. Dec 21;64(8):637-44. DOI: 10.1080/152873901753246232. https://www.ncbi.nlm.nih.gov/pubmed/11766170

Lin MC, Yu HS, Tsai SS, Cheng BH, Hsu TY, Wu TN, Yang CY. 2001. Adverse pregnancy outcome in a petrochemical polluted area in Taiwan. J Toxicol Environ Health A. Aug 24;63(8):565-74. DOI: 10.1080/152873901316857743. https://www.ncbi.nlm.nih.gov/pubmed/11549116

Liu CC, Chen CC, Wu TN, Yang CY. 2008. Association of brain cancer with residential exposure to petrochemical air pollution in Taiwan. J Toxicol Environ Health A. 2008;71(5):310-4. doi: 10.1080/15287390701738491. https://www.ncbi.nlm.nih.gov/pubmed/18214804

Loyo-Berríos, Nilsa I, Rafael Irizarry, Joseph G. Hennessey, Xuguang Grant Tao and Genevieve Matanoski. 2007. Air Pollution Sources and Childhood Asthma Attacks in Cataño, Puerto Rico. Am. J. Epidemiol. 165 (8):927-935. http://aje.oxfordjournals.org/content/165/8/927.short

Luginaah IN, Taylor SM, Elliott SJ, Eyles JD. 2000 A longitudinal study of the health impacts of a petroleum refinery. Soc Sci Med. Apr; 50(7-8):1155-66.

Luginaah IN, Taylor SM, Elliott SJ, Eyles JD. 2002. Community responses and coping strategies in the vicinity of a petroleum refinery in Oakville, Ontario. Health Place. Sep; 8(3):177-90.

Lyons R. 1995. Incidence of leukaemia and lymphoma in young people in the vicinity of the petrochemical plant at Baglan Bay, South Wales, 1974 to 1991. Occupational and environmental medicine. http://www.pubmedcentral.nih.gov/articlerender.fcgi?artid=1128199&tool=pmcentrez&rendertype=abstract

Riccardi , Di Filippo P, Pomata D, Incoronato F, Di Basilio M, Papini MP, Spicaglia S. 2007. Characterization and distribution of petroleum hydrocarbons and heavy metals in groundwater from three Italian tank farms, Science of The Total Environment 393:50–63.

Rusconi F, Catelan D, Accetta G, Peluso M, Pistelli R, Barbone F, Di Felice E, Munnia A, Murgia P, Paladini L, Serci A, Biggeri A. 2011. Asthma symptoms, lung function, and markers of oxidative stress and inflammation in children exposed to oil refinery pollution. J Asthma. Feb;48(1):84-90. doi: 10.3109/02770903.2010.538106. Epub 2010 Dec 29.

Sánchez de la Campa AM, Moreno T, de la Rosa J, Alastuey A, Querol X. 2011. Size distribution and chemical composition of metalliferous stack emissions in the San Roque petroleum refinery complex, southern Spain. Journal of Hazardous Materials 190:713–722

Simpson I. 2013. Air quality in the Industrial Heartland of Alberta, Canada and potential impacts on human health. Atmospheric environment. <u>http://linkinghub.elsevier.com/retrieve/pii/S135223101300705X</u>

Smargiassi A. 2009. Risk of asthmatic episodes in children exposed to sulfur dioxide stack emissions from a refinery point source in Montreal, Canada. Environmental health perspectives.

http://www.pubmedcentral.nih.gov/articlerender.fcgi?artid=2679612&tool=pmcentrez&rendertype=abstract

Tsai SS, Tiao MM, Kuo HW, Wu TN, Yang CY. Association of bladder cancer with residential exposure to petrochemical air pollutant emissions in Taiwan. J Toxicol Environ Health A;72(2):53-9. doi: 10.1080/15287390802476934. https://www.ncbi.nlm.nih.gov/pubmed/19034794

Whitworth K. 2008. Childhood lymphohematopoietic cancer incidence and hazardous air pollutants in southeast Texas, 1995-2004' Environmental health perspectives.

http://www.pubmedcentral.nih.gov/articlerender.fcgi?artid=2592281&tool=pmcentrez&rendertype=abstract

Yang CY, Chen BH, Hsu TY, Tsai SS, Hung CF, Wu TN. 2000. Female Lung Cancer Mortality and Sex Ratios at Birth near a Petroleum Refinery Plant Environmental Research June 83(1):33-40 DOI: 10.1006/enrs.2000.4038

Yang CY, Chiu HF, Tsai SS, Chang CC, Chuang HY. Increased risk of preterm delivery in areas with cancer mortality problems from petrochemical complexes. Environ Res. Jul;89(3):195-200. https://www.ncbi.nlm.nih.gov/pubmed/12176003

References

American Lung Association. 2017. State of the Air. Available at http://www.lung.org/assets/documents/healthy-air/state-of-the-air/state-of-the-air-2017.pdf

Anenberg, S.C., West, J.J., Yu, H., Chin, M., Schulz, M., Bergmann, D., Bey, I., Bian, H., Diehl, T., Fiore, A., et al. (2014). Impacts of intercontinental transport of anthropogenic fine particulate matter on human mortality. Air Qual. Atmosphere Health 7, 369–379.

BAAQMD (2012a) Regulatory Concept Paper, Petroleum Refining Emissions Tracking Rule, Draft, October 15, 2012, citing The U.S. Oil Refining Industry: Background in Changing Markets and Fuel Policies" (Nov. 22, 2010), available at http://www.baaqmd.gov/~/media/files/planning-and-research/rules-and-regs/workshops/2013/1215_dr_rpt032113.pdf?la=en

BAAQMD 2012. Understanding Particulate Matter: Protecting Public Health in the San Francisco Bay Area, available at http://www.baaqmd.gov/~/media/Files/Planning%20and%20Research/Plans/PM%20Planning/UnderstandingPM_ Draft Aug%2023.ashx

BAAQMD, 2013. Petroleum Refining Emissions Tracking, Regulatory Concept Paper, available at <u>http://www.baaqmd.gov/~/media/files/planning-and-research/rules-and-</u>regs/workshops/2013/1215_dr_rpt032113.pdf?la=en

BAAMD, 2017. State Implementation Plan (*"2017 Clean Air Plan"*). Bay Area Air Quality Management District: San Francisco, CA. Two volumes, with attachments, appendices, and supporting documents including the *"Multi-Pollutant Evaluation Method"* (MPEM) and others. Adopted 19 April 2017. <u>See</u> 2017 Clean Air Plan; HYPERLINK "http://www.baaqmd.gov" www.baaqmd.gov.

BAAQMD Staff Presentation to 17 April 2017 BAAQMD Stationary Source Committee Meeting. *Update on Regulation 6: Particulate Matter Rule Update, Stationary Source Committee;* Bay Area Air Quality Management District: San Francisco, CA. <u>See</u> Slide 4.

Brody et al., 2009. Linking Exposure Assessment Science With Policy Objectives for Environmental Justice and Breast Cancer Advocacy: The Northern California Household Exposure Study. *American Journal of Public Health* 99(S3): S600–S609. DOI: 10.2105/AJPH.2008.149088.

Christensen, J.N., Weiss-Penzias, P., Fine, R., McDade, C.E., Trzepla, K., Brown, S.T., and Gustin, M.S. (2015). Unraveling the sources of ground level ozone in the Intermountain Western United States using Pb isotopes. Sci. Total Environ. 530–531, 519–525.

California Department of Public Health, 2013. Death records, deaths by county and cause. <u>See</u>: HYPERLINK "http://www.cdph.ca.gov/data/statistics/Pages/DeathStatisticalDataTables.aspx" www.cdph.ca.gov/data/statistics/Pages/DeathStatisticalDataTables.aspx.

CARB "ADAM" data for 2013. Daily average PM_{2.5} data from the San Pablo-Rumrill and Point Reyes monitoring stations reported for 2013. California Air Resources Board: Sacramento, CA. <u>See</u> HYPERLINK "http://www.arb.ca.gov/adam/weekly/weeklydisplay.php" www.arb.ca.gov/adam/weekly/weeklydisplay.php.

CBE, 2015. Supplemental Comment on Air District Staff Proposal, Rules 12-15 and 12-16: Evidence of Localized Bay Area Refinery GHG and PM_{2.5} Emission Impact; 23 November 2015; revised 23 November 2016. Communities for a Better Environment: Richmond, CA. <u>See</u> esp. pages 6–7.

Cushing, L, Wander, M, Morello-Frosch, R, Pastor, M, Zhu, A, Sadd, J, 2016. "A Preliminary Environmental Equity Assessment of California's Cap-and-Trade Program," University of California, Berkeley, University of Southern California, San Francisco State University, Occidental College, Sept. available at <u>http://cal.streetsblog.org/wp-</u>ontent/uploads/sites/13/2016/09/Climate_Equity_Brief_CA_Cap_and_Trade_Sept2016_FINAL.pdf Currie J, Heep Ray S, Neidell M, 2011. Quasi-Experimental Studies Suggest That Lowering Air Pollution Levels Benefits Infants' And Children's Health. *Health Affairs* 30, no.12 (2011):2391-2399 Accessed on the internet November 20, at http://content.healthaffairs.org/content/30/12/2391.full.pdf+html

Dominici F, Peng RD, Bell ML, Pham L, McDermott A, Zeger SL, Samet JM. 2006. Fine particulate air pollution and hospital admission for cardiovascular and respiratory diseases. *JAMA*. Mar 8;295(10):1127-34. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3543154/

Goodman CL, Sinclair H, Dockery DW. 2002. Effect of air-pollution control on death rates in Dublin, Ireland: an intervention study. *Lancet*. Oct 19; 360(9341):1210-4.

Hedley AJ, Wong CM, Thach TQ, Ma S, Lam TH, Anderson HR. 2002. Cardiorespiratory and all-cause mortality after restrictions on sulphur content of fuel in Hong Kong: an intervention study. *Lancet*. Nov 23; 360(9346):1646-52.

He'roux ME, Anderson HR, Atkinson R, Brunekreef B, Cohen A, Forastiere F, Hurley F, Katsouyanni K, Krewski D, Krzyzanowski M, Ku[°] nzli M, Mills I, Querol X, Ostro B, Walton H. 20 Quantifying the health impacts of ambient air pollutants: Recommendations of a WHO/Europe project. *Int J Public Health* 60:619–627.

Karras, 2016. Combustion Emissions from Refining Lower Quality Oil Part 2: How much could a switch to 'tar sands' oil increase direct emissions of PM_{2.5} from northern California refineries?; Technical report provided to BAAQMD with comments on the scope of the Draft Environmental Impact Report (DEIR) for proposed Rule 12-16. 2 December 2016. Communities for a Better Environment: Richmond, CA.

Krewski et al., 2000. *Reanalysis of the Harvard Six Cities Study and the American Cancer Society Study of Particulate Air Pollution and Mortality; A special report of the Institute's particle epidemiology reanalysis project;* Health Effects Institute: Cambridge, MA.

Laden, F.; Schwartz, J.; Speizer, F.E.; Dockery, D.W. 2006. Reduction in Fine Particulate Air Pollution and Mortality: Extended Follow-Up of the Harvard Six Cities Study. Am. J. Respir. Crit. Care Med. 173, 667-672.

March Staff Report. *Regulation 12, Rule 16: Petroleum Refining Facility-Wide Emissions Limits Staff Report;* March 2017. Bay Area Air Quality Management District: San Francisco, CA. <u>See</u> esp. page 38: "It is important to note that PM_{2.5} from refineries is produced predominantly from combustion, resulting in PM_{2.5} being sent aloft, and therefore typically contributes to regional PM_{2.5} as opposed to producing localized impacts It is possible that some combustion sources may have more localized impacts depending on stack height, weather and topography."

Ostro B, Hu J, Goldberg D, Reynolds P, Hertz A, Bernstein L, Kleemanz M. 2015. Associations of Mortality with Long-Term Exposures to Fine and Ultrafine Particles, Species and Sources: Results from the California Teachers Study Cohort. *Environmental Health Perspectives*. June 123(6) pp 549-556. Available at http://dx.doi.org/10.1289/ehp.1408565.

Pastor et al., 2010. *Minding the Climate Gap: What's at Stake if California's Climate Law Isn't Done Right and Right Away;* USC Program for Environmental and Regional Equity: Los Angeles, CA. Available at: HYPERLINK "https://dornsife.usc.edu/PERE/enviro-equity-CA-cap-trade" <u>https://dornsife.usc.edu/PERE/enviro-equity-CA-cap-trade</u>.

Pope et al., 2002. Lung cancer, cardiopulmonary mortality, and long-term exposure to fine particulate air pollution. *JAMA* 287: 1132–1141.

Pope CA, 3rd, Ezzati M, Dockery DW. (2009). Fine-particulate air pollution and life expectancy in the United States. N Engl J Med. 2009;360:376–386.

Senate Bill No. 32: Global Warming Solutions Act of 2006: emissions limit (extends AB 32 and sets 2030 greenhouse gas emissions targets), available at https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201520160SB32 Specifically, SB 32 Sec. 1 (d) and AB 197 Sec. 1 (c), (e), Sec. 5

U.S. Bureau of the Census, various dates. County and census tract population data from: HYPERLINK "https://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml" https://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml

U.S. Environmental Protection Agency. Overview of Petroleum Refining. Accessed from the internet at: <u>https://www3.epa.gov/ttn/chief/ap42/ch05/final/c05s01_2015.pdf</u>

Zhang, L., Jacob, D.J., Boersma, K.F., Jaffe, D.A., Olson, J.R., Bowman, K.W., Worden, J.R., Thompson, A.M., Avery, M.A., Cohen, R.C., et al. (2008). Transpacific transport of ozone pollution and the effect of recent Asian emission increases on air quality in North America: an integrated analysis using satellite, aircraft, ozonesonde, and surface observations. Atmospheric Chem. Phys. Discuss. 8, 8143–8191.

Zhang, L., Jacob, D.J., Kopacz, M., Henze, D.K., Singh, K., and Jaffe, D.A. (2009). Intercontinental source attribution of ozone pollution at western U.S. sites using an adjoint method. Geophys. Res. Lett. 36, L11810.

Zhang, R., Li, G., Fan, J., Wu, D.L., and Molina, M.J. (2007). Intensification of Pacific storm track linked to Asian pollution. Proc. Natl. Acad. Sci. 104, 5295–5299.



Re: CBE Comments on Draft Community Air Protection Blueprint pursuant to AB 617; Need Strong State Mandated Refinery, Transportation, and Small Cumulative Source Cuts

Honorable Air Resources Board Boardmembers and Staff,

CBE is a statewide Environmental Justice (EJ) organization based in Southern and Northern California urban communities heavily impacted by fossil fuel air pollution sources, including **Wilmington** (Oil Refineries, drilling, Ports/trucking), **Richmond/Rodeo** (oil refineries, superfund sites), **Southeast Los Angeles** (**Huntington Park** and surrounding areas, with heavy transportation and stationary sources), and **East Oakland** (Port/trucking, and stationary sources). All these communities have high CalEnviroScreen scores for disproportionate impacts, and were previously nominated for high priority by CBE and many others. CBE is also a member of CEJA (the California Environmental Justice Alliance), with impacted communities throughout both urban and rural California deserving strong pollution prevention measures.

We opposed AB617 adoption, as it was used to justify extending pollution trading, which harms our communities. Because of this, many EJ communities are frankly disengaged from AB617, and without confidence in the ongoing process. Nevertheless, CBE is working through implementation to secure improvements, which are achievable. We need strong state-mandated emissions cuts in the Blueprint that are *additional* to existing Air District measures; otherwise AB617 would be without purpose. Currently the Draft Blueprint is over-generalized and leaves out major sources (including oil refineries).

We understand AB617 added tough deadlines to staff responsibilities. But CARB must correct the perverse outcome that AB617 has been used to *delay* emission cuts previously poised for adoption regionally (such as the Bay Area regional Refinery PM Cap). Adding administrative burdens without mandating emission cuts leaves communities worse off, but CARB can correct this by adding state-mandated emissions cuts in the Final Blueprint. Monitoring is also important, but not as a barrier or replacement for cutting emissions. Our comments on Refineries, Transportation, and Cumulative Smaller Sources are summarized immediately below; also see our full letter below for additional comments and recommendations:

OIL REFINERIES:

- -- The 617 Blueprint has no emission cuts for refineries the largest, and expanding industrial sources. (This is despite AB 617 being adopted to address co-pollutants of Cap & Trade sources).
- -- Refineries receive sweetheart deals from Air Districts; communities need recourse.
- -- Communities need state mandates for measures to cut pollution which are *additional* to regional regulations, including state mandated refinery <u>Boiler and Heater</u> replacements, Best <u>Catalytic Cracking</u> Unit PM2.5 and SOx controls, and ensuring no emission increases (see below).
- -- The state must recognize it needs a long-term Just Transition Plan to phase down Oil Refineries and Oil extraction in favor of clean renewable transportation, instead of continuing expansion. Without a plan, state clean air and greenhouse goals will never be met.

TRANSPORTATION: In addition to large industrial sources, pollution from transportation of people and goods are a major source of pollution in most low-income communities of color.

- ARB must use the mandate of AB 617 for setting aggressive targets in transportation electrification and enhancing clean mobility. We applaud ARB's work in proposing Innovative Clean Transit.
- ARB needs to replicate similar and technology forcing programs in other transportation categories related to movement of goods.
- Additionally, CARB needs to issue clear guidance documents for agencies such as Caltrans that undertake expansion of freeways such as I-710. For years community leaders, public health experts and environmental advocates have asked Caltrans to create a zero emission lane as part of I-710 expansion project. CARB has the obligation to show how this massive infrastructure project could advance the zero emission programs in California and help California and the South Coast region achieve some of its climate and air quality targets.
- Furthermore, CARB needs to provide similar guidance documents for the Ports of LA, Long Beach and Oakland. If Air Districts fail to create sufficient emission reduction regulation, CARB needs to fulfill its responsibilities in compliance with the intent of AB 617.
- On access to clean mobility, EJ organizations have worked extensively with CARB under the SB 350 study to identify the obstacles that DACs (Disadvantaged Communities) are facing. Many of these programs require a more robust commitment on the part of CARB and more dedicated funding. Creating meaningful incentives, programs and projects that are centered around the needs of DACs and responsive to those needs are key in reducing pollution and enhancing access from mobile sources in low income communities of color.
- Also note the need for the fossil fuel Phasedown Plan described above, for transportation, Oil Refining, and Oil Extraction.

CUMULATIVE IMPACTS INCLUDING SMALL, AND ALL SOURCES:

- Any serious attempt at reducing emissions in EJ communities must look at the cumulative impacts of a communities under consideration for priority action.
- It is clear that multiple sources of pollution impacting a community cannot be regulated in the same manner as one source impacting the community if each facility creates similar exposure.
- The obvious but unaddressed question EJ advocates have asked for years is: why each of multiple sources of pollution in DACs are treated without regard for other sources?
- ARB and Air Districts have so far refused to create regulation from the point of view of impacted and vulnerable community members, and they have designed their program from the perspective of industry. The intent of 617 has been to address this great flaw in the regulatory system. We need ARB and Air Districts to stop pointing fingers at each other, and get to work creating a serious cumulative impacts regulatory regime in permitting, rule-making and enforcement.

ADD RIGHT TO PETITION CARB TO CORRECT AQMD ERRORS -- a mechanism for public petition for a second-opinion review of emission inventories and permitting errors.

I. Refinery neighborhoods are disproportionately impacted by the largest stationary sources of emissions under Cap & Trade, and available refinery emission cut requirements are missing from the draft Blueprint

Oil Refineries (with their associated hydrogen production and use) are the largest industrial sources under Cap and Trade. Industrial and refinery emissions, which disproportionately impact communities of color, have stagnated or gone up under Cap and Trade since 2009.^{1,2} (See charts at right.) Greenhouse gases are not emitted by themselves, but along with co-pollutant smogforming and toxic chemicals that severely harm these communities.

We were dismayed the Draft Blueprint included no emission reduction measures for Oil

Refineries. AB 617 was purportedly designed to address Cap & Trade gaps, by cutting co-pollutant smog precursors and toxics emitted at the same time as Greenhouse Gases (GHGs) for sources covered by Cap & Trade (of which refineries and their associated hydrogen production and use are the largest stationary sources).

At the Wilmington workshop in June, CARB staff responded to such community comments, and committed to add specific refinery measures to the Blueprint. We look forward to strong statemandated requirements (not relying on the Air Districts, which have failed our communities).



CARB / Figure 2. Trends in California GHG Emissions. Emissions are organized by the categories in the AB 32 Scoping Plan.

¹ California Greenhouse Gas Emissions for 2000 to 2016 Trends of Emissions and Other Indicators, p. 10, <u>https://www.arb.ca.gov/cc/inventory/pubs/reports/2000_2016/ghg_inventory_trends_00-16.pdf</u>

² Cushing L, Blaustein-Rejto D, Wander M, Pastor M, Sadd J, Zhu A, et al. (2018) Carbon trading, co-pollutants, and environmental equity: Evidence from California's cap-and-trade program (2011–2015). PLoS Med 15(7): e1002604. <u>https://doi.org/10.1371/journal.pmed.1002604</u> [Facilities regulated under California's cap-and-trade program are disproportionately located in disadvantaged neighborhoods. Statistical analysis found that co-pollutant emissions from regulated facilities were temporally correlated with GHG emissions, and most regulated facilities (52%) reported higher annual average local (in-state) GHG emissions after the initiation of trading, even though total emissions remained well under the cap established by the program.]

<u>California's cap-and-trade air quality benefits go mostly out of state</u> -- July 10, 2018, Berkeley News, UC Berkeley, **During** the first three years of California's 5-year-old cap-and-trade program, the bulk of the greenhouse gas reductions occurred out of state, which means that state residents did not see the benefits of improved air quality from presumed reductions in harmful co-pollutants.
In summary, we urge CARB to add to the Blueprint, State Refinery Regulations:

- Mandate replacement of Refinery Boilers & Heaters, in addition to retrofitting and maintenance measures (cutting smog precursors, toxics, and greenhouse gases).
- Mandate that air districts require wet scrubbing or equivalent PM2.5 and SOx emission cuts from Refinery Catalytic Cracking units, which will result in large reductions in deadly particulate matter disproportionately threatening EJ communities
- Set requirements prohibiting refinery-level emission increases
- Prohibit air districts from granting (in-basin) particulate matter (PM) pollution trading credits instead of limiting and reducing PM emissions
- Start a plan for at least 80% phasedown of Oil Refineries by 2050, consistent with AB 32 requirements for 80% GHG cuts by 2050, and consistent with Clean Air Act health standards. California will not be able to meet overall GHG reductions without a plan to phase down fossil fuel production and use pollution trading will not achieve the 80% cuts, and it leaves heavy polluting sources in our communities. California will not be able to meet Clean Air Act health standards without a phasedown of fossil fueled transportation.
- A. Oil refinery neighborhoods throughout the state face severe pollution and health risks, and should be high-priority in AB617 implementation for emission cuts

California Oil Refineries are not only major smog, toxic, and greenhouse gas sources, they also regularly explode, catch fire, flare, and smoke. These episodic emissions are very poorly quantified, but heavily impact refinery neighbors throughout the state regularly. Below are a small fraction of the examples.



August 2016, Tesoro LA sulfur tank explosion.



2009 Tesoro LA Coker Fire



2012 Chevron Richmond Explosion



Various California refinery smoking flaring events below, and accidents above are small fraction of numbers of hazardous events

Ongoing emissions from California refinery have also been shown to be grossly underestimated. For example, a recent study of Swedish Scientists with the South Coast Air Quality Management District (SCAQMD) on refineries in greater Los Angeles found they are emitting *on average* 34

times higher benzene compared to the SCAQMD inventory.³

Wilmington Impacts:

CBE members living here face some of the worst fossil fuel-impacts in the state. This community is over 90% people of color, with many children attending school within a mile of a refinery, and *five* oil refineries within, or on, the city's borders. Major diesel trucking and the Ports of LA and Long Beach increase cumulative impacts.

The massive refinery complex bordered by neighbors in Wilmington, Carson, and W. Long Beach includes Tesoro Wilmington and Carson (recently bought by Marathon, formerly two refineries owned by Tesoro and BP), plus the Phillips 66 Wilmington and Carson refineries, and Valero Wilmington.

Wilmington also contains the largest urban oil field with wells literally next door to houses. Although separate from the Oil Refineries, these are part of the broader Oil Industry impacting Wilmington air quality and adding to methane climate impacts.

Use of dozens of toxic and hazardous chemicals in the hundreds of oil wells in the area went undisclosed for years until the SCAQMD adopted its Rule 1148.2, an important step forward.

See Attachment B, CBE, listing these chemicals and many drilling sites, including the following and dozens of



Wilmington/Carson/W. Long Beach is Ground-Zero to five California refinery air plumes (*map from SCAQMD Refinery Pilot Study, 2007*) See more in <u>More in CalEnviroScreen</u>.





After 10 years, neighbors of a Wilmington oil drilling operation still complain of health, environmental issues, Bettina Boxall and Joe Mozingo, photo, Rick Loomis / Los Angeles Times, Feb. 20, 2016

others: Ethylbenezene, Hydrogen Chloride, Hydrogen Fluoride, Methanol, Naphtha, Heavy Aromatics, Toluene, Xylene, Aromatic Amines, Halides, Naphthalene Sulfonate, Formaldehyde Condensate, PAHs, Wood Chemicals, and many more, some listed specifically, others only provided as "Trade Secret" general categories of chemicals.

³ Emission Measurements of VOCs, NO2 and SO2 from the Refineries in the South Coast Air Basin Using Solar Occultation Flux and Other Optical Remote Sensing Methods, Final Report, FluxSense Inc, 11 April 2017, Authors: Johan Mellqvist, Jerker Samuelsson, Oscar Isoz, Samuel Brohede, Pontus Andersson, Marianne Ericsson, John Johansson, available at: https://www.courthousenews.com/wp-content/uploads/2017/06/FluxSense-Study.pdf

Richmond and nearby Rodeo impacts:

Richmond is home to the 2,900-acre Chevron Richmond Refinery, one of the largest stationary sources of greenhouse gas (GHG) emissions in California, the most egregious polluter in Richmond, and previously the largest refinery in California.

The city of **Rodeo** nearby is home of the Phillips 66 Refinery which has proposed a marine terminal expansion at its Crockett-Rodeo facility. Phillips 66 seeks to more than double its annual tankers traffic from 59 to 129, threatening air and water quality and increasing oil spill risk, significantly affecting low-income people of color.

In addition to the major ongoing emissions and repeated explosions and fires at the refineries, CalEnviroScreen shows Richmond and Rodeo both at risk from very high asthma, diesel impacts, hazardous waste, and toxic chemical cleanup sites (Richmond is top 97th, Rodeo top 87th worst, mapped below).⁴



http://oehha.maps.arcgis.com/apps/webappviewer /index.html?id=9d54eecc28264c2da6495d64ce053 913



Above: Commuters step out of their cars to take pictures of the fire raging within the Chevron oil refinery on Aug. 6, 2012, found by the US Chemical Safety Board to be the result of repeated failures of Chevron to fix known metal thinning, and due to increases in corrosive sulfur in crude oil (which Chevron had tried to discount during environmental review of an expansion). This explosion narrowly missed killing 19 workers, and sent thousands of residents fleeing the black clouds.



<u>Richmond and Rodeo refinery neighbors</u> in Cal Enviroscreen red & orange impact zones, neighboring communities get green zone benefits not enjoyed in Richmond / Rodeo

⁴ https://oehha.maps.arcgis.com/apps/webappviewer/index.html?id=4560cfbce7c745c299b2d0cbb07044f5

B. Refinery Boiler and Heater co-pollutant emissions are large, and replacement and retrofit regulations can yield concentrated emission cuts – CARB should begin a state regulation

In 2008, the California Air Resources Board staff⁵ supported our advocacy for direct refinery emission controls. CARB proposed a statewide regulation of Refinery Boiler and Heater control measures in discussion with CBE and other community advocates, to cut both greenhouse gas and co-pollutant emissions in the first state Scoping Plan under AB32. Unfortunately, a decision was made to sweep all CARB refinery controls into Cap and Trade (except for a very weak and ineffective version of our proposed industrial energy efficiency measure). Thus a well-founded state regulation to cut Boiler and Heater emissions disappeared. CARB can now rectify this problem by requiring such a statewide measure under AB617 for these large, polluting, and old refinery units.

In (2010) CARB published data within the Cap and Trade arena, showing available methods to cut emissions by replacing and retrofitting Oil Refinery Boilers and Heaters (although these methods were never required, but only listed as potential compliance pathways).⁶ CARB analyzed Department of Energy data to identify how much energy would be saved, and quantifying CO2 reductions (due to combustion avoided) for the measures listed below, in million British Thermal Units (MMBTU). CARB provided two spreadsheets calculating emissions reductions, applying the following listed controls. (Note that additional sectors' boilers and heaters were included, such as industrial food, wood product, and chemical industries in CARB's analysis, but by far the larger emissions reductions came from Oil Refineries, which we excerpted below. Oil and gas facilities (presumably referring to extraction) also showed substantial emission reduction opportunities for boilers, and we included those as well.)

Emission reduction measures included (for 282 Refinery Boilers, 293 Oil and Gas Boilers, and 524 Refinery Process Heaters):

- 1. Replacing low and medium efficiency Boilers (Categories 1 and 2)
- 2. Optimizing boilers by reducing excess air
- 3. Retrofitting feedwater economizers
- 4. Retrofitting with air preheaters
- 5. Blowdown Reduction with controls and with feedwater cleanup
- 6. Blowdown heat recovery
- 7. Optimizing steam quality
- 8. Optimizing condensate recovery
- 9. Minimizing vented steam
- 10. Boiler insulation maintenance
- 11. Steam trap maintenance
- 12. Steam leak maintenance
- 13. Replacing low and medium efficiency heaters

⁵ Dean Simeroth, Criteria Pollutant Branch Chief at that time

⁶ CARB, Cap and Trade 2010 webpage, at: <u>https://www.arb.ca.gov/regact/2010/capandtrade10/capandtrade10.htm</u>, including CARB's methodologies and assumptions in APPENDIX F COMPLIANCE PATHWAYS: <u>https://www.arb.ca.gov/regact/2010/capandtrade10/capv3appf.pdf</u>,

and two CARB spreadsheets -- Compliance Pathways Analysis – Boilers:

http://www.arb.ca.gov/cc/capandtrade/capandtrade/compathboiler.xls

Compliance Pathways Analysis - Process Heaters:

http://www.arb.ca.gov/cc/capandtrade/capandtrade/compathprocessheat.xls

- 14. Optimizing heaters
- 15. Recovering flue gas heat
- 16. Replacing refractory brick
- 17. Heater insulation maintenance

CBE also submitted comments about this in 2010, advocating that CARB take advantage of these options through a direct emission reduction regulation for Oil Refineries, in order to address the co-pollutants smog precursors and toxics in refinery communities, as well as cutting greenhouse gases. CARB however decided to continue pollution trading in lieu of direct emission reductions. Since then CARB has acknowledged in many proceedings the need to directly cut co-pollutants in EJ communities, and AB617 proceedings acknowledge and state they will address this need. Consequently, we are resubmitting data which are still relevant, and since no statewide regulation was ever enacted. Hundreds of oil refinery boilers and heaters are in operation statewide, and continue as major polluters, many operating for decades. And in the SCAQMD, the RECLAIM program (now sunsetting), has long replaced direct regulation of NOx and SOx with pollution trading. Now is the time to return to direct regulation in EJ communities.

Below we show the reductions in combustion of fuels in the heaters and boilers which CARB calculated for each of the measures identified. CARB used this information not only to identify the fuel use reduction, but also the reductions in Greenhouse Gases (GHGs). CBE submitted calculations in 2010 to show avoided NOx and CO emissions associated with this fuel reduction, using AP 42 emissions factors. Since ten years have passed, it is unknown exactly what controls are in place or not in place for each boiler and heater, and since EPA emission factors vary in accuracy, we are presenting the data in the original CARB form, as *fuel use avoided*.

We now urge CARB to carry out an updated statewide assessment of Refinery and Oil and Gas Boilers and Heaters to characterize each one in a public database, and begin the process for a statewide regulation requiring replacing antiquated heaters and boilers and other emission reductions. **These should not wait until the CARB BACT/BARCT Clearinghouse is developed.** These Measures to avoid burning fuels, result in reductions in GHGs, smog-forming chemicals, and toxics.

	1. REPLACE BOILERS		2. OPTIMIZE BOILERS		3. FEEDWATER ECONOMIZ.	
	Cat. 1	Cat. 2	Cat. 1	Cat. 2	Cat. 1	Cat. 2
Refineries	3,339,654	3,258,199	1,500,618	900,371	667,931	400,758
Oil and Gas	3,035,370	2,072,935	954,725	572,835	743,666	446,199
Total	7,334,421	6,293,435	2,921,920	1,753,152	1,701,004	1,020,602
	4. AIR PREHEATER		5. BLOWDOWN PRCTC		6. BLOWDWN HEAT RECOV	
Refineries	166,983	100,190	189,247	567,741	333,965	200,379
Oil and Gas	127,486	76,491	174,230	522,691	212,476	127,486
Total	358,416	215,049	436,122	1,308,367	650,279	390,167

TABLE 1: BOILERS-Refinery and Oil & Gas facilities-Fuel Reduction Measures, MMBTUs/year

	7. OPT STE	EAM QUAL	8. OPT CONDENS. REC		9. MINIM. VENTD STEAM	
Refineries	129,133	77,480	178,115	106,869	228,210	136,926
Oil and Gas	160,065	96,039	113,320	67,992	216,017	129,610
Total	289,198	173,519	291,435	174,861	444,227	266,536
	10. INSUL. MAINT.		11. STEAM TRAP MAINT.		12. STEAM LEAK MAINT.	
Refineries	3,117,011	834,914	3,339,654	3,339,654	1,113,218	667,931
Oil and Gas	1,983,108	531,190	2,124,759	2,124,759	708,253	424,952
Total	5,100,119	1,366,103	5,464,413	5,464,413	1,821,471	1,092,883

TABLE 2: HEATERS - Refineries -- Fuel Reduction (MMBTUs/year)

	1. REPLACE HEATERS		2. OPTIMIZE HEATERS		3. RECOV. FLUE GAS HEAT	
	Cat. 1	Cat. 2	Cat. 1	Cat. 2	Cat. 1	Cat. 2
Refineries	8,052,390	5,040,927	2,786,020	1,671,612	1,240,068	744,041
	4. REPL. BRICK		5. INSUL. MAINT.			
Refineries	165,342	99,205	189,247	567,741		

Many of these emission reduction measures are additive, others may not be, but an updated inventory and regulatory process can identify the highest priority and most effective pollution reduction measures.

- CARB's data above estimated that replacing both low and medium efficiency Boilers and Heaters alone accounted for more than 26,000,000 MMBTU/year in avoided fuel combustion (26x10¹² BTUs), which would be concentrated in heavily impacted communities.
- CARB-calculated GHG reductions associated with these two measures alone was 1.3 million metric tons per year.⁷ CBE calculated associated NOx, CO, and other co-pollutant reductions in 2010 using AP42 emission factors associated with this reduction in fuel combustion, which resulted in many tons per day in emissions reductions.⁸ We are not reproducing our original submittal for these pollutants, since almost a decade has passed.
- Instead, we are urging CARB to produce an updated public statewide inventory of Refinery and Oil and Gas Boilers and Heaters as soon as possible, since these are known major polluters. (We ask for fuel type, volumes used, controls, permit, monitoring conditions, age, etc.).
- Although valuable, our communities do not want to wait years for the BARCT/BACT Clearinghouse to be completed, while AQMDs continue to permit refinery and pollution expansions, with hidden emissions.
- Additional reductions from ongoing requirements for insulation and leak maintenance, as well as
 optimizing combustion requirements could be achieved, and additional pollutants including
 particulate matter, sulfur oxides, and more, would also be eliminated through these energysaving measures, but were not calculated.

⁷ *Id.* <u>Compliance Pathways Analysis – Boilers</u>, and <u>Compliance Pathways Analysis – Process Heaters</u> -- CARB spreadsheets ⁸ *CBE Comments on Draft Cap and Trade Regulation: Draft Cap & Trade Regulation Misses California GHG and Pollution Reduction Opportunities, Job Opportunities, and Contains Egregious Errors,* submitted to CARB, Dec. 14, 2010

While we expect that some refinery boiler and heater emissions may have improved, we know for a fact that some have been allowed to *increase*. (See the case of the Tesoro Los Angeles Refinery below.)

Finally beginning the regulatory process originally proposed a decade ago by CARB's own Criteria Pollutant Branch Chief (before the Cap and Trade program undermined such direct refinery emissions cuts) can achieve the following -- updated data, identifying the worst polluting boilers and heaters in the state, requiring replacement, maintenance, and combustion optimizing, setting <u>BACT</u> emission standards and CEMS requirements (Continuous Emission Monitoring Systems) for properly calculating both baselines and emissions, and setting other requirements should be put in place.

Note that we are not proposing that this should be subsumed only into the state's BACT/BARCT clearinghouse for new and modified sources, but instead should be a high priority <u>stand-alone regulation</u> on existing refinery Boilers and Heaters, which are already known major pollution sources with known fixes (especially replacement).

One example AQMD sweetheart deal for a Refinery Coker Heater permitting change (at the Tesoro Los Angeles Refinery), indicates emissions may be grossly underestimated for other Heaters and Boilers:

While grandfathered oil refinery Boilers and Heaters throughout the state need replacement, we have found that Air Districts regularly let them off the hook. An example is the H-100 Coker heater at Wilmington Tesoro (now Marathon). This heater was constructed in 1968⁹ (50 years old). It was allowed an increased firing rate from 252 to 302 million British Thermal Units per hour (MMBTU), a 20% increase in combustion of fuels, without SCAQMD counting any emission increase. Incredibly, the SCAQMD allowed Tesoro to count this increased burning of fuel as an emission *decrease*, despite this being physically impossible. This supposed decrease was based on comparison to a chosen baseline period of extremely high emissions, over a short timeframe, under unusual conditions. No physical improvements were made to this heater.

This supposed emission decrease was justified by a statement that Tesoro believed they could reduce emissions, and by a flimsy permit condition allowing Tesoro to calculate emissions, choosing averaging periods as it wishes.¹⁰ Stated pre-project emissions were 352.47 lbs/day of NOx,¹¹ which if accurate,

⁹ Heater H-100, Tesoro Los Angeles Refinery Title V permit 272th page of pdf,

¹⁰ H-100 daily permit limit. 293rd page of PDF, Title V. [*The operator shall calculate the daily emissions for NOx and SOx using the SCAQMD certified CEMS.*] Tesoro was previously allowed by the SCAQMD to set the very high baseline for this heater during environmental review, based on unusual conditions during the 15 highest emitting days out of a 2-year period (also from CEMS data), making it appear that emissions were not increasing despite being allowed a 20% increase in fuel combustion (from 252 to 302MMBTU/hr). This was contrary to a California Supreme Court decision stating this method is not legal for setting baselines, when the SCAQMD used the same method at the Phillips 66 refinery. SCAQMD ignored this decision and allowed the same method to be used for Tesoro's LARIC project including the H-100 heat rate increase. Then SCAQMD's permit allowed Tesoro to calculate compliance with a supposed daily permit limit of 181 lbs/day, again based on Tesoro's choice of averaging period. This allows Tesoro to choose the most favorable conditions (in this case, the lowest emissions period of its choice). On the other hand, the *hourly* limit for this heater of 18.4 lbs/hour, which allows emissions up to 442 lbs/day, is consistent with the 20% increase in fuel use allowed, and a 20% increase in emissions above the pre-project 352.47 lbs/day. This indicates the real daily emissions limit is 442 lbs/day.

¹¹ Tesoro LARIC (Los Angeles Refinery Integration and Compliance project) FEIR (Table A-3),

http://www.aqmd.gov/home/research/documents-reports/lead-agency-permit-projects

would increase to 422 lbs/day of NOx (20% higher due to burning 20% more fuel) from this single heater. Instead it was shockingly allowed to show an emission decrease down to 181 lbs/day.

If this heater had been required to meet BACT (Best Available Control Technology), it would have to reduce down to at least 72 lbs/day¹² and perhaps lower, instead of allowing hidden emissions of 422 lbs/day for this single heater.

Because there are so many refinery Boilers and Heaters throughout the state, examples like the Tesoro coker heater deal in addition to CARB's data, show that emissions reduction potentials are large. While the Bay Area and South Coast have regulated refinery boilers and heaters in the past, and the South Coast is planning new regulations to replace its RECLAIM pollution trading program for NOx and SOx, our experience is that these are underregulated major sources of pollution concentrated in communities of color receiving permitting and regulatory decisions highly favorable to the polluters.

ACTIONS:

-- CARB should immediately require reporting to a new public statewide database all Oil **Refinery Boilers and Heaters in the state,** including vintage, emissions controls, fuel type, fuel combustion, location, monitoring, permit conditions, etc.

-- CARB should begin a regulatory process to replace old refinery boilers and heaters, require meeting BACT standards, increase maintenance, and require other measures listed in the tables above.

Because these are very large combustion sources located in communities of color, because these sources emit NOx, CO, other criteria pollutants and toxics, because these also emit greenhouse gases while Air District have allowed these to go without replacement for decades, **these sources are excellent candidates for statewide mandated regulation**.

C. Mandate that air districts require wet scrubbing or equivalent PM2.5 and SOx emission cuts from oil refining catalytic cracking units (CCUs)

Nine oil refineries operate catalytic cracking units (CCUs) with a collective capacity of 642,000 barrels/day in Avon, Benicia, Carson, El Segundo, Martinez, Richmond, Torrance and Wilmington, CA.¹³ CCUs are exceptionally high-emitting sources of air pollution that causes environmental injustice and premature deaths unnecessarily because air districts have failed to require proven control technology

¹² For example, a cursory review of coker heater BACT determinations found the *State of WA Refinery Coker Heater BACT Determination at Cherry Point:* Ultra Low NOx Burners with Good Combustion Practice and Selective Catalytic Reduction (ULNBs w/GCPs and SCR) meets 0.01 lb/MMBtu, p. 40, May 23, 2017,

https://fortress.wa.gov/ecy/ezshare/AQ/PSD/PSD_PDFS/BP_Blaine_TSD.pdf

This would result in Tesoro's H-100 Heater at a limit of 72 lbs/day (302 MMBtu/hr x 0.01 lb/MMBTU = 3.02 lb/hr x 24 hrs) ¹³ OGJ surveys downloads; PennWell: Tulsa, OK. 2018. 2018 Worldwide Refining Survey, Oil & Gas Journal. Web site: <u>http://www.ogi.com/index/ogi-survey-downloads.html</u> (accessed February 15, 2018.)

that can cut CCU emissions. We ask CARB to stop this injustice and protect our health by mandating CCU $PM_{2.5}$ and SO_x cuts consistent with this proven wet scrubbing technology now.

Catalytic cracking is an exceptionally polluting refining process.

Catalytic cracking units (CCUs) are exceptionally—and inherently—polluting because burning a form of petroleum coke, the dirtiest-burning fuel used in refineries, is intrinsic to their process design. <u>See</u> Diagram.



The CCU process continuously reactivates its process catalyst by burning off coke that forms on the catalyst during the process reaction (diagram right) in a catalyst regenerator vessel (diagram left). Burning the coke supplies most of the heat for the process reaction (diagram bottom). One CCU alone thus burns 650–900 tons of coke daily.¹⁴ Despite the partial capture of the pollution dumped from the regenerator (diagram top left), burning all that coke emits huge amounts of air pollutants.

Without wet scrubbing CCUs can dominate refinery-wide $PM_{2.5}$ emissions. For example, CCUs are the largest source of $PM_{2.5}$ at the Shell Martinez and Chevron Richmond refineries, emitting 127 tons/year (21% of refinery-wide $PM_{2.5}$) at Shell in 2014 and 274 t/y (58 % of refinery-wide $PM_{2.5}$) at Chevron from 2010–2014. These examples are from air district inventory data for years when CCU estimates were based on source tests measuring condensable as well as filterable $PM_{.15}$ Wet scrubbing has proven able to cut CCU emissions dramatically. It can capture substantial portions of filterable $PM_{2.5}$ and sulfur compounds before they emit. That sulfur can otherwise react with ammonia to form condensable ammonium sulfate $PM_{2.5}$ in the CCU emission stack and plume.

CCU PM and SOx emissions are deadly and cause environmental *in* justice.

A massive collection of scientific evidence indicates that $PM_{2.5}$ is the deadliest criteria air pollutant in California, as ARB well knows. In the Bay Area, $PM_{2.5}$ exposures account for more than 90% of

¹⁴ Bay Area Air Quality Management District, various dates. *Emissions Inventory abated and unabated emissions, Chevron Richmond refinery;* District data reported by the City of Richmond, CA in EIR SCH #2011062042, Appendix 4.3–EI. ¹⁵ Source-specific BAAQMD Emission Inventory data reviewed by CBE pursuant to the Public Records Act and vetted with District staff during development of proposed "caps" Rule 12-16.

premature deaths associated with air pollution¹⁶ and kill an estimated 2,000–2,500 people each year.¹⁷ Statewide, and especially in the Los Angeles and San Joaquin basins, the impacts are even worse—and the impacts are worse still in low income communities of color near the refineries.

Disparately severe health risk from 'hot spot' exposures near this exceptionally high-emitting source is obvious—and has long been documented by clear scientific evidence. Peer reviewed research, in which CBE members participated, documented disparately severe outdoor *and* indoor $PM_{2.5}$ exposures linked to refinery emissions in 2009.¹⁸ In 2010, ARB's former environmental justice advisors showed that "refineries account for the largest portion (93%) of the state-wide PM_{10} pollution disparity score, or difference between the emissions burdens of people of color and non-Hispanic whites" among all major GHG emitting facilities under ARB's cap-and-trade scheme.¹⁹ More recently, a prestigious group of independent health experts estimated in 2017 that communities within 2.5 miles of refineries face a disparately severe $PM_{2.5}$ mortality risk from refinery emissions as much as 8–12 *times* that of the Bay Area population as a whole.²⁰ (See Attachment C)

Wet scrubbing is proven technology that should have been required long ago.

A more effective CCU emission capture technology, wet scrubbing, has been demonstrated in practice. Wet scrubbing has been installed to control $PM_{2.5}$ and SO_x emissions from the CCU at the Valero Benicia refinery and has operated there since 2011.²¹ The scrubber controls its CCU, fluid coker, and crude unit furnace emissions.

Air District Emission Inventory data show that wet scrubbing brought combined CCU, fluid coking and crude furnace $PM_{2.5}$ emissions it controls at Benicia down to an average of 0.72 tons/year during 2011–2014.²² That emission rate (0.72 t/y) is 99% less $PM_{2.5}$ than either the Shell Martinez CCU (at 127 t/y) or the Chevron Richmond CCU (at 274 t/y) emit now.²³ CCU SO_x emissions at the Benicia refinery itself were cut by roughly 99%, from 1,158 t/y in 2010, before the scrubber began operating, to an

¹⁶ Understanding Particulate Matter; BAAQMD public report; 2012. <u>See</u> esp. page 26.

¹⁷ <u>See</u> Fairly and Burch, 2016. *Multi-Pollutant Evaluation Method Technical Document 2016 Update;* documentation for the State Implementation Plan for the Bay Area Air District on 19 April 2017. San Francisco Bay Area Air Quality Management District: San Francisco, CA.

¹⁸ Brody, J. G., Morello-Frosch, R., Zota, A., Brown, P., Pérez, C., and Rudel, R. A. Linking Exposure Assessment Science with Policy Objectives for Environmental Justice and Breast Cancer Advocacy: The Northern California Household Exposure Study. *American Journal of Public Health* **2009**;99:S600–S609. DOI: 10.2105/AJPH.2008.149088.

¹⁹ Pastor, M., Morello-Frosch, R., Sadd, J. and Scoggins, M. S. *Minding the Climate Gap: What's at Stake if California's Climate Law isn't Done Right and Right Away;* **2010.** College of Natural Resources, U.C. Berkeley, Department of Environmental Science, Policy and Management, U.C. Berkeley, and Program for Environmental and Regional Equity, University of Southern California.

²⁰ Kuiper, H., Broome, C. V., Brunner, W., Gould, R. M., Heller, J., Jackson, R, J., Kirsch. J. L., Neutra, R., Newman, T. B., Ostro, B., Rudolph, L., Shonkoff, S. BC., and Sutton, P. *Health impacts and implications should be included in the No Project and alternative scenarios and the environmental and regulatory settings section of the EIR for BAAQMD Rule 12-16;* 8 May 2017 health experts report to BAAQMD including discussion, appendices and references.

²¹ The scrubbing was implemented as proposed to offset impacts of a proposed refinery expansion; <u>see</u> Valero's November 2007 Application for Authority to Construct and Permit to Operate Valero Improvement Project Amendments (BAAQMD Application 016937) at page 2-1.

 ²² Source-specific BAAQMD Emission Inventory data reviewed by CBE pursuant to the Public Records Act and vetted with District staff during development of proposed "caps" Rule 12-16.
 ²³ Id.

average of 4.6 t/y from 2011-2014.²⁴ Pre-scrubber PM_{2.5} was measured less well than SO_x at the CCU, but the scrubber cut Benicia CCU PM_{2.5} emissions more than 90% based on available data.²⁵ This huge reduction in deadly pollution should have been required at all refiners' CCUs as soon as it was proven at the Benicia refinery CCU.

Instead, failures to require wet scrubbing make things worse. Refiners dump ammonia into less efficient and undersized electrostatic precipitators (ESPs) on their CCUs to meet PM_{10} limits. That *increases* CCU $PM_{2.5}$ emissions by boosting formation of condensable ammonium sulfate $PM_{2.5}$. Condensable $PM_{2.5}$ is up to 94–95% of the total PM_{10} mass emitted from CCUs with ESPs using ammonia injection, such as the Chevron Richmond CCU.²⁶ And ESPs create a hazard wet scrubbing does not: sparking in startup conditions that ignites explosive gases in pollution incidents like the 2015 Torrance ESP explosion. Allowing refiners to avoid replacing ESPs with wet scrubbers risks another explosion.

ARB action is needed. In the years since it was proven at Benicia, no California air district has required wet scrubbing at all the other refinery CCUs in its jurisdiction. One district has stalled a CCU wet scrubbing measure planned in 2014 despite its own board's direction in 2014²⁷ for maximum feasible refinery emission cuts to be made before 2020. A district's senior staff has testified *against* a local government measure to require PM_{2.5} emission reduction at a refinery CCU.²⁸ Now some district staff say AB 617 is another reason why they plan to further delay this proven emission-cutting measure at the biggest source of the worst air pollutant in low-income communities of color like Richmond.

AB617's Draft Blueprint Appendix C (p. C-5) affirms the priority of reducing PM emissions as one of its top objectives:

To address disproportionate localized air quality impacts, community emissions reduction programs will focus on two objectives:

• Reducing exposure caused by local sources to achieve healthful levels of PM2.5 within the community.

For all of these reasons CBE asks that CARB include a requirement under AB 617 for air districts to implement wet scrubbing or equivalent reductions in $PM_{2.5}$ and SO_x emissions from oil refinery catalytic cracking units forthwith.

ACTION

— Mandate that air districts require wet scrubbing or equivalent $PM_{2.5}$ and SO_x emission cuts from catalytic cracking units (CCUs) at oil refineries forthwith.

²⁴ Id.

²⁵ Id.

²⁶ BAAQMD Chevron Richmond refinery Source Test Reports 10021 and 11076.

²⁷ BAAQMD Resolution 2014–07, adopted unanimously on 15 October 2014.

²⁸ <u>See</u> Hearing Transcript, Richmond City Council hearing in the matter of Chevron's Appeal of the Conditions of Approval of the Chevron Richmond Refinery Modernization Project, PLN11-089, EIR SCH #2011062042; July 2014.

D. Begin a plan for Oil Refinery phasedown by 2050:

- California cannot meet urgent GHG, Smog, and Toxics goals without a phasedown Plan
- Start with a moratorium on refinery expansions,
- Also ban harmful pollution trading (such as PM2.5) within air basins that replaces emissions cuts and expansion limits

California has set goals which by their nature require replacement of fossil fuels with clean renewable energy, including goals for 80% GHG cuts by 2050, and 40% by 2030. California has made progress on the electricity sector due to substantial changes toward clean renewable electricity (about 30% now, and 50% renewables required on the grid by 2030), but not so in other big sectors. California is also required by the Clean Air Act to meet health-based standards for criteria pollutants as expeditiously as practicable, yet decade after decade, fails to do so. Furthermore, AB617 requirements will not be met for addressing disproportionate pollution impacts in communities of color, unless California begins to replace fossil fueled transportation sources, including vehicles, Oil Refinery production, and oil extraction. None of these local or global air pollution reduction goals will be met without clean energy.

While California has publicized reductions in GHG emissions in its most recent inventory, most of these emissions cuts come from renewable electricity gains, while transportation and refining emissions either made no progress or emissions went *up*, since 2009.²⁹ While little progress has been made replacing fossil-fueled transportation and associated oil refining, and oil extraction, they make up more than half of greenhouse gases and an even larger percentage of smog-precursors. The State has instead deferred to local permitting that allows Business-As-Usual expansions of these fossil fuel sources. While important state programs such as Charge Ahead for vehicle electrification exist, only a bit more than 1% is now electric.

California must make much deeper cuts in emissions from 2020 to 2030 and beyond to 2050 compared to outs paeded

beyond to 2050, compared to cuts needed to meet much milder 2020 requirements. (CARB's chart at right)

Note that even if the entire electricity generation sector emissions were eliminated, this would still not be enough to meet 2030 goals. Goals cannot be reached without substantial cuts in transportation and transportation fuel production, especially to reach 80% 2050 goals. (Chart from ARB and originally from E3)



²⁹ California Greenhouse Gas Inventory for 2000-2016 — by Category as Defined in the 2008 Scoping Plan, https://www.arb.ca.gov/cc/inventory/data/tables/ghg_inventory_scopingplan_sum_2000-16.pdf

Rather than *simply starting to plan* a long-term phasedown of transportation fossil fuel production at Oil Refineries, regulators rely on mitigation, pollution trading, and allow new fossil fuel infrastructure that will be in place for decades. Regulators seem not to be able to *imagine* requiring phasing down of Oil Refineries. But California will not be able to meet its long-term goals without doing so.

With communities of color overflowing with asthma and other health harms and most at-risk from impending climate disasters, and with the entire planet at risk, we must at least *begin* a serious plan for oil production and oil refining phase down. AB 617 planning is an appropriate place to include this planning.

We can start by allowing no increase in emissions, and no expansions of fossil fuel production and infrastructure. As highlighted in CEJA's comments³⁰ on the Draft Blueprint, CBE supports the call for:

— Substantial, quantifiable annual reductions and no net increase in emissions, and that these must be additional to existing requirements

For starters, CBE urges requirements setting prohibitions on new fossil fuel infrastructure. Other jurisdictions have begun setting such bans on fossil fuel infrastructure. For example, the City of Portland Oregon's ban on expansion of certain fossil fuel terminals was upheld in court earlier this year:³¹

The Oregon Court of Appeals set the stage Thursday for the City of Portland to reinstate its ban on the expansion of bulk fossil fuel terminals. The Court reversed a decision by the state Land Use Board of Appeals, concluding that the city could ban major expansions of bulk fuel terminals without violating the "dormant" commerce clause of the U.S. Constitution.

We also urgently need prohibitions on trading harmful pollutants such as PM2.5 in air basins (as the Bay Area Air District allows), which allows further concentration of such deadly pollutants in communities of color.

Other Oil Infrastructure Needs Regarding Oil Extraction – 2500 ft Buffer Zone: Also please note that our AB617 comments do not include our regional oil extraction goals and concerns, because we are addressing these within the City and County of Los Angeles process at this time. CBE is working to win a 2500 foot buffer zone in the City and County of LA for all existing and new extraction sites, in concert with our STAND LA (Stand Together Against Neighborhood Drilling) coalition. CBE also supports a statewide requirement at least as stringent as this, and supports CEJA, CRPE, and others who are working toward a statewide buffer requirement.

Please also see CBE's 2017 Scoping Plan comments.³²

https://www.oregonlive.com/portland/index.ssf/2018/01/appeals court upholds portland.html ³² 4/10/2017, CBE Scoping Comments-Just Transition to Zero Carbon and Equity: Ramp up EVs, Stop expanding Power plants, Refineries & Dirty Crudes, Replace Trading with Direct Cuts

³⁰ 7/23/2018, CEJA Comments on Draft Community Air Protection Blueprint, p. 5-6 and elsewhere ³¹ For example, this report Jan. 4, 2018,

II. Many Areas of the State without Oil Refineries such as Southeast LA and East Oakland are severely cumulatively impacted by heavy transportation and smaller stationary sources

CBE also represents heavily impacted community members in Southeast Los Angeles and East Oakland, outside the refinery zones (of Wilmington and Richmond/Rodeo). These areas require customized approaches to clean up transportation and cumulative impacts of local stationary sources, and should be treated as high priority disadvantaged communities pursuant to AB617. Impacts may be somewhat less visible than in refinery towns, but are nevertheless harsh, as shown in Calenviroscreen scores and other demographic data and evidence.

A. Characterizing South East Los Angeles (SELA) impacts

This area is the heart of LA's "Red Zone" in CalEnviroScreen (most disadvantaged due to pollution, low income, & other indicators, with heavy impacts unfairly burdening communities of color,). Huntington Park is 97% latino, with a median age of 29, and median income for workers of $$19,000^{33}$.

Cumulative Impacts include PM2.5, toxic releases, traffic, diesel, ground-level ozone (smog), cleanup sites, hazardous waste, plus educational, and economic disadvantages, and asthma, cardiovascular, and other health disadvantages. Most census tracts (48 out of 66) for CBE SELA members and



partners, including Huntington Park, Maywood, Bell, & Southgate, are in the 91-100% overall most disadvantaged. Total population is 269,281.³⁴ We added markers below relating to four sources of major concern to community members (Exide lead emissions cleanup, which still does not have sufficient funding to clean up all known contaminated residences, Central Metal (closed, but proposing re-opening), Farmer John rendering plant, and the expanding 710 freeway). Also note Alameda Corridor - (transportation impacts).

³³ CalEnviroscreen:

https://oehha.maps.arcgis.com/apps/webappviewer/index.html?id=4560cfbce7c745c299b2d0cbb07044f5 and Census: Social Characteristics 2010 Census and Economic Characteristics 2010 Census

³⁴ CES3results.xlsx



Additional indicators of health & environmental impacts from various sources:

— The SCAQMD MATES study (Multiple Air Toxics Exposure Study)³⁵ found: "... emissions from railroads and goods movement are likely to contribute to the elevated study average UFP [Ultra-Fine Particulate] concentration observed at the Huntington Park site". The MATES IV Air Toxics Risk chart showed Huntington Park had the highest risk per million exposed to mobil source air toxics including diesel PM, benzene, butadiene, and carbonyls.



— The TRI (US Toxic Release Inventory) 2015³⁶ included Huntington Park 90255 (362,476 lbs. including chromium, nickel, nitric acid, zinc, and copper from Los Angeles Galvanizing, Airctraft X-Ray Laboratories, Los Angeles Pump & Valves, and West Coast Foundry); South Gate 90280 (932,653 lbs including PAHs, Chromium, Nickel, Benzene, Cobalt, from Technic-Cast, Tesoro Vinvale Terminal, Brenntag N.A. Inc., Parker Hannifin Corp., and World Oil.); Bell 90201 (22,811 lbs released, including zinc, nickel, glycol ethers, lithium carbonate, and cyanide compounds, from RPM International, Custom Building Products, and Metal Surfaces.), and Maywood 90270 (none listed despite having the Exide facility nearby).

³⁵ MATES IV Final Report Figure 5-2, p. 5-3

³⁶ 2015 TRI data for: <u>Huntington Park</u> 90255, <u>South Gate</u> 90280, <u>Bell</u> 90201, and <u>Maywood</u> 90270

B. Characterizing East Oakland impacts

East Oakland's Hegenberger Corridor (roughly 1.5 miles by 0.8 miles) is a largely black and latino community in the heart of the Elmhurst neighborhood, with a history of industrial pollution, with heavy diesel, asthma, hazardous waste, and housing impacts.³⁷

It is home to the Oakland Coliseum, the 100-year-old American Brass & Iron Foundry, and major transportation and freeways serving the Port of Oakland, the Oakland International Airport, and the Bay Area in general.

After World War II, the flight of the white middle-class and discriminatory practices by financial institutions contributed to disinvestment in East Oakland. The community is burdened by poor schools, inadequate health care and social services, and employment opportunities largely limited to low-paying stressful jobs.³⁸

CBE's East Oakland Particulate Matter 2.5, Community-based Air Monitoring Research Report found:³⁹

East Oakland has a childhood asthma hospitalization rate 150 to 200% higher than Alameda County as a whole, and life expectancy in East Oakland for the years 2000 to 2003 was 72.0 years, which was 6.9 years lower than Alameda County. Air pollution from busy roadways, which is made up of many compounds and chemicals, including particulate matter, are linked both to increased childhood asthma, impaired lung function, allergies,



East Oakland Diesel Truck Survey Report, CBE, 2010, http://www.cbecal.org/resources/our-research/#cumulative



CalEnviroScreen 2018 East Oakland shows 95-100th percentile worst scores for disproportionate impacts, including the 92th highest percentile for Diesel impacts

³⁷ Oakland, CA, 94621 CalEnviroScreen: https://oehha.ca.gov/calenviroscreen/maps-data

³⁸ Cumulative Impacts in East Oakland, CBE, 2008, <u>http://www.cbecal.org/resources/our-research/#cumulative</u>

³⁹ CBE, Sept. 2010, <u>http://www.cbecal.org/wp-content/uploads/2013/01/East-Oakland-PM-Monitoring-Report-FINAL-2010.pdf</u>

heart disease and mortality. East Oakland residents have been shown to be heavily impacted by industrial stationary and mobile sources of air pollution located near homes, schools, recreation centers, and churches.⁴⁰

And in the recent years an industrial-sized crematorium was permitted in already heavilyimpacted East Oakland, without sufficient public review and protections. Human cremation is linked to mercury, dioxin, and other harmful emissions. Last year, Air District officials were reported in an East Bay Express article, as pointing to AB617 to solve cumulative impacts from this and other East Oakland sources.⁴¹

C. What does Southeast LA and East Oakland need, to reduce all these impacts?

Like other communities, South East LA, and East Oakland need:

- -- Clean and equitable Energy (access and development of Zero Emission transportation and infrastructure (such as charging), public transit, a solar grid, etc.);
- -- Accountability and Funding for toxic site cleanup (e.g. Exide in SELA)
- -- Better permitting, enforcement, no rubber-stamping expansions, and real evaluation of alternatives by regulators (e.g. Industrial Crematorium in East Oakland, 710 Freeway expansion in SELA)
- -- Stop permitting that continues to increase Cumulative Impacts of toxic sources in these communiites
- -- Just Transition to a green, equitable economy

III. Clean Transportation needs are a statewide need in all EJ communities

In addition to large industrial sources, pollution from transportation of people and goods are a major source of pollution in most low-income communities of color. Much more can be said on developing and mandating Zero Emission Transportation measures, which are key to meeting state goals, as described earlier. In summary:

 ARB must use the mandate of AB 617 for setting aggressive targets in transportation electrification and enhancing clean mobility. We applaud ARB's work in proposing Innovative Clean Transit.

⁴⁰ Addition details on East Oakland asthma, 94621: Asthma Emergency Department (ED) visits is > twice Alameda County's, & 2nd highest in county. Asthma ED visits is 1,257 per 100,000 residents compared to Alameda County rate of 553/100,000. Asthma ED visit rate for children is 2,350/100,000 (0-4 year-olds) compared to county 1,301/100,000. Asthma inpatient hospitalization rate is 364/100,000 residents (2.5 times the county rate of 147/100,000. The childhood asthma hospitalization rate is 1048 / 100,000 (over twice the county rate of 477 / 100,000). (Source: ACPHD CAPE Unit with 2008-2010 data from California Office of Statewide Health Planning and Development (OSHPD).)

⁴¹ As described in East Bay Express Article, November 15, 2017, <u>https://www.eastbayexpress.com/oakland/the-return-of-the-crematorium/Content?oid=10841726</u>

- ARB needs to replicate similar and technology forcing programs in other transportation categories related to movement of goods.
- Additionally, ARB needs to issue clear guidance documents for agencies such as Caltrans that undertake expansion of freeways such as I-710. For years community leaders, public health experts and environmental advocates have asked Caltrans to create a zero emission lane as part of I-710 expansion project. CARB has the obligation to show how this massive infrastructure project could advance the zero emission programs in California and help California and the South Coast region achieve some of its climate and air quality targets.
- Furthermore, ARB needs to provide similar guidance documents for the Ports of LA, Long Beach and Oakland. If Districts fail to create emission reduction regulation, CARB needs to fulfill its responsibilities in compliance with the intent of AB 617.
- On access to clean mobility, EJ organizations including CBE have worked extensively with CARB under the SB 350 study to identify the obstacles that DACs face. Many of these programs require a more robust commitment on the part of CARB and more dedicated funding. Creating meaningful incentives, programs and projects that are centered around the needs of DACs and responsive to those needs, are key in reducing pollution and enhancing access from mobile sources in low income communities of color.

IV. Addressing Cumulatively large impacts from Smaller Stationary Sources in EJ communities

Any serious attempt at reducing emissions in EJ communities must look at the cumulative impacts of a communities under consideration for priority action. It is clear that multiple sources of pollution impacting a community, cannot be regulated in the same manner as one source impacting the community, if each facility creates similar exposure. The obvious but unaddressed question EJ advocates have asked for years is: why each of multiple sources of pollution in DACs are treated without regard for other sources?

CARB and Air Districts have so for refused to create regulation from the point of view of impacted and vulnerable community members, and have designed programs from the perspective of industry. The intent of 617 has been to address this great flaw in the regulatory system. We need ARB and Air Districts to stop pointing fingers at each other, and get to work in creating a serious cumulative impacts regulatory regime in permitting, rule-making and enforcement.

V. Communities need options for recourse through the State, to correct regional agency errors and bias

AB617 requires addressing cumulative impacts, and AB32 requires ARB to design its programs to *prevent* any increase in emissions of toxic air contaminants or criteria pollutants.⁴² It also requires it to consider the overall societal benefits of reducing other air pollutants and benefits to the environment and public health.⁴³ California has not fulfilled these requirements, but does have options to do so.

⁴² H&S Code § 38570(b)(2).

⁴³ H&S Code § 38562(b)(6).

Meantime, communities throughout the state have had to fight their local Air Districts (in the South Coast District, in the Bay Area, in the Central Valley, and more), to receive a fair shake about obvious errors in emissions inventories, permitting, etc. An important part of fairness in addressing cumulative impacts, is recourse through the state to address bias inside regional agencies such as the Air Districts.

This problem has been recognized widely. For example, the SCAQMD was found a captive agency of the Oil Industry, as described in the LA Times report below describes the 2016 furor over this agency's favor of oil refiners, recognized by CARB, Senator De Leon, and others:⁴⁴

How the refineries came to own our air pollution regulators

Refineries account for 60% of nitrogen oxide emissions in the Southland. Above, the Phillips 66 refinery looms over a Wilmington neighborhood.... "Regulatory capture" is the term for what happens when an agency overseeing an industry begins to see things the industry's way. Consider the most recent illustration: the South Coast Air Quality Management District board and the refinery industry.

The refineries are among the worst-polluting facilities in the Southland, which has the dirtiest air in the United States. But that didn't stop the board from rejecting on Dec. 4 a clean-air plan worked out by its staff over 37 months and substituting a plan made public that very morning, developed by the Western States Petroleum Assn., a refinery lobbying group.

Given a chance to reconsider its action at a meeting earlier this month, the board voted to stand pat. At the same meeting it fired its executive officer, Barry Wallerstein, who had supported the staff proposal.

These actions have landed <u>the AQMD board</u> in a world of hurt. The board, which is composed of 13 local politicians and business leaders representing Los Angeles, Orange, San Bernardino and Riverside counties, has been upbraided by the California Air Resources Board's executive officer, Richard Corey. He says the clean-air program would be so lax it might well <u>violate state and federal regulations</u>.

State Senate President Pro Tem Kevin de León (D-Los Angeles) has launched an effort to remake the board so its pollution-tolerant majority can be outvoted. On Wednesday, the Sierra Club and three other environmental organizations <u>sued in state court</u> to force the board to reverse its vote. ... (Full article is attached)

ACTION: We urge CARB to set up a process whereby communities can petition CARB to weigh in and correct errors and bias in permitting, regulation, etc. (For example, see earlier, with the Tesoro H-100 coker heater example.)

⁴⁴ 3/11/16, full article attached as Attachment A

Much more could be said about the breadth and depth of toxic sources impacting our communities, but we urge CARB to begin with the recommendations herein. Thank you for your consideration.

Sincerely;

Julia May, Senior Scientist, CBE, Southern California (Communities for a Better Environment)

Greg Karras, Senior Scientist, CBE, Northern California

Bahram Fazeli, Research and Policy Director, CBE

-- Attachments A, B included below, Attachment C as separate attachment

ATTACHMENT A

How the refineries came to own our air pollution regulators, by Michael Hiltzik, 3/11/16



Refineries account for 60% of nitrogen oxide emissions in the Southland. Above, the Phillips 66 refinery looms over a Wilmington neighborhood. (Rick Loomis / Los Angeles Times)

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made public that very morning, developed by the Western States Petroleum Assn., a refinery lobbying group.

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In response, the board majority and its industry overlords have offered some of the most fatuous defenses heard from a public body in years.

Board member Mike Antonovich, a Los Angeles County supervisor, informed me in an emailed statement that the AQMD board "is not simply a rubber stamp for District staff." That's true, but it doesn't explain why it should be a rubber stamp for the refinery industry.

Orange County Supervisor Shawn Nelson, who sponsored the initial Dec. 4 motion to accept the industry proposal, argued that the plan does reduce emissions, just not as much as the staff proposal. He observed that the AQMD has no control over cars and trucks, the major source of air pollution. "If we put every company we regulate out of business tomorrow, we still wouldn't meet the clean air mandate," he said. That's hardly an excuse for falling short on the sources it does regulate, which are stationary facilities.

As for the refinery group, its president, Catherine Reheis-Boyd, claimed in an email that the plan adopted by the board amounted to "90% of what was proposed by staff" and that the rejected proposal would have cost the industry more than \$1 billion. Both figures are exaggerations, and even on the surface not especially relevant to the task of reducing emissions to levels that save lives and reduce the cost of dirty air to society.

Nor are those costs evenly distributed. Wilmington and West Long Beach, which are bordered by refineries and the ports of Los Angeles and Long Beach, have some of the highest rates of childhood asthma in the region or state. <u>Some 15% of Long Beach children suffer</u> from the condition, compared with 8% in the county overall. Nitrogen oxides, an asthma trigger, is among the pollutants at issue in the clean air plan.

Refineries, which account for 60% of nitrogen oxide emissions in the Southland, have managed to game air-quality standards.

The debate at the AQMD concerns the RECLAIM program (for "Regional Clean Air Incentive Market,"), a cap-and-trade system the AQMD created in 1993. Instead of directly ordering every pollution-emitter to install clean-air equipment,

RECLAIM established a market in pollution credits; a power plant, cement plant or refinery that met or exceeded its cleanair goals could defray its costs by selling its excess pollution allowances to facilities that hadn't met their goal, and could use the purchased credits to buy time. RECLAIM wasn't supposed to give polluters a break on meeting clean-air standards, just more flexibility in how they did so.

Things haven't worked out that way. "What we've seen over time is that RECLAIM has deep, deep flaws," says Evan Gillespie of the Sierra Club. The biggest flaw is that the market is flooded with excess credits. They're so cheap that it's much more economical for a polluter to buy credits than to install clean-air equipment. That has slowed the pace of environmental improvement.

The refineries are the principal offenders. Electrical generating plants, which also were big players in RECLAIM, have largely been forced by their own regulators to install the necessary equipment. California Portland Cement's Colton plant, which had been the largest single source of nitrogen oxides, shut down in 2013. That could have had a big impact on the air, but its pollution credits remained in the market, allowing other polluters to use them to avoid cutting their own emissions.

The <u>AQMD staff calculated in 2005</u> that refineries would have to install 51 catalytic reduction units by 2011 to meet cleanair standards. Thanks to RECLAIM, however, only four were installed — and those as a result of orders from the federal Environmental Protection Agency. Avoiding the other 47 installations saved the refinery industry \$205 million, the AQMD staff estimated.

Under RECLAIM, industries were expected to reduce their nitrogen oxide emissions by 7.7 tons per day in 2007-11. By 2012, the reduction had come to only 4 tons — mostly because of industry shutdowns, "not measures taken to reduce actual emissions," the staff reported.

To bring the available credits more in line with emissions, the AQMD staff proposed at the December meeting to "shave" the total credits by 14 tons per day through 2022. The hope is that the price of credits would rise, making them more expensive than installing clean-air equipment.

The staff also recommended front-loading the shave, starting with 4 tons per day this year, followed by 2 tons more each year from 2018 through 2022. The staff chose this schedule because the 2016 reduction could be achieved simply by cutting excess credits out of the market. No installation of equipment would be needed — another pro-industry step. Most important, the staff proposed that credits attached to shutdown facilities be extinguished.

But the refinery group wouldn't have it. The Western States Petroleum Assn. proposed instead a shave of only 12 tons per day, back-loaded so that the most substantial reductions wouldn't kick in until after 2020. The industry also persuaded the AQMD board to refer the elimination of credits from closed facilities to a "working group," which as everyone knows is where such proposals go to die.

Let's be clear: Only one plan is based on analysis of the past and the potential to meet future clean-air mandates. The other plan achieves nothing but relief for the industry, at the expense of everyone in the Los Angeles Basin.

Supervisor Nelson says the board's decision has been misrepresented as a sop to the refineries. "This narrative that we're giving 'olly-olly-oxen-free' to polluters is just fiction," he told me.

But the proof is in the results. RECLAIM has failed, and the AQMD should be replaced with a body that serves the public interest, not just one industry's interest.

ATTACHMENT B



neighborhoods! Drilling in residential are at risk from toxic Oil Wilmington neighborhoods

- extraction & production, right next to Neighborhood Drilling). We have been fighting for protections for communities burdened by oil CBE is part of the STAND LA coalition (Stand Together Against impacted community in the region homes. Wilmington is just one
- maintenance, acidizing, and other Last year we won stronger notification measures for oil drilling operations that are happening
- notification. For example, the South Coast Air Quality Management District (AQMD) strengthened regulations 1148.1 and 1148.2 to add throughout the LA region. standards, and increase public
- These rules are still very weak, and pollution controls, monitoring, etc, are primitive compared to other industries
- Fluoride, and an astonishingly long chemicals such as Hydrogen (or waterways), including cancerthese sites, right next to houses Wilmington CA. See the back for dozens of toxic chemicals used at We summarized data reported for causing or extremely hazardous

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are volatile. This toxic chemical use should be eliminated. We also oppose contaminating underground areas with toxics, and transporting toxics through neighborhoods. because of new regulations requiring public reporting. Previously, companies did not even have to report. We still don't know how much is emitted to the air, but many chemicals Drilling uses many hazardous chemicals including those below: We only found out these were used in Wilmington

- Warren E&P: 44 Events, 6/8/13-4/22/16, (Most pre 9/15), Well Drilling, Completion, & Rework; Maintenance Acidizing for some events, Gravel Packing some events. Chemicals Reported: 2-Hydroxy-1,2,3-Propanetricarboxylic Acid, 2-Propyn-1-OL, Ethylbenezene, Ethyl Octynol, Glycolic Acid, Hydrogen Chloride Polyester, Polyoxyalkylenes, Polysaccharide, Powervis, Proprietary Blend, Quaternary Ammonium Compound (1), (2), (3), Salt Compound, Salt of Organic Acid, Sulfur Compound (1), (2), Oxyalkylated Alkylphenol, Oxyalkylated Polyamine, Phosphonate Salt, Polyacrylate, Polycyclic Aromatic Hydrocarbon, Polycyclic Compound Fatty Acid Esters, Halides, Inorganic Compound, Inorganic Potassium Compound / Alkali Hydroxide, Inorganic Salt of an Acid, Ionic Compound, Ionic Surfactants, Aromatic Amine - TOFA Salt, Aromatic Amines, Aromatic Compound, Aromatic Compound (1), (2), (3), (4), (5), and (6), Non-hazardous ingredients, Ester, Fatty Acid, "Trade Secrets" Chemicals Family Name: Aldehyde, Aliphatic Alcohol, Aliphatic Alcohol, (1), (2), (3), Alkyl Benzenesulfonic Acid, Alkylaryl Sulfonates, Alkyne Alcohol Hydroxyacetic Acid, Isoquinoline, Methanol, Phosphoric Acid, Quinaldine, Solvent Naphtha (Petroleum) – Heavy Aromatic, Terpene Hydrocarbon, Toluene, Xylene. Compound, Thrutrol, Vegetable and Polymer Fibers, Viscosifier, Wood Chemicals Lubricant, Mixture, Modified Sulfonate, Modified Thiourea Polymer, Naphthalene Sulfonate-Formaldehyde Condensate, Nonylphenol Ethoxylate, Olefin, Organosulfur
- Tidelands: 34 Events, 9/9/13-5/26/16, (Most pre 9/15), Well Drilling, Completion, Maintenance, & Rework; Acidizing & Maintenance Acidizing for some events Polysaccharide, Salt Compound, Salt of Inorganic Acid, Salt of Organic Acid, Sulfur Compound, Unsaturated Alcohol, Viscosifier, Wood Chemicals Oxyalkylated Alkylphenol, Oxyalkylated Alkylphenol Resin, Oxyalkylated Amin Quat, Petroleum Resins, Polycyclic Compound, Polyglycol Ester, Polyoxylalkylenes Inorganic Solvent, Ionic Surfactants, Ketone, Linear Alkylbenzene, Lubricant, Mixture, Modified Starch, Modified Sulfonate, Modified Thiourea Polymer Limonene, Diol Compound, Ester, Fatty Acids, Fatty Acids Ester, Halides-Inorganic Salt, Inorganic Compound, Inorganic Potassium Compound/Alkali Hydroxide. Amines, Aromatic Compound, Aromatic Hydrocarbons, Aromatic Petroleum Distillates, Cinnamic Inhibitor, Copolymer, Crosslinked Polyol Ester, Detergent, D-Sulfonate, Alkylaryl Sulfonates, Amide Surfactant Phosphate Acid Salt, Amide Surfactant Phosphate Ester Salt, Amide Surfactant, Aromatic Amine TOFA Salt, Aromatic Polymer, Toluene, Welan Gum, Wood Dust-Soft Wood, Xanthan Gum, Xylene. "Trade Secrets" Chemicals Family Name: Acetic Acid, Aliphatic Alcohol, Alkylaryl Amine Sodium Carbonate, Sodium Chloride, Sodium Gluconate, Sodium Lignosulfate, Stearic Acid, Sulfonate, Synthetic Red Iron Oxide, Terpene Hydrocarbon, Thiourea Polymer, Portland Cement, Potassium Chloride, Propargyl Alcohol, Proprietary, Quinoline, Quinaldine, Saponite, Silica, Silica Crystalline Quartz, Sodium Bicarbonate, Fiber, Naphthalene, Nitrilotriacetic Acid, Oxyalkylated Amine Quat, Oxyalkylated Alkylphenol, Oxyalkylated Alkylphenol Resin, Petroleum Naphtha, Petroleum Resins, Fluoride, Isoquinoline, Light Aromatic Naphtha, Magnesium, Magnesium Oxide, Methanol, Methyl Amyl Alcohol, Methyl Ester of Sulfonated Tannin, Mica, Mineral Ethylene Glycol Monobutyl Ether, Ethyl Octynol, Ferrous Sulfate, Formaldehyde, Glutaral, Glyoxal, Gypsum, Heavy Aromatic Naphtha, Hydrochloric Acid, Hydrogen Acid, Citrus Terpenes, Crystalline Silica, Cumene, Cylohexanamine-Sulfate (1:1), Diisoproylnaphthalene, Disodium Metasilicate, Erythorbic Acid, Ethylbenzene, Sulfate, Bentonite, Calcium Bromide, Calcium Carbonate, Calcium Chloride, Calcium Oxide, Carbon, Carboxy methylcellulose Sodium Salt, Cellophane, Cellulose, Citric Mixture, Aluminum, Aluminum Oxide, Ammonium Chloride, Amorophous Silica, Amorophous Silica Fume, Anionic Acylamide Copolymer, Aromatic Barite, Barium Gravel Packing some events Chemicals Reported: 1,2,4-Trimethylbenzene, Acetic Acid Ethyl Ester-Polymer with Ethenol, Acetone, Acrylic Polymer, Alkylbenzene Naphthalenesulfonate-Formaldehyde Condensate – Sodium Salt, Non-hazardous ingredients, Nonylphenol Ethoxylate, Olefin, Organophosphonic Acid Salt
- E&B Natural Resources, 4 Events, 5/21/14 7/28/15, Well Rework; Maintenance Acidizing for some events, Gravel Packing some events Chloride, Potassium Oxide, Propyn-1-ol, Quartz (SIO2), Quinaldine, Sodium Chloride, Solvent Naphtha (Petroleum)- Heavy Arom., Terpene Hydrocarbon, Toluene, Citric Acid, Ethylbenzene, Ethyl Octynol, Hydochloric Acid, Hydrogen Fluoride (Hydrofluoric Acid), Iron Oxide (FE2O3), Isoquinoline, Methanol, Pine Oil, Potassium Chemicals Reported: 2-Butoxy Ethanol, 2-Hydroxy-1,2,3-Propanetricarboxylic Acid, 2-Propyn-1-ol, Alumina, Ammonium Chloride ((NH4)CL), Calcium Oxide, (CAO) Aromatic Amine TOFA Salt, Aromatic Amines, Ionic Surfactants, Nonylphenol Ethoxylate. Xylene "Trade Secrets" Chemicals Family Name: Amide Surfactant Phosphate Acid Salt, Amide Surfactant Phosphate Ester Salt, Amide Surfactant

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California Council for Environmental and Economic Balance

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July 23, 2018

Karen Magliano Director, Office of Community Air Protection Air Resources Board Submitted electronically to <u>http://www.arb.ca.gov/lispub/comm/bclist.php</u>

RE: ARB AB 617 Draft Community Air Protection Blueprint

Dear Director Magliano,

On behalf of the members of the California Council for Environmental and Economic Balance (CCEEB), we appreciate this opportunity to comment on the Air Resources Board (ARB) Draft Community Air Protection Blueprint ("Draft Blueprint") and implementation of AB 617. The historic passage of AB 617, which CCEEB supported, provides the state and California communities with the tools and resources needed to make meaningful reductions in emissions and exposures of localized air pollutants, particularly toxic air contaminants (TACs or "air toxics") and particulate matter (PM). However, successful implementation will depend on close coordination among State, regional, and local partners, transparent data and technical assessments, strong and neutral facilitation of public participation and engagement, and effective allocation of public and private funding. The combined programs being implemented under AB 617 will amount to hundreds of millions, if not billions, of dollars in investments in overly burdened communities, creating the largest air quality effort of this generation. CCEEB recognizes the many challenges involved in developing AB 617 programs, and offers these comments in support of the goal of AB 617 "to reduce emissions of toxic air contaminants and criteria pollutants in communities affected by a high cumulative exposure burden." See Health & Safety Code (H&SC) Section 44391.2 (b).

What follows are our key comments on the Draft Blueprint:

1. ARB and the air districts must first focus on meeting the statutory requirements of AB 617 before consideration of expanding to new program areas. This helps ensure that the significant resources to be expended on implementing AB 617 achieve real and meaningful emission and exposure reductions in communities that have been identified as experiencing high cumulative exposure burdens, as well as other legislatively mandated goals.

- 2. AB 617 does not create new or additional jurisdictional authority for ARB or the air districts. As such, program success will depend on the ability of agencies to forge effective partnerships with local and regional entities and to develop new tools, incentives, and measures that augment and complement existing regulations.
- 3. AB 617 clearly defines roles and authorities to carry out the programs, but is also meant to be inclusive; "community" is defined so as to encompass all who work, live, and reside in a designated neighborhood or area. Businesses and "affected sources" should be treated as equal and valued partners, along with other stakeholders, rather than as targets or problems to be solved or eliminated.
- 4. Community Steering Committees will play a critical consultation role in the development of plans and actions by ARB and the air districts but are not in and of themselves decision-making or oversight bodies; rather, these roles are filled by the appropriate agency boards.
- 5. Emission reduction targets for designated communities must be based on feasible and cost effective measures, taking into account the relative contribution of different sources to ambient conditions. CCEEB agrees with the proposed five-year planning horizon, as it strikes a balance between breadth (i.e., how many communities can be prioritized for action) and depth (i.e., how much time and resources can be expended in any one community). However, it should be understood that the five-year planning horizon is just a guideline; actual engagement with the community to achieve emission reduction targets may take more or less time.
- 6. More detail is needed about technical guidance and protocols that form the basis of the Draft Blueprint. While we understand from staff that these documents will eventually be available as part of the Online Resource Center, CCEEB believes this additional background is needed to understand how the Draft Blueprint will be implemented. We strongly urge that sufficient time be given for public review and comment on technical guidance documents and protocols before approving the final Blueprint.
- 7. Alignment of resources across agencies is needed. ARB should reduce duplication of effort. This particularly applies to community air monitoring, where multiple efforts at ARB, the air districts, community-based organizations, public health departments, and researchers may be happening concurrently, potentially creating inconsistency and confusion.
- 8. The Draft Environmental Analysis (EA) in Appendix G does not conform to the Draft Blueprint, and omits analysis of foreseeable impacts from implementation of the Blueprint. We recommend that staff revise the EA to address reasonably foreseeable impacts, or modify the Draft Blueprint to allow for greater flexibility in how air districts will implement emission reduction programs.

What follows is a more detailed discussion of these key points. We have also attached an Appendix A, which offers specific suggestions or questions on the Draft Blueprint and ARB appendices, Appendix B, a resubmittal of our letter on the proposed concepts for an emissions reporting regulation at ARB (dated June 29, 2018), and Appendix C, a resubmittal of our letter regarding the ARB AB 617 Concept Paper (dated March 29, 2018).

Focus on Statutory Requirements in Initial Years

AB 617 mandates several comprehensive program initiatives at ARB and the air districts, laying out aggressive timelines for action. CCEEB believes the agencies should focus on achieving legislative requirements before considering additional program elements that go beyond the statute. Expanding the scope of work in these initial years dilutes needed resources to implement AB 617 programs effectively, and detracts from development of core programs intended to expeditiously reduce community emissions and exposures. CCEEB strongly recommends that any additional action be considered only after the core program elements have been successfully implemented. It should be realized that adding elements that go beyond AB 617 could create financial burdens in programs that already struggle to generate the revenue necessary to effectively move forward. What follows are a few specific examples.

AB 617 Statutory Requirements	Activities in Blueprint beyond AB 617
Air monitoring in priority communities, deployed by the air districts H&SC § 42705.5 (c)	Air monitoring operated by community-based organizations and monitoring in communities not yet selected and approved for inclusion in AB 617 programs
ARB assesses air district implementation of AB 2588 risk reduction audits and emission/risk reduction plans H&SC 44391.2 (b)(3)	Permit audits ¹ , whether programmatic or for an individual facility
ARB develops a Clearinghouse for BARCT, BACT, and related technologies to control air toxics (no time specified) H&SC § 40920.8 (a)	Including advanced technologies that do not meet BARCT/BACT definitions or do not significantly reduce air toxics (i.e. technology transfers)
ARB develops a uniform statewide emissions reporting system for major stationary sources, as defined in statute H&SC § 39607.1 (a)(2)	Requiring "clustered" sources and "all permitted" sources in priority communities to report annual emissions
ARB and air districts reduce emissions in communities based on monitoring or other data H&SC § 44391.2 (c)(5)	Improve health outcomes, such as rates of disease or emergency room visits, based on the tracking of health data

¹ CCEEB asks that staff clarify what is meant by "permit audits" as we are unfamiliar with this term. We also ask staff to explain what criteria would be used to audit a permit or permit program, for what purpose, and with what intended outcome.

Identification of High Cumulative Exposure Burden

In terms of identifying communities, AB 617 specifies that ARB must designate communities affected by a high cumulative exposure burden by October 1, 2018, with new communities identified every year thereafter. *See H&SC § 44391.2 (b).* CCEEB reiterates here our comment from March 29, 2018, in which we emphasize the primacy of risk-based air pollution data that indicates the level of exposure and relative burden. *See discussion starting page four of Appendix C.* We recommend that staff expand on the six factors described on page 11 of the Draft Blueprint, as the proposed assessment criteria appear incomplete. Important to achieving the intent of AB 617 is a demonstration that a community is burdened "above and beyond" the exposure levels experienced by other communities within the air basins. Additionally, the assessment must describe if existing programs are underway to address the measured impacts, i.e., a "gap" analysis. Such an assessment was partially described in staff's previous Concept Paper, and should be carried forward and expanded upon in the Draft Blueprint.

Clearly Articulate Agency Authorities and Roles

Importantly, AB 617 does not create new sources of jurisdictional authority for either ARB or the air districts. Early in the process, ARB should develop a matrix explaining the various authorities and responsibilities of regulatory agencies, local lead agencies, planning departments, and public health departments. ARB could also include resources available to communities through different public entities, such as grant funding or technical assistance. This information sets the stage for community discussions on potential emission reduction measures.

Partnership with Local Government and Local Lead Agencies

CCEEB readily acknowledges that issues such as legacy land use decisions largely drive cumulative and disproportionate impacts in disadvantaged communities. To address these concerns, ARB and the air districts must set realistic expectations and clearly define authorities, leverage the advisory function of the agencies by providing enhanced air emissions data to communities and local decision makers, and forge effective partnerships where significant emission reduction opportunities exist at sources beyond ARB or air district authority. However, ARB must allow local lead agencies to *lead*, taking care to partner with local government while not interfering with local land use and development authority, as granted to them by the State. *See Government Code Sections 65000-66037.* Some of the steps described in Appendix C, page 23, appear potentially disruptive, e.g., asking air districts to "direct meetings with staff or elected officials," "direct meetings with facility owners and/or equipment operators," and, "formation of an integrated permitting group with land use permitting agencies to review proposed projects." If done out of step with local partners, these actions could become political, making the air districts appear as if they were lobbying for specific siting outcomes, coercing project proponents, or undermining the authority of local lead agencies.

When working in sync with local decision makers and other agencies, ARB and the air districts can *support* effective measures on land use and transportation. For example, partnerships with local government can result in targeted receptor-side actions that leverage air district data, such as adoption of local building ordinances to place new affordable housing, schools, or park away from criteria and toxic air pollutant sources.

Air District Authority over Permitted Sources Is Unchanged

In terms of air district permitting, CCEEB must raise concerns about ambiguous or unclear language in the Draft Blueprint and caution against attempts to use New Source Review (NSR) or Title V permitting as a surrogate for local land use decisions on siting. For example, under "Implementation Strategies" listed on page 15, it is unclear what a "permitting audit" is, which agency would conduct such an audit, for what purpose, and using what criteria. Federal and State law govern how permits are issued or modified and cannot be usurped by AB 617. Similarly, Appendix C, page 18 states that the emissions reduction program must evaluate "[a]ctivity limits and other operational requirements," but does not clarify who would conduct that evaluation, for what purpose, or what legal authority an air district has under AB 617 to restrict activity at permitted sources.

As discussed, NSR and Title V permits are regulated by the federal Clean Air Act under a strict legal framework. Unless a permit is modified or amended at the request of the permittee – usually in an attempt to modernize equipment – these permits cannot be retroactively amended or altered. Furthermore, emissions associated with permitted sources in non-attainment areas are mitigated at a ratio greater than one-to-one, and equipment operators must stay below permitted levels or risk non-compliance with their permit or regulatory requirements. AB 617 does nothing to change this legal framework, nor does it expand air district authority over permitted sources.

Air District Authority over BARCT Determinations is Unchanged

In terms of Best Available Retrofit Control Technology (BARCT), CCEEB emphasizes here the authority of the air districts to make BARCT determinations. Additionally, and as mandated by H&SC § 40920.6, any rule or regulation for BARCT must satisfy specific requirements defined in the section. These requirements include, among other things, identification of one or more control options, cost-effectiveness and incremental cost-effectiveness of proposed control strategies. Findings must then be presented at a public hearing where the findings of these requirements are considered as part of the adoption of the proposed control option.

H&SC § 40406 defines BARCT as "an emission limitation that is based on the maximum degree of reduction achievable, taking into account environmental, energy, and economic impacts by each class or category of source." While technology can be identified through other recent BARCT determinations, as compiled in ARB's Clearinghouse, each responsible air district must still evaluate specific environmental, energy, and economic impacts for each class or category of sources affected by its BARCT requirements. We reiterate here our past concerns regarding the Clearinghouse moving beyond the scope of AB 617, and recommend that statutory authorities and requirements for BARCT be explicitly incorporated into the Draft Blueprint. See Appendix C, starting page 11.

Develop Inclusive and Transparent Public Process and Partnerships

AB 617 requires air districts to consult with "the state board, individuals, community-based organizations, affected sources, and local government bodies in the affected community" before adopting a community emission reduction program. *See H&SC § 44391.2 (c)(2).* CCEEB presumes that the convening of Community Steering Committees (CSCs), as described in the Draft Blueprint, is meant to satisfy this requirement. As such, CCEEB asks that ARB make the inclusive nature of the CSCs clear throughout the Draft Blueprint. Accordingly, we have provided suggested language in the appendix where the Blueprint seems ambiguous. We believe this is important so as to clearly set expectations about the makeup of the CSCs and to counter public comments from some individuals and groups calling for the outright exclusion of the regulated community.

CCEEB understands the historic mistrust between community-based environmental advocates and the regulated community. However, besides the legal requirements mandating an inclusive consultation process, we believe that AB 617 marks a turning point for the state and that the success of AB 617 will largely depend on the ability of all parties to foster effective partnerships. To this end, CCEEB suggests that ARB and the air district recruit experienced, independent and neutral facilitators and communication experts who can help guide stakeholder discussions and foster a safe environment for sharing perspectives and information. Ideally, these experts could help develop tools, training, and guidance that can be used as a model for later-year communities.

Finally, we appreciate the mention in Appendix C, page 8, that the CSCs must comply with Bagley-Keene Act and Brown Act requirements. CCEEB believes that open meetings and transparent public engagement help support trust and credibility in the process.

Community Steering Committees Play a Critical Consultation Role

CCEEB appreciates the "bottom-up" approach outlined in the Draft Blueprint, which relies on the input and expertise of CSCs to guide development of community air monitoring and emission reduction plans. However, we again remind ARB that AB 617 envisioned a "consultation" role for communities and others, and recommend that expectations be clearly articulated early in the process. AB 617 places decision-making authority solely with the boards of the air districts and the ARB. The CSCs are an important part of that decision-making process, but the boards are the ultimate arbiters. This is good governance consistent with California statute that defines the roles and quasi-legislative decision-making authority of the boards. Agency boards are appointed in statutorily defined public processes, and operate according to statutorily mandated procedures. These procedures are a necessary part of the regulatory process, which includes AB 617 decision-making. In the appendix to our comments, we highlight language in the Draft Blueprint that is ambiguous about the role of the CSCs and decision-making responsibilities of agency boards.

Develop Targets Based on Feasible and Cost-Effective Measures

AB 617 makes clear that emission reduction measures must be cost effective. *See H&SC §* 44391.2 (c)(2). Additionally, the Health & Safety Code requires that regulatory agencies consider a number of factors in any rulemaking, all of which apply to regulatory actions under AB 617. These statutory requirements should be clearly articulated in the Blueprint and as background to the CSCs and public stakeholders, so as to inform community proposals and public input into emission reduction plans.

Setting quantitative emission reduction targets is an important aspect of AB 617, and one area that warrants greater public discourse. CCEEB believes that program goals and targets must be developed using a bottom-up approach that is based on community assessments and inventories, source apportionment, and evaluation of existing rules and regulations for sources shown to be contributing to ambient conditions. In terms of the latter, ARB's concept paper (released February 7, 2018) included a useful outline of steps air districts should take to evaluate the adequacy of existing regulations (see page 18). CCEEB recommends that these evaluation steps be incorporated into the Draft Blueprint and possibly expanded in the Online Resource Center as part of the discussion of the technical assessment (see page C-11).

Quantitative emission reduction targets should rightfully be the cornerstone of program tracking for AB 617. However, we note that AB 617 is not intended to bypass the scientific review inherent to all health-based air standards, nor does it mandate an absolute elimination of health risks from air pollution. Thus, ARB and the air districts must make an evidence-based case for any target they adopt. CCEEB strongly disagrees with the discussion in Appendix C, page 13, which suggests targets should go below state or federal PM2.5 standards; regional standards do not comport with localized exposures and health impacts. Moreover, AB 617 provides no authority to require such an effort and can be counter to existing permitting programs (see permitting discussion above).

In terms of AB 2588 and control of air toxics – for which there is no state or federal standard, but rather, air districts set regional risk limits – CCEEB recommends that ARB expand its discussion of risk reduction audits in Appendix C, page, 19, to describe the recent changes to risk assessment guidelines by the Office of Environmental Health Hazard Assessment (OEHHA). As implemented by the air districts, these changes significantly increase the stringency of the AB 2588 Air Toxics Hot Spot Program and other air toxic control measures, by as much as a factor of three or more, depending on the pollutant. Facilities and sources across the state are implementing major risk reduction projects to achieve these new risk limits; these efforts should be described and accounted for as part of air district review of existing rules and programs.

Zero Emission Technology Is Not a Surrogate for Real Emission Reduction Targets

26-3

The Draft Blueprint places a high priority on zero emission technologies, but without any evaluation of which control strategies maximize emission and exposure reductions. CCEEB is very concerned by any blanket endorsement of a single technological pathway (e.g. zero emission versus ultra-low NOx), and instead believes that community emission reduction plans should maximize local health benefits within the existing regulatory framework. At a minimum, ARB and the air districts should provide public stakeholders with estimated emission reductions for different alternatives, being honest about the cost and air quality tradeoffs between zero-emission strategies and those that prioritize ultra-low NOx or PM strategies. For example, investments in ultra-low NOx heavy-duty vehicles can achieve as much as four times the NOx reductions as the equivalent investment in zero-emission heavy-duty vehicles.

More generally, sections of the Draft Blueprint and appendices seem to reflect ARB's climate objectives rather than the statutory goals of AB 617, which are to maximize immediate and cost-effective reductions in criteria and toxic pollutants to improve public health. CCEEB reminds staff that ARB and the air districts have other complementary programs meant to spur advancement of zero emission technologies, and that funding in these state and local programs amounts to hundreds of millions of dollars, independent of AB 617 implementation. CCEEB is concerned that AB 617 not be diluted by separate climate goals that do little to reduce community exposures to criteria and toxic emissions, or mandates that require local businesses, public and private utilities, and transit agencies to deploy technologies that are not cost effective or not yet proven in real-world conditions.

Provide Technical Background for Public Review and Comments

CCEEB asks staff to release drafts of technical documents and protocols in the Online Resource Center as soon as possible, and before finalizing the Draft Blueprint. This background is critical to the AB 617 programs and must be developed through a transparent public process. As such, we request staff provide sufficient time for public review and comment on these documents since this information is essential to program implementation. We further note that it is difficult to provide full comments on the Draft Blueprint without these significant details. We provide some examples below.

QAQC, Technical Guidance and Data Validation for CBO-Operated Air Monitoring ARB has committed to incorporating air monitoring data from community-based organizations (CBOs) into its AB 617 programs, going so far as to directly fund deployment of several of these networks through its "Air Grants." However, unlike the monitoring conducted by regulated sources complying with air district rules and guidelines, it is not clear what technical specifications will be required of CBO-operated networks. It's also unclear how the data from these CBO-operated networks will be used. Similarly, it's unclear whether the Community Air Monitoring Plan Elements described throughout Appendix E apply to CBO-operated systems, or only those operated by the air districts. AB 617 speaks only of systems deployed by the air districts, 26-4 cont. and only requires that data gathered from air district systems be reported to ARB. See H&SC §§ 42705.5 (c) and (e).

CCEEB recommends that Appendix E be restructured so as to clarify what guidance and resources are meant to apply to air district-operated systems, and what is meant to apply to CBO-operated systems. Additionally, we ask ARB to convene technical working groups to work with stakeholders on developing minimum technical requirements and guidance for ARB-funded systems or those being incorporated into AB 617 programs. These requirements should include necessary Quality Assurance and Quality Control (QAQC) protocols, and steps ARB will take to both audit CBO-operated systems and validate data generated to ensure the transparency and accuracy of data used for AB 617 purposes. Once guidance and requirements have been developed, ARB needs a process to communicate these requirements to partner CBOs and educate groups on proper implementation of its technical protocols.

Certification of Sensors and Applicable Uses

CCEEB is aware of interagency discussions related to the development of a certification system for air sensors, which would be linked to data quality indicators and applicable uses. We look forward to seeing more details as this work develops.

Assessing Baseline Conditions, Source Apportionment, and Tracking Progress

ARB has not yet released "a methodology for assessing and identifying the contributing sources or categories of sources, including, but not limited to, stationary and mobile sources, and an estimate of their relative contribution to elevated exposure to air pollution in impacted communities" as required by AB 617. In addition to this source apportionment methodology, ARB needs to better describe what metrics will be used by air districts to track trends and progress in annual reports. *See H&SC §§ 44391.3 (b)(2) and (c)(7)*. These are key to the successful implementation of emission reduction strategies in targeted communities, and must be developed quickly to support planning efforts at the air districts. As with the other efforts described above, it is critical that these methodologies are subject to public review and input.

Align Resources to Maximize Benefits and Avoid Duplication of Effort

CCEEB supports the use of ARB "Air Grants" to fund community capacity building so that communities can effectively engage in AB 617. We further recognize that ARB and its partners at the air districts face aggressive (but arbitrary) implementation deadlines under AB 617. While we understand that programs must be developed and implemented expeditiously, we see opportunity to better coordinate agency actions and align the delivery of public resources in priority communities. Moreover, CCEEB is concerned that staff is proposing funding allocations ahead of ARB's approval of community selections, which raises questions about whether there will be available and adequate funding to support participation in prioritized communities. For example, as proposed by staff, the Bay Area will receive about 24 percent of all funds, San Diego will receive 13 percent, San Joaquin Valley will receive 17 percent, and South Coast will receive 28 percent (18 percent goes to other regions or to efforts across multiple regions). However, it is unclear how the Board will balance initial year selections across regions and air districts, and whether this will reflect staff's proposed funding allocations to the regions. We further note that proposed grants are not proportionate to community burdens as expressed by CalEnviroScreen (e.g., South Coast has 68 percent of the top census tracts, but only 28 percent of grant funds).

Other questions arise over this early allocation of Air Grants. For example, all but four of the 29 proposed grants include air monitoring operated by community-based organizations, and a full 96 percent of funding is going to applicants whose projects include air monitoring. Yet it isn't clear which of these state-funded networks will align with communities selected for initial year AB 617 monitoring deployed by the air districts. In at least one proposed community – the City of Richmond – ARB has chosen to fund monitoring conducted by multiple CBOs, which duplicates efforts by the BAAQMD under AB 617 and the district's Rule 12-15. For these efforts, the CBOs in Richmond will receive \$1 million in state funds, or 10 percent of all funding available statewide. At best, this situation creates potential conflicts and redundancies between CBO efforts and those of the air districts.

We also note that nine of the proposed 29 grants are going to institutions, foundations, or environmental NGOs, rather than community-based organizations. Although these recipients are applying for projects within DACs, funding being directed to them totals \$2.8 million or 28 percent of all available funds.

ARB's Draft Environmental Analysis Does Not Analyze the Reasonably Foreseeable Impacts of the Actions Required to Implement the Draft Blueprint

CCEEB agrees ARB's Draft Environmental Analysis (Draft EA) is appropriately framed as a programmatic CEQA evaluation to be followed by more detailed, project-level CEQA review of individual actions undertaken by ARB, the air districts, cities, counties, and other agencies. However, we are concerned that ARB has framed the Draft EA too narrowly. The Draft EA analyzes only reasonably foreseeable consequences of implementing ARB's own proposed regulations in Draft EA Table 2-1, but does not analyze the multitude of actions by local air districts and other agencies required to implement the Draft Blueprint.

CCEEB recognizes that the Draft Blueprint commits ARB to a much larger scope of work than just this list of its own new regulations. In adopting this program, ARB will commit itself to achieving outcomes that require regulatory or approval actions by air districts, cities, counties and other agencies. For actions under the jurisdiction of other agencies, the Draft EA states that those agencies will later perform project-level evaluation of those actions. Moreover, ARB states that, because community emission reduction plans will be developed in the future, it is unable to predict any impacts associated with implementing the plans. But the Draft Blueprint will require new local regulations for pollution control, incentives to promote accelerated equipment turnover to cleaner technologies, and engagement with local agencies on land use and transportation strategies. We urge ARB to consider the potentially adverse environmental

Further, CCEEB is concerned that, by separating review of the ARB regulations covered in the Draft EA from review of future implementation actions by air districts and other agencies, the CEQA review of the Draft Blueprint has been improperly piecemealed. In addition, even if it was proper for ARB to limit the scope of the Draft EA impact analysis to its own regulations and exclude the environmental consequences of using incentive funding, new air district regulations, and land use and transportation strategies, those additional actions are still reasonably foreseeable and required by the Draft Blueprint. As such, they should have been included in the cumulative impact analysis. We urge ARB to follow the requirements under CEQA and evaluate the full scope of the Draft Blueprint.

consequences of those actions by other agencies as they are foreseeable and can be analyzed.

CCEEB appreciates the commitment of ARB staff, the air districts, and other public stakeholders to an open and transparent public process for developing AB 617 plans and programs, and we are grateful for the opportunity to provide our comments. We are particularly encouraged by the progress made on the statewide framework, despite the aggressive timelines laid out by AB 617. Should you or your staff have questions or wish to discuss our comments in greater detail, please contact Bill Quinn or Janet Whittick of CCEEB at (415) 512-7890 or via email; Bill is ext. 115 or <u>billq@cceeb.org</u> and Janet is ext. 111 or janetw@cceeb.org.

Sincerely,

Biel Herry

Bill Quinn, CCEEB Chief Operating Officer and Project Manager of the South Coast and Bay Area Air Projects

CC: Richard Corey, ARB Veronica Eady, ARB Jack Broadbent, BAAQMD Wayne Nastri, SCAQMD Samir Sheikh, SJVAPCD Alan Abbs, CAPCOA

and leater

Janet Whittick, CCEEB Policy Director and ARB Consultation Group Member

CCEEB Appendix A: Suggested Language Changes to Draft Blueprint and Questions for Clarification

Blue Text is suggested addition. Red Text is suggested deletion.

Page 1, paragraph 2: "...of the total known cancer risk from toxic air contaminants in the State..."

Page 4, paragraph 3: "...CARB and the air districts to work with local residents and affected sources to identify..."

Page 5, paragraph 5: "...new regulations, focused incentive investments, enforceable agreements, and engage with local land use authorities..."

Page 6, paragraph 1: "...how it engages with community groups and businesses..."

Page 13, paragraph 1: "e.g. regulations, enforcement, incentives, and enforceable agreements..."

Page 21, paragraph 1: "Air districts will also continue to implement regional plans for ozone and fine particles, AB 2588 Air Toxics Hot Spots programs, along with local risk reduction measures for specific sources..."

Page 23, paragraph 3: "...making the data accurate, accessible, transparent, and understandable."

Page C-3, paragraph 1: "...in partnership with community residents, and community-based organization, and affected industry..."

Page C-3, second bullet: include assessment of existing rules and regulations, and expected future reductions based on state actions described in appendices D and F.

Page C-3, fifth bullet: "Identify cost effective and applicable...strategies to implement the most stringent approaches for reduceing emissions, with a focus on zero emission technologies where feasible-maximizing immediate health benefits."

Page C-3, last paragraph: "collaborate closely with communities, affected industry, and the air districts..."

Page C-5, first bullet: how will "healthful levels if PM2.5" be determined, and by whom? Page C-9, first bullet: "Community meetings provide an informal opportunity for community residents to engage with the air district members of the steering committee to share the needs of the residents..." Air districts must manage and be accountable for the public process; residents should have direct communication with the air districts.
Page C-9, fifth bullet: Links to non-agency data should come with appropriate disclaimers.

Page C-13, fourth paragraph: "Reducing PM2.5 concentrations beyond what the federal or State PM2.5 standard require can deliver additional health benefits. In communities where PM2.5 levels are already at or below the standards, air districts may want to consider establishing targets to further improve PM2.5 levels if doing so would reduce the cumulative exposure burden. Air districts must also identify whether there are any other localized criteria air pollutant nonattainment issues within the community such as lead, PM2.5, or PM10 that needs to be addressed."

Page C-15, first paragraph: "...the community emissions reduction program will identify sourcespecific technologies and control techniques that can reduce emissions of the identified pollutants and applicable precursors, with a focus on zero emission technologies where feasible maximizing immediate health benefits to achieve program targets..."

Page C-24, third bullet: "Cost-effectiveness, if applicable, calculated in accordance with the air district's cost-effectiveness methodologies." Because all measures under AB 617 must be applicable, cost effectiveness should always apply.

Page C-24, final bullet: "The perspective of the community steering committee- and other public comments." Air district must consider <u>all</u> public input, not just that of steering committee members for whom it selects.

Page C-25, final bullet: please clarify what "enhanced community participation in enforcement efforts," means in practice, and how this should be done while adhering to evidentiary standards for enforcement actions at the air districts.

Page C-30, first paragraph: "...monitoring data if it is available in characterizing the community..." CCEEB believes that all AB 617 communities should have monitoring data in order to make statutorily required assessments of cumulative exposure burden and source identification and apportionment.

Page C-34, first bullet: "Characterized health-related emission and exposure reduction benefits of any strategies under development or implemented."

Page C-39, Incentive-Based Strategies: CCEEB suggests that adequacy of funding be assessed to in help inform administrative and legislative decisions related to air quality incentives.

Page D-1, paragraph 2: what is a "climate super pollutant" and how is this related to local air impacts in a selected community?

Page D-2, second bullet: what "resources on health data" are being developed to inform local beyond data already collected by county health departments?

Page D-2, fourth bullet: what "future actions" and associated data collection is envisioned? Is it limited to transportation projects? This bullet is ambiguous.

Page D-3, second paragraph: "This is an ongoing process that will begin achieving emissions reductions in the near-term and providing benefits that support community-level actions, with a focus on zero emission technologies where the technologies are now feasible."



California Council for Environmental and Economic Balance

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June 29, 2018

Greenhouse Gas and Toxics Emission Inventory Branch Chief Air Resources Board Submitted electronically to Ctr-report@arb.ca.gov

RE: Concepts Presented at May-June 2018 Workshops on Proposed Regulation for Criteria Pollutant and Toxic Air Contaminant Emissions Reporting

Dear David,

On behalf of the members of the California Council for Environmental and Economic Balance (CCEEB), we submit the following comments on the Air Resources Board (ARB) concepts, as presented during workshops held in May and June 2018, for a Proposed Regulation for Criteria Pollutant and Toxic Air Contaminant (TAC) Emissions Reporting ("proposed regulatory concepts"). CCEEB supports the goal of consistent statewide emissions reporting as part of AB 617 implementation, and believes that this effort will help improve data transparency and public accountability for emission sources.

However, we also recognize the need to follow the language in the statute of AB 617 as ARB undertakes the significant challenges inherent in harmonizing its proposed regulatory concepts with the many different air district rules already in place. Existing emissions reporting rules exist pursuant to the air districts' historic authority to require emissions reporting from stationary sources within their jurisdiction.¹ Partnering with the individual air districts to synchronize reporting rules is critical. We commit to working with you, your staff, the air districts, the California Air Pollution Control Officers Association (CAPCOA), and other interested stakeholders on identifying and addressing potential issues with the proposed concepts, and avoiding duplicative or conflicting agency requirements.

Our main comments are as follows:

¹ Cal. Health & Safety Code section 41511.

- Phasing the implementation of program components should be done so as to ensure consistency between and accuracy of ARB and air district rules. State reporting requirements should become effective only after ARB has demonstrated that its regulation is aligned with the air districts and that it is not creating overlapping or conflicting mandates. We note that Health and Safety Code Section 39607.1 only requires ARB to develop a uniform statewide system of annual reporting of emissions for stationary sources as defined in §§39607.1.a (2)(A)-(C).
- Enforcement of dual reporting programs needs to be better understood. It is unclear how an ARB-adopted reporting regulation will be enforced in conjunction with all air district reporting rules, and whether air district rules could need to be amended in order to be consistent with State requirements. To help minimize confusion over who has authority to enforce, CCEEB asks ARB staff to consider delegating enforcement to the air districts.
- Applicability should result in community-level data necessary for robust source apportionment and community inventories, while being realistic in terms of additional workloads for air districts and ARB. For example, adding "elevated" sources of air toxics sources, as well as "all permitted sources" in AB 617 communities and "clustered" sources, would increase the number of reporting facilities by many hundreds over the course of the program.
- CCEEB supports convening technical working groups consisting of interested stakeholders and air district partners. In particular, aligning sector-specific reporting methods across air districts and potential new requirements for clustering of facilities, should this additional phase of the program be implemented, will be technically challenging to develop and necessitate clear understanding of source operations. Technical working groups provide a venue to discuss pertinent issues.

What follows is a more detailed discussion of these points.

Phasing Implementation Can Help Resolve Duplicative or Overlapping Requirements

One of the objectives of statewide reporting under AB 617 is to provide the public with transparent and consistent emissions reporting data. CCEEB supports this objective, and commits to working with ARB towards a program where air districts are applying consistent calculation methods and then transmitting data to a common statewide platform, rather than co-reporting by facilities to both an air district and to ARB. (We leave open the possibility for air districts to opt to have facilities report directly and only to ARB, with ARB submitting the data to the air district.) Conversely, efforts must be made to align air district and ARB requirements and schedules and avoid having "two sets of books" that show different values for a source or facility.

CCEEB recommends removing the somewhat arbitrary distinction between Phases 1 and 2, as outlined in workshop presentations, and instead focus on developing consistency between ARB's proposed regulatory concepts and air district rules. As harmonization is achieved for each component of the program, then ARB can move forward with adopting State requirements, with the air districts working to concurrently amend their rules and facility permits as needed. An example of such a process could look like this:



This phasing-in of harmonized program components is appropriate for annual toxics reporting,² source-specific requirements, and general requirements. Over the interim, sources would report "business-as-usual" to air districts, and air districts would continue to submit reported data to ARB, as required under AB 197. Facilities and sources facing new reporting requirements under AB 617 could be brought into air district programs until such time as ARB establishes consistent statewide reporting requirements.

Emissions reporting schedules present another challenge to ARB's proposed regulation, should it move forward before harmonizing with air district rules. Air district deadlines impact a number of operations, such as budgeting, planning, and compliance audits for rules and permitting, and facilities have staffed and designed data collection procedures with these deadlines in mind. For example, in the Bay Area, annual toxics reporting is aligned with federal EPA requirements and due at the end of June of each year for the prior year's emissions. This would only give the BAAQMD about a month to validate, reconcile, and approve data in accordance with the proposed August 1 deadline for submittals to ARB. This would leave very little time for administrative review of errors or to settle disagreements should a facility question BAAQMD calculations. Rather than

² CCEEB notes that regional air districts are in the process of implementing revised guidelines from the Office of Environmental Health Hazard Assessment for AB 2588 Air Toxics Hot Spots Program health risk assessments. As part of this work, individual air districts are updating facility emissions reporting for TACs.

setting its own deadline in the hopes that air districts comply—and without any authority to mandate the timely submittal of facility data by air districts—ARB should first work to align schedules with the air district and only then adopt new reporting requirements for facilities and sources.

Over time, ARB will need an ongoing process to work with CAPCOA and the air districts on periodic updates to calculation methods and other program requirements in order to maintain and sustain uniform reporting systems, while taking into account new information about sources and emissions. Such a process should be developed up front as part of ARB's regulatory concepts.

Identifying and Addressing Potential Compliance and Enforcement Issues

Just as it is critical to apply consistent emissions calculation methods and requirements, it is equally important that ARB align any proposed regulation with air district rules in terms of compliance and enforcement so as to avoid creating "double jeopardy" for reporting entities or inadvertently placing reporting entities into compliance traps where they can comply with one but not both sets of requirements. Moreover, changes in reported emissions have the potential to create unintended compliance issues with federally enforceable permits, particularly Title V permits that consolidate all permitted limits at a facility. Additionally, facilities have an increasing interest in the accuracy of emission reports as the data becomes publicly available, as they will be held accountable for emissions.

Some initial questions we ask staff to consider:

- 1. If a facility has an error in its reported data, would it be subject to enforcement by both ARB and the air district, or just to the agency to which the data was originally submitted?
- 2. If ARB and an air district have different requirements—whether in rules or guidance documents—but a shared submittal process (e.g., facilities report to the air district, which then submits data to ARB) which rule would supersede the other? Could a facility be found in violation by one agency when it was in compliance with the other?
- 3. Facilities often work with air districts to correct or refine already reported data. If ARB has a single annual submission, how would updates be processed? Would a facility be considered in violation by ARB if an air district later revises its emissions calculations?
- 4. If a facility submits its data to the air district on time, but the air district fails to submit the data to ARB by its deadline, could the facility be found in violation of ARB's requirements?

For CCEEB members, compliance assurance is a major operational consideration, and one taken very seriously by reporting entities. Having a clear compliance pathway at every phase of the program is critical. CCEEB recommends that ARB consider contracting with the air districts through Memorandums of Agreement (MOAs) to delegate enforcement of its reporting regulation, once adopted, similar to the approach used for its oil and gas field methane control regulation, landfill methane control regulation, semiconductor operations regulation, and certain mobile diesel regulations. We believe the MOA-approach reduces the potential for overlapping enforcement authority, and is more efficient given that ARB staff is already envisioning using air districts to validate and verify data being reported by facilities.

CCEEB asks staff, regardless of its ultimate approach to harmonizing enforcement authorities, to develop reasonable and achievable compliance pathways and schedules, and to give due consideration to potential compliance challenges that could occur during the program's initial years or as new phases of the program are implemented. This could include holding joint meetings with the Enforcement Division to better clarify how ARB would address compliance concerns and questions, including the retroactive assessment of *daily* penalties for *annual* reporting programs. This is an issue that CCEEB has raised with ARB in the past, and believes could be compounded once an AB 617 reporting regulation is adopted.

Applicability Issues

CCEEB suggests that ARB assess air district guidelines for Air Toxics Hot Spots Program prioritization and base its definition of "elevated" on the least stringent threshold, so that a facility prioritized by any one air district would be prioritized by ARB. CCEEB notes that prioritization scoring varies across air districts, although all use CAPCOA guidance as a starting point for prioritization procedures. However, given the conservative nature of prioritization scoring, we believe that differences amongst various air district procedures will be minimal, and that an appropriately large universe of facilities will be subject to ARB's proposed reporting requirements.

CCEEB notes that the proposed applicability requirements for "all permitted sources" in AB 617 communities and "clustered" sources are not specifically mandated under the Health and Safety Code Section 39607.1. We believe that ARB should first develop the required uniform statewide system of annual reporting for stationary sources, as defined, before delving into territory beyond the reach of the statute.

Process and Schedule for Developing Technical Details of an ARB Regulation

CCEEB believe the rulemaking process outlined by staff may be premature, but supports the convening of technical working groups that can help staff develop uniform reporting methods. We urge ARB to reconsider the need to adopt a regulation by the end of the year, as there is no statutory requirement to do so. Rather, we encourage ARB to expend it resources to develop a comprehensive statewide approach before drafting regulatory language, working with the air districts as closely as possible.

Finally, to the extent possible, we ask staff to clarify expected timing of implementation for the different program phases, such as new requirements for "elevated" sources, supplemental data and "all permitted sources" in AB 617 communities. This will help potentially affected businesses to participate in rule and program development, and plan in advance for compliance.

We thank you for the time and effort you and your staff have given to understanding the complex regulatory, administrative and technological challenges involved in moving towards a statewide reporting system, and to the outreach made to engage stakeholders and air districts. CCEEB feels we are moving in a positive direction, and hopes that these comments help support your work. Please contact us should you wish to discuss our suggestions in more depth (billq@cceeb.org or 415-512-7890 ext. 115 and janetw@cceeb.org or ext. 111).

Respectfully,

Beel Henry

Bill Quinn CCEEB Chief Executive Officer and Project Manager for South Coast and Bay Area Air Projects

Jour lebour

Janet Whittick CCEEB Policy Director

cc: Jack Broadbent, BAAQMD Wayne Nastri, SCAQMD Alan Abbs, CAPCOA



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March 29, 2018

Karen Magliano Director, Office of Community Air Protection Air Resources Board Submitted Electronically

RE: AB 617 Community Air Protection Program Framework Concept Paper

Dear Director Magliano,

On behalf of the members of the California Council for Environmental and Economic Balance (CCEEB), we submit the following comments on the AB 617 Community Air Protection Program Framework Concept Paper ("Concept Paper"). CCEEB supported the passage of AB 617, and shares with the California Air Resources Board (CARB) the belief that this is the most significant piece of air quality legislation in the past thirty years. We are committed to working with CARB, the state's air districts, and legislative leaders on successful design and implementation of AB 617 so as to achieve real and meaningful risk reductions in communities highly burdened by local air pollution.

Our main points regarding the Concept Paper are as follows:

- Standardized guidance on data interpretation is needed. CARB and the air districts should work with stakeholders to develop and provide guidance on how to interpret the data collected by AB 617 community monitoring programs.
- Community identification and prioritization should be based on air pollution data that indicates the level of exposure from ambient air.
- **CARB must implement applicable mobile source elements** and be part of the process as air districts develop Community Emissions Reduction Plans (CERPs).
- Measures in the CERPs must be cost effective and consistent with the Health & Safety Code. The Technology Clearinghouse, meant to describe appropriate tools and measures for the statewide strategy and CERPs, should be consistent with Health and Safety Code requirements for Best Available Control Technology, Best Available Retrofit Control Technology, and AB 617, including tests for cost effectiveness and technological feasibility, as required by law and determined by responsible air districts.

- **Program Goals should be clearly articulated.** CARB should provide guidance on how air districts, with community partners, affected sources, and local government, can establish program goals and quantify results so as to determine program success.
- The State must establish equitable and sustainable sources of funding for program success. CARB should acknowledge the funding needs of the air districts responsible for implementation of AB 617 community monitoring and the CERPs, and work with the districts and public stakeholders to identify and secure sustained and equitable sources of program funding.

What follows is an in-depth discussion of these key points, along with additional comments related to specific sections of the Concept Paper, as well as a few comments on the *DRAFT Process and Criteria for 2018 Community Selections* document.

CAP Program Concept Paper – Comments by Section

Section 1. Preface

AB 617 seeks to reduce high cumulative exposure burdens in prioritized communities. While efforts taken as part of the Community Air Protection (CAP) Program should be expected to reduce disparities between highly burdened and non-highly burdened communities, it is important to recognize that the goal is to reduce risk from exposures, not to eliminate all relative differences. For example, two communities could have relative differences in ambient air concentrations, yet both communities could be nonburdened and not warrant action under AB 617. To clarify intent, CCEEB recommends the following change to page 1:

"The bill recognizes that While California has seen tremendous improvement in air quality, some communities still suffer greater impacts than others experience high cumulative exposure burdens and more needs to be done."

Section II. Public Health Imperative for AB 617

CCEEB recommends that CARB provide meaningful context for health risks from exposure to criteria and toxic air pollutants. At a minimum, we suggest the following changes to page 3:

"Ozone levels have dropped over 40 percent in the South Coast region since 1990 and diesel particulate matter, which accounts for over two thirds of the total known statewide air toxics cancer risk in the State, has dropped nearly 70 percent over this same period. Additionally, California is on its way to exceeding its 2020 GHG emissions reduction target. Statewide cancer risk from airborne toxics is estimated to be about [NUMBER], whereas total lifetime cancer risk in the United States from all causes is about 40 percent¹ or 400,000-in-a-million."

In addition to expanding useful risk communication, CCEEB believes that greenhouse gas programs, which are meant to control *global* pollutants, are outside the scope of AB 617 and should not be unintentionally conflated with local health impacts caused by direct exposure to criteria and toxic emissions.

Section III. Guiding Principles

CCEEB generally supports the ten Guiding Principles, and suggests the following changes to clarify intent and align the principles with AB 617 requirements.

In order to recognize that some measures could reduce exposures and emissions (e.g., altering truck routes or traffic patterns), we suggest:

"Implement community-focused actions to reduce emissions of and exposures to criteria air pollutants and toxic air contaminants in order to improve public health in disadvantaged communities most impacted by air pollution."

In order to be consistent with AB 617 consultation requirements², we suggest: "Develop a strong collaborative relationship between local community groups, air districts, CARB, affected industries, local governments, and other stakeholders."

In order to be consistent with AB 617 requirements for the statewide strategy and Community Emission Reduction Programs (CERPs),³ we suggest:

"Support investments that are cost effective and technologically feasible to advance the deployment of the cleanest mobile and stationary source technologies within impacted communities in order to maximize emissions reductions including a focus on zero emission technologies where feasible."

¹ <u>https://www.cancer.org/content/dam/cancer-org/online-documents/en/pdf/reports/california-facts-figures-2017.pdf</u>. The American Cancer Society estimates lifetime cancer risk is 41 percent for US men and 38.1 percent for US women (2017).

² See Sections 42705.5(b) and 44391.2(c)(2).

³ See Section 44391.2(c)(2).

Section V. Identification and Selection of Communities

CCEEB agrees that many types of data will be needed to identify and prioritize communities with "high exposure burdens" and "high cumulative pollution exposure burden[s]."⁴ As such, when identifying communities, emphasis must be placed on risk-based air pollution data that indicates the level of exposure.⁵ Ideally, use of other criteria related to more general population characteristics should be applied either as a second screen to prioritize communities already identified for high exposure levels, or as a separate analysis to show how different communities can benefit from the program.

We recommend that CARB articulate a hierarchy of available evidence to help guide air districts and public stakeholders and ensure consistency since some data will be more directly relevant in assessing exposure burdens. For example:

 Community Ambient Air Quality Data

 e.g., AB 617 monitoring and inventories, SCAQMD MATES, BAAQMD CARE

 Regional Ambient Air Quality Data

 e.g. Regional monitoring, attainment status, PM2.5 modeling

 Location and Concentration of Sources of Emissions and Sensitive Receptors

 Vulnerability Indicators

 e.g. CalEnviroScreen ranking

⁴ AB 617 on Identifying and Prioritizing Communities:

⁵ CCEEB makes a distinction between mass emissions for criteria pollutants – typically expressed as pounds or tons per day or per year – and exposure estimates for toxic air contaminants (TACs) – typically expressed as lifetime cancer risk or Health Index value. Mass emissions for criteria pollutants can be compared to health-based ambient air standards set by the federal EPA or the state air board. Risk estimates for TACs are set by the air board for statewide programs or by air districts for stationary source rules, following risk assessment guidelines developed by the Office of Health Hazard Assessment. For air toxics, mass emissions fail to indicate the potency level of the chemical emitted or the duration of exposure, both of which affect health risks. CCEEB believes the appropriate metric should be used for each pollutant.

For Community Monitoring: "the state board shall select, concurrent with the monitoring plan, in consultation with the districts and based on an assessment of the locations of sensitive receptors and disadvantaged communities, the highest priority locations around the state to deploy community air monitoring systems, which shall be <u>communities with high exposure burdens for toxic air contaminants and criteria air pollutants</u>." *Health and Safety Code, Section 42705.5(c)* For Community Emissions Reduction Programs: "On or before October 1, 2018, the state board shall prepare, in consultation with the Scientific Review Panel on Toxic Air Contaminants, the districts, the Office of Environmental Health Hazard Assessment, environmental justice organizations, affected industry, and other interested stakeholders, a statewide strategy to reduce emissions of toxic air contaminants and criteria air pollutants in <u>communities affected by a high cumulative exposure burden</u>." *H.&S.C. Section 44391.2(b)*

Use of Reported Public Health Data

Public health and socioeconomic indicators may be appropriate for assessing potential community vulnerability to air-related impacts, but any data used must be clearly correlated to air emissions. CCEEB recognizes the many challenges in aligning currently available reported public health data with air emissions. Care must be taken since county and zip code data is not granular enough to indicate air impacts within a community, and health endpoints may be overwhelmed by the influence of independent and more predominant factors to disease outcomes.

An example of this problem can be seen by looking at the correlation analysis for CalEnviroScreen done by the Office of Environmental Health Hazard Assessment, which shows a clear lack of correlation between air quality indicators and health outcomes. This lack of correlation should *not* be interpreted as evidence that no causal relationship exists, but rather that the data we have is not robust enough to show the expected association. (Please see Appendix A.) This limitation with existing statewide data is one of the reasons why CCEEB believes that air quality data should be prioritized over other types of data that may be less informative in terms of selecting the most highly burdened communities.

The most scientifically sound and straightforward approach to evaluating health impacts is to look at estimated health risks due to air pollution exposures. A common form of this approach is used in evaluating health benefits from air quality management plans. Another more novel and detailed form was used by the BAAQMD in its CARE modeling,⁶ which itself was based in part on U.S. EPA's Environmental Benefits Mapping and Analysis Program.⁷

Use of CalEnviroScreen Ranking

CARB and air districts should avoid double counting that could arise if using criteria that replicate indicators already embedded in CalEnviroScreen (CES). This includes, but is not limited to, data on public health outcomes, total cancer risk, and socio-economic factors.

Balancing Air Quality Data

Page 6 of the supplemental document *DRAFT Process and Criteria for 2018 Community Selections* lists sources of air quality data to be included in community evaluations. However, several of the proposed data sources are duplicative in that they estimate emissions from the same sources, whereas similar data for other source types may be missing or less robust. CCEEB recommends that CARB provide guidance on how to

⁶ See

http://www.baaqmd.gov/~/media/Files/Planning%20and%20Research/CARE%20Program/Documents/Impa_ctCommunities_2_Methodology.ashx?la=en.

⁷ See <u>https://www.epa.gov/benmap</u>.

manage these overlapping lines of evidence to avoid double counting and bias, and address potential data gaps for source categories suspected of significantly contributing to community ambient air concentrations.

Enforcement Data Can Be Misleading

CCEEB strongly disagrees that notice of violations (NOVs) are useful data, since many NOVs result from ministerial or minor errors that do not result in excess emissions. We believe that the ratio of such "paper" errors compared to emissions-related violations is quite high. Moreover, use of NOVs would likely add a de facto bias in favor of communities with large stationary sources, which are frequently inspected and must comply with complex administrative and reporting rules, as compared to those with high concentrations of area or mobile sources but where the number of inspections could be far fewer. Similarly, a large number of enforcement actions could be indicative of a robust or focused enforcement program at work rather than a community with a high cumulative exposure burden. Because of this bias, CCEEB believes enforcement data would unintentionally skew community selection results.

At a minimum, CARB and the air districts should have wide latitude when considering enforcement data, relying on local knowledge of sources and information on compliance trends for the source types most commonly found in a given community.⁸ Raw data on the number of NOVs issued or enforcement actions taken does not paint an accurate picture of enforcement issues within a community, or whether those enforcement issues are driving high exposures burdens.

Section VI. Strategies to Reduce Emissions and Exposures

CCEEB recommends amending the first paragraph to include state and district air toxics programs and making minor additions to clarify that planning efforts result in regulations to directly control emissions. We suggest the following for the discussion on page 9:

"Identifying strategies for reducing criteria air pollutants and air toxics at the community level is critical for establishing a strong statewide framework for action. Existing air quality planning efforts such as the California State Implementation Plan Strategy, Mobile Source Strategy, California Sustainable Freight Action Plan, Short-Lived Climate Pollutant Reduction Strategy, and Climate Change Scoping Plan, will be the foundation for further reducing emissions and exposure within communities across the State. Air districts also

⁸ For example, compliance with ARB's Truck and Bus Rule is 69 percent in total, but only 50 percent for small fleets with only one to three trucks. This type of analysis could be more important for communities with a large number of small fleets than the total number of NOVs issued. See CARB's 2016 Enforcement Report.

have ongoing planning efforts that will further reduce emissions within their respective air basins and drive adoption of rules and regulations to control stationary source emissions. Additionally, both CARB and air districts directly regulate toxic air contaminants through the Air Toxics Hot Spots Program and air toxic control measures, with further environmental review and mitigation of risk required by lead agencies under CEQA. "

Multi-Layered Suite of Strategies

Major sources in non-attainment areas are subject to all feasible control measures, expedited BARCT implementation under AB 617, and recently updated air toxics rules that substantially increase the stringency of those programs. The analysis presented on page 18 of the Concept Paper provides a useful starting point for air districts in determining what gaps exist in current regulations, and could help identify opportunities where enforceable agreements can achieve additional or accelerated reductions beyond agency rules. We suggest the following change on page 10:

"Regulatory actions along with focused enforcement to ensure effective implementation of both new and existing regulations within specific communities. Whenever feasible, the strategy should consider enforceable agreements as a means to achieve reductions."

Focused use of incentive funds will be another important mechanism to achieve emission reductions. Incentives can be used to advance both the development and deployment of cleaner technologies, and can help equipment owners and operators reduce emissions. We suggest the following change to clarify the roles of incentives on page 10:

"Coordinated incentive funding to provide investments in cleaner technologies and accelerated engine and equipment turnover, along with needed infrastructure and other complementary elements to support complete and sustainable technology solutions."

CCEEB agrees with the multi-layered approach described in the Concept Paper, which recognizes that each community "will require a different combination of strategies based upon the nature of each air quality challenge..." However, we believe that the approaches listed on pages 10-11 should represent a menu or suite of available options rather than "a minimum starting point," and that each CERP will be different. We suggest the following change on page 10:

"While Each community will require a different combination of strategies based upon the nature of each air quality challenge; the strategies outlined below provides a minimum starting point for menu of options that can be used in an assessment of appropriate actions."

Section VII. Criteria for Community Action Plans

CARB should amend Section VII and specify how it will implement the applicable mobile source elements as part of the Community Emissions Reduction Plans (CERPs). CCEEB recommends that this be addressed, noting that AB 617 specifies that, "[t]he [community emission reduction] programs shall result in emissions reductions in the community based on monitoring or other data," and that, "[i]n implementing the [community emission reduction] program, the district and the state board shall be responsible for measures consistent with their respective authorities."⁹

In discussion at the Riverside AB 617 Technical Workshop on February 28, 2018, staff stated that CARB will not propose community-specific measures as part of the CERPs, but would instead rely on implementation of existing statewide programs to reduce mobile and area sources. While CCEEB agrees with this approach as it relates to regulatory actions—and generally believes that regulations should be applied consistently statewide or regionally—we believe that CARB must be "at the table" as the districts develop and implement the CERPs, and be responsible for measures consistent with its authority. Such measures could include focused enforcement and inspections, compliance assistance to local businesses, and prioritization of incentive funds in AB 617 communities. We ask staff and the Board to reconsider CARB's role in AB 617 and add steps CARB will take to participate in the development and implementation of the CERPs.

VII.A. Health-based Air Quality Goals

CCEEB appreciates the discussion on page 14 that describes the multi-factorial nature of diseases associated with exposure to air pollutants, and the independent contribution that structural determinants of health have on disease outcomes. CCEEB believes that health-based air quality goals should be based on reductions in emissions from the highest contributing sources of risk in a community, and that goals should be quantifiable whenever possible.

However, CCEEB recommends that CARB provide greater detail on what an end goal would look like, and how air districts can work with public stakeholders to establish achievable emission targets, based on community monitoring and other data, source apportionment, and community inventories developed for AB 617 purposes. Clearly articulated program goals, along with required AB 617 analyses—including but not limited to those mentioned above—will form the basis for selecting appropriate and feasible timeframes for action.

⁹ H.&S.C. Section 44391.2(c)(4) and (5) and (6).

Section VIII. Criteria for Community Air Monitoring

VIII.A. Community Air Monitoring Objectives and Methods

As CARB develops the statewide plan for community air monitoring, CCEEB hopes to work with staff and other stakeholders to identify and define appropriate technologies and techniques to achieve the various objectives of each community. We suggest that staff develop a simple framework or matrix that describes how different monitoring approaches match different objectives, including information on the following aspects:

- Objective(s) to be addressed
- Pollutants and sources to be measured
- Suitable technologies and techniques for monitoring
- Spatial coverage
- Duration of monitoring
- Timing period of measurements taken
- Who manages equipment, sampling and data
- Uses of data
- Costs for deploying and maintaining
- Limitations of the system

Different approaches to air monitoring will require different standards for data, and result in different quality data. Additionally, poorly designed studies or systems, inadequate or inappropriate data collection and data management, and other issues related to quality control and quality assurance could arise. To ensure data integrity, CCEEB recommends that staff work with stakeholders and technology experts to develop clear standards and QAQC protocols for any AB 617 community monitoring system, and that these systems be operated by air districts that can regularly conduct QAQC audits and provide accountability that all QAQC steps are being properly taken.

VIII.B. Community Air Monitoring Plan Elements

CCEEB recommends the following additions to Table 1 on page 26, which outlines the thirteen proposed elements for air monitoring plans:

[Add element] Develop and advance sensor and monitoring technology, working towards common platforms and open source systems.

"Develop quality control procedures and conduct regular QAQC, reporting results to the public as part of annual reporting."

"Manage, validate, and store data"

"Communicate results and provide access to stored data"

VIII.C. Community Engagement

CCEEB supports the establishment of a community steering committee in each community selected for air monitoring and CERPs, and appreciates the approach that CARB proposes in the Concept Paper. Broad participation by communities, affected sources, local government, and other interested groups in the planning stage should help foster collaborative and innovative approaches, leverage local knowledge about sources of emissions and sensitive receptors, and minimize uncertainties or challenges later on during implementation phases. It is important for the long-term success of AB 617 that initial community programs are seen as inclusive, effective, fair, and equitable, with the greatest degree of buy-in among all community stakeholders.

CCEEB believes the steering committees should be advisory bodies, where air districts, CARB and other responsible parties can discuss ideas and proposals. However, decisionmaking authority can and must rest with the governing boards of the air districts, which will ultimately be accountable for the success of community plans, and the state air board in its oversight of district AB 617 programs.

Section IX. Additional Implementation Elements

While this section addresses the funding needs of communities wishing to engage in AB 617 programs, it misses discussion of funding needed for the air districts to implement these same programs. This is a vitally important implementation element; we recommend that a subsection be added to Section IX that addresses it. CCEEB is committed to working with the districts, CARB, and other public stakeholders to identify and secure sustained program funding, and believes that the current lack of ongoing funding must to be explicitly acknowledged so that it can be appropriately addressed.

IX.C. Statewide System of Annual Emissions Reporting

Page 32 of the Concept Paper states that the statewide reporting framework is meant to "support air district and community needs." CCEEB recommends that CARB consider the needs of reporting entities, which strongly support user-friendly and consistent reporting programs and calculation methodologies that result in the most accurate data possible. In addition to regulatory needs for emissions reporting, such as payment of fees and compliance with district permits and rules, stationary sources have a vested interest in ensuring that publicly available emissions data is both accurate and consistent from agency to agency. CCEEB recommends that CARB add a discussion of stationary sources to subsection IX.C and that it make the following change to page 31:

"New requirements under AB 617 will work hand-in-hand with efforts underway as part of AB 197 and include: consistent annual reporting of criteria air pollutant and toxic air contaminant emissions for specified large facilities."

IX.D. Technology Clearinghouse

AB 617 directs CARB to establish a Technology Clearinghouse "that identifies the best available control technology and best available retrofit control technology for criteria air pollutants, and related technologies for the control of toxic air contaminants."¹⁰ In regards to the community plans, AB 617 states that the CERPs must "achieve emissions reductions for the location selected using <u>cost-effective measures</u>" identified through CARB's assessment of available BACT, BARCT, and T-BACT technologies.

CCEEB is concerned that staff are moving well beyond the stated purpose of AB 617, in that staff propose including "forward-looking information on the next generation of ultra-low or zero emissions technologies to support continued emissions control technology advancement."¹¹ In presentations at the recent AB 617 Technical Workshops, staff illustrated what is meant by next generation technology by showing the transition from an internal combustion engine to a fuel cell, and from a power plant to battery storage. Neither of those scenarios are BACT, BARCT or T-BACT under Health and Safety Code requirements, nor would they be cost effective under AB 617 for purposes of the CERPs. CCEEB is not clear why technology switching, such as staff's examples, would be proposed for the clearinghouse. We recommend that staff remove those references from the Concept Paper, and convene a technical working group to advise staff on appropriate BACT, BARCT and T-BACT technologies that should be included.

Under the <u>Background</u> on page 33, CCEEB recommends replacing "facility" and "facilities" with "source" and "sources" since district permits are for sources, not facilities. We also recommend that this subsection clarify that allowable emissions limits or thresholds are based on maximum feasible control for a source.

IX.F. Resources for Community Air Monitoring

CCEEB hopes that CARB will build on ongoing work at EPA's Office of Research and Development and South Coast's AQ-Spec Laboratory, while avoiding redundancies in activity and focus.

Under the subsection *Leverage Advanced Air Monitoring Technology* on page 37, CCEEB recommends removing the example of methane monitoring. Methane emissions have no direct local health impacts; instead, monitoring is conducted to better characterize GHG emissions and identify GHG hotspots. CCEEB does not believe this is germane to AB 617 and should be removed.

Under the subsection *Support Community Science* on page 38, CCEEB recommends that CARB provide technical support beyond the online resources described. Towards this

¹⁰ AB 617, Section 3.

¹¹ Page 32.

end, we suggest CARB commit to directly advising community-based organizations on how to design air quality studies and deploy air sensor and monitoring networks, including steps needed for effective QAQC. CARB should also consider providing communities with information and resources so that communities can build effective partnerships with public agencies, academic and research institutions, nongovernmental organizations, and other groups that can support community-monitoring efforts.

CCEEB appreciates the opportunity to provide these comments on the Concept Paper, and looks forward to continuing our work with CARB, the air districts, legislative leaders, and other public stakeholders on developing and implementing AB 617. We further wish to acknowledge the tireless efforts of you and your staff, along with Assistant Secretary Eady, in ensuring an inclusive and robust public participation process, especially given the aggressive timelines set forth by AB 617.

Should you or your staff have any questions or wish to discuss our comments in more detail, please contact me at janetw@cceeb.org or (415) 512-7890 ext. 111.

Sincerely,

Janet Whittick CCEEB Policy Director

cc: Veronica Eady, CARB Jack Broadbent, BAAQMD Wayne Nastri, SCAQMD Seyed Sadredin, SJVAPCD Alan Abbs, CAPCOA Gerald D. Secundy, CCEEB Bill Quinn, CCEEB Kendra Daijogo, The Gualco Group, Inc. and CCEEB consultant

Sensitivity Analysis of CalEnviroScreen 3.0 Indicators

Table 1. Spearman's correlation coefficients (p) between indicator CES 3.0 raw scores.*

			Ozone	PM2.5	Diesel	Pesticides	Toxic Releases	Traffic	Drinking Water													
Pollution Burden	Exposures	Ozone	1																			
		PM2.5	0.39	1						Cleanup Sites	Groundwater Threats	Hazardou s Waste Sites	Impaired Water Bodies	Solid Waste Sites								
		Diesel	-0.17	0.40	1																	
		Pesticides	0.08	-0.10	-0.37	1						u s Wa										
		Toxic Releases	0.08	0.60	0.47	-0.23	1					zardoi										
		Traffic	-0.09	0.26	0.49	-0.30	0.39	1			ē	На:	Imp									
		Drinking Water	0.58	0.42	-0.06	0.17	0.14	0.00	1													
	Environmental Effects	Cleanup Sites	-0.11	0.13	0.25	-0.01	0.17	0.15	0.01	1 0.45 0.46 0.11					e		ase					
		Groundwater Threats	-0.32	-0.05	0.15	0.08	0.00	0.11	-0.13		1					Veight	Low Birth Weight Cardiovascular Disease					
		Hazardous Waste Sites	-0.13	0.11	0.32	-0.03	0.22	0.25	-0.03		0.39	1			Asthma	Birth \ ascula	ascula					
		Impaired Water Bodies	-0.29	-0.22	-0.08	0.12	-0.13	-0.02	-0.19		0.22	0.12	1			LowF	rdiov					
		Solid Waste Sites	0.02	0.02	-0.06	0.18	0.07	0.00	0.12	0.31	0.29	0.29	0.17	1			Ca					
	Sensitive Populations	Asthma	0.11	0.15	0.22	-0.04	0.07	0.01	0.02	0.14	0.11	0.09	-0.07	0.08	1		u	n ti	≿	ment	urden	
Population Characteristics		Low Birth Weight	0.09	0.20	0.22	-0.11	0.15	0.11	0.07	0.08	0.00	0.09	-0.09	0.03	0.34	1		Education	Linguistic Isolation	Poverty	Unemployment	Hou sing Bur den
		Cardiovascular Disease	0.39	0.20	0.04	0.06	0.07	-0.07	0.20	0.05	-0.03	0.02	-0.13	0.09	0.72	0.24	1	ш			Une	Hou
	Socioeconomic Factors	Education	0.18	0.32	0.24	0.02	0.21	0.10	0.23	0.20	0.10	0.13	-0.11	0.19	0.56	0.35	0.48	1				
		Linguistic Isolation	-0.02	0.34	0.43	-0.13	0.32	0.28	0.10	0.23	0.14	0.19	-0.09	0.09	0.30	0.28	0.19	0.72	1			
		Poverty	0.21	0.26	0.21	-0.02	0.11	0.06	0.19	0.19	0.13	0.12	-0.11	0.16	0.56	0.33	0.44	0.83	0.60	1		
		Unemployment	0.30	0.19	0.05	0.02	0.03	-0.04	0.20	0.06	0.02	0.01	-0.08	0.10	0.47	0.27	0.45	0.53	0.27	0.61	1	
		Housing Burden	0.04	0.21	0.34	-0.19	0.22	0.26	0.07	0.16	0.11	0.15	-0.08	0.08	0.38	0.28	0.22	0.58	0.53	0.71	0.41	1

*Spearman's correlation coefficient measures the degree to which two indicators tend to vary together. Values near -1 mean the indicators are strongly inversely related. Values of 1 mean the indicators are positively correlated. Values of 0 mean there is no clear relationship between the indicators. Strong and moderate correlations are shown in bold. Pairs with missing values were omitted from the analysis.

Sensitivity Analyses of the CalEnviroScreen Model and Indicator

			Ozone	PM2.5	Diesel PM	Pesticides	TRI	Traffic											
Pollution Burden	Exposures	Ozone	1							S	ŝ								
		PM2.5	0.44	1					Cleanup sites	Groundwater threats	oodie	Waste sites							
		Diesel PM	0.10	0.71	1					er th	ater l								
		Pesticides	0.07	0.05	-0.07	1				dwat	Impaired water bodies								
		TRI	-0.01	0.16	0.17	0.00	1			roun	ipaire								
		Traffic	0.04	0.39	0.62	0.12	0.23	1		G	<u>2</u>								
	Environmental Effects	Cleanup sites	-0.03	0.34	0.48	0.10	0.37	0.62	1						it				
		Groundwater threats	-0.15	0.21	0.36	0.15	0.24	0.62	0.66	1			Age	Asthma	Low Birth Weight				
		Impaired water	-0.31	-0.07	0.06	0.26	0.05	0.24	0.22	0.34 1	1				v Birt				
		Waste sites	0.07	0.11	0.04	0.15	0.27	0.25	0.37	0.42	0.16	1			ΓO				
Population Characteristics	Sensitive Populations	Age	0.08	-0.22	-0.38	0.11	-0.06	-0.24	-0.22	-0.15	-0.05	-0.01	1			uc	n iç	>	×.
		Asthma	0.11	0.03	-0.07	-0.06	0.20	-0.12	0.07	0.06	-0.09	0.09	0.05	1		Education	Linguistic isolation	Poverty	Race/ ethnicity
		Low Birth Weight	0.11	0.28	0.32	-0.16	0.02	0.22	0.15	0.08	-0.06	0.01	-0.12	0.06	1	Edi	Lin isc	Pe	etl
	Socioeconomic Factors	Education	0.21	0.30	0.16	0.27	0.20	0.16	0.25	0.23	0.01	0.23	-0.01	0.40	0.03	1			
		Linguistic isolation	0.06	0.46	0.56	0.20	0.18	0.50	0.47	0.43	0.11	0.14	-0.21	0.10	0.17	0.61	1		
		Poverty	0.17	0.14	-0.04	0.08	0.14	-0.08	0.10	0.11	-0.09	0.16	0.05	0.50	-0.03	0.67	0.37	1	
		Race /ethnicity	0.12	0.53	0.57	0.21	0.28	0.50	0.49	0.41	0.07	0.18	-0.28	0.22	0.24	0.65	0.82	0.38	1

Table 1. Spearman's correlation coefficients (p) between indicator raw scores.*

*Spearman's correlation coefficient measures the degree to which two indicators tend to vary together. Values near -1 mean the indicators are strongly inversely related. Values of 1 mean the indicators are positively correlated. Values of 0 mean there is no clear relationship between the indicators. Strong and moderate correlations are shown in bold. Pairs with missing values were omitted from the analysis.



July 23, 2018

California Air Resources Board 1001 I Street Sacramento, CA 95814

RE: CEJA Comments on Draft Community Air Protection Blueprint

To the California Air Resources Board:

The California Environmental Justice Alliance (CEJA) respectfully submits these comments regarding the Draft Community Air Protection Blueprint (Draft Blueprint) released in June 2018.

CEJA is a statewide coalition of grassroots community-based organizations working to advance environmental justice in state policy. Our members work across California in low-income communities and communities of color that are disproportionately burdened by air pollution and suffer from the severe negative health impacts.

Our communities are breathing some of the most polluted air in California and the U.S.¹ and are bearing the health, social, and economic costs. The core purpose and intent of Assembly Bill (AB) 617 is to produce real, significant emissions reductions and better air in our neighborhoods – this is the most important bottomline requirement for the Community Air Protection Program overall. We are committed to engaging collaboratively with California Air Resources Board (CARB) staff and the Governing Board to accomplish this, not just for our communities, but also for the many, many others across the state that share the burdens of dirty, polluted air.

We appreciate the work of CARB staff to develop this Draft Blueprint, and we are pleased to see some of our previous recommendations reflected in it. We offer the following comments to supplement our previous comments submitted in March 2018 and October 2017. In addition, we agree with and support comments submitted by our member and partner organizations.

¹ "California Metropolitan Areas among Top Ten most impacted by air pollution in the US" from American Lung Association 2018 State of the Air report: <u>http://www.lung.org/local-content/california/documents/state-of-the-</u> <u>air/2018/sota-2018 ca most-polluted.pdf</u>

SUMMARY OF KEY COMMENTS

1. As stated above and throughout our comments, our interest in AB 617 and the Community Air Protection Program (Program) is to achieve substantial emissions reductions and better air quality in communities disproportionately impacted by air pollution. This is the bottomline purpose of the legislation and the Program. In these comments, we discuss and recommend specific regulatory measures to reduce emissions from particular sources because these have been identified by residents in the communities we work with as high priority measures to address the pollution in their neighborhoods. These measures are not intended to constitute a comprehensive list of strategies or actions to be taken, and we strongly urge and support the development of additional rules and regulations by CARB and air districts to reduce emissions.

Further, we point out that the comments in this document are not organized in order of priority, and our comments on aspects of the Program design and processes are aimed at ensuring effective implementation, community participation and decision-making, and CARB oversight authority over the Program and air districts in order to accomplish the ultimate objective of emissions reductions.

- 2. To ensure that Community Emissions Reduction Programs (CERPs) result in significant emissions reductions, we strongly recommend that CARB require the following minimum baseline standards for all CERPs:
 - a. Substantial, quantifiable annual emissions reductions above and beyond what is already required by existing law and regulations and no net increase in total emissions.
 - b. The content of CERPs, especially the strategies to reduce emissions and exposure within them, must reflect priorities identified by community residents, as documented through authentic, meaningful outreach and engagement processes.
 - c. CERPs and the strategies to reduce emissions and exposure within them should assess and address all significant mobile, stationary, indirect and other area emissions sources.
- 3. CARB must exercise its authority to provide oversight over CERPs and hold air districts accountable for meeting their specified metrics and timelines.
 - a. CARB should use our recommended minimum substantive baseline requirements for all CERPs as requirements to be approved.
 - b. For CERP approval, CARB should define the public review and approval process. At minimum, the CERP should be presented and decided on in a public CARB Governing Board meeting, and the public should be given the opportunity to comment. CARB staff should present the recommendation related to approval of the CERP with a written explanation that clearly evaluates how the CERP meets requirements. CARB should consider using a scoring system or rubric to make the decision clear, objective, and transparent.
 - c. For annual review, CARB should provide written evaluation of whether a CERP is meeting its requirements.

- d. If a CERP does not meet its annual metrics, CARB should provide a process to consider what steps to take to ensure that the CERP meets the timeline as soon as possible. CARB should evaluate options in a public process, and the options should include CARB stepping in.² CARB should also consider enforcement and penalty options, including withholding relevant funds from an air district that is not meeting its requirements.
- 4. Strategies to reduce emissions and exposure should include statewide actions developed and implemented by CARB, *as well as* actions prescribed by CARB to be implemented by air districts.
 - a. We recommend additional specific statewide strategies for CARB to act on.
 - b. We also recommend that CARB prescribe specific emission reduction measures for air districts to implement based on the pollution sources in their areas.

I. COMMUNITY SELECTION

A. We recommend that CARB lay out a **clear and specific process for how the assessment will be used to compare communities and how the decision will be made to recommend communities for selection**. Appendix B of the Draft Blueprint describes a three-step process to identify, assess, and select communities, with six assessment factors and numerous additional considerations to be used in the selection process,³ but the actual method of comparing communities to each other and the rationale for how CARB staff will actually decide which communities to recommend for selection remain unclear. The Draft Blueprint states that "CARB will release [its] assessment [of all identified potential communities] in summer 2018" and that "CARB staff will develop recommendations on the selection of communities."⁴

To provide clarity and objectivity, we request that CARB lay out a clear and specific process for how the assessment will be used to compare communities and how exactly staff will decide which communities to recommend for selection. As we have stated in our previous comments, the comparison should be based on objective data and be transparent so as to leave no question or doubt as to how and why communities have been selected or will be selected in the future. Potential examples of an objective decision-making process are a simple point system or a weighted scoring rubric such as that in CalEnviroScreen.

B. We request that CARB include community representatives and a public process for the research consortium. We appreciate that "CARB and the Department of Toxic Substances Control (DTSC) are contracting with a consortium of researchers to provide analytical support to

² Consistent with Cal. Health & Safety Code Sec. 39002.

³ Draft Blueprint, Appendix B.

⁴ Draft Blueprint, p. 11-12.

identify appropriate datasets and to develop novel indicators that can be integrated into existing cumulative impacts screening approaches such as CalEnviroScreen."⁵ We recommend that community representatives be included in this consortium to provide input on research questions and goals and that this research be made available to the public. CARB should hold public meetings to present the research plan and questions and gather input and clearly explain how the results will be used in the community selection process.

- C. We recommend that CARB clearly identify other communities to be targeted and define actions and timelines. We appreciate that, in addition to providing the selection of communities for community emissions reduction programs and monitoring, CARB plans to "also include a description of near-term actions to be taken in communities not yet selected, to underscore efforts to reduce emissions and exposure in all heavily impacted communities."⁶ In this description, the communities to be targeted should be clearly identified, as should the actions to be taken and timelines.
- D. We request that CARB strive to minimize competition between communities and support community capacity-building and collaboration. A clear objective process for choosing communities, as described above, will help to better ensure fairness among communities.
- E. **Meaningfully consider rural pollution from agricultural, dairy, and livestock operations**. While we appreciate CARB's inclusion of rural sources of pollution as additional considerations in recommending communities to be selected in the first year of the program, we request that CARB do more to ensure that emissions from agricultural, dairy and livestock operations are meaningfully assessed and define specific data sources to be included in technical assessments.

In California, agriculture accounts for a significant portion of both greenhouse and air pollution emissions, including from fertilizer use, pesticide use, livestock enteric fermentation and manure⁷ and is of particular concern in rural regions. Agriculture's contribution to air pollution is, of course, even greater in regions of the state that contain the majority of irrigated agriculture and livestock operations. Agriculture also accounts for the majority of nitrous oxide emissions in California, primarily from fertilizer and manure added to the soil.⁸ Ammonia emissions are also of particular concern due to their propensity to react with other emissions in the atmosphere to create particulate matter (PM).⁹ Some estimates suggest that ammonia may

⁵ Draft Blueprint, Appendix B, p. 7-8.

⁶ Draft Blueprint, Appendix B, p. 10.

⁷ <u>https://www.arb.ca.gov/cc/inventory/background/ch4.htm</u>; INVENTORY OF U.S. GREENHOUSE GAS EMISSIONS AND SINKS: 1990–2016, EPA Ch. 5, 5-1 (2018), https://www.epa.gov/sites/production/files/2018-

^{01/}documents/2018_chapter_5_agriculture.pdf.; Zifei Liu et al., *Ammonia and Methane Emission Factors from Cattle Operations Expressed as Losses of Dietary Nutrients or Energy*, 3 AGRICULTURE 1, 1 (Feb. 23, 2017). ⁸ https://www.arb.ca.gov/cc/inventory/background/n2o.htm

⁹ Air Emission Sources, EPA, <u>https://www.epa.gov/air-emissions-inventories/air-emissions-sources</u> (last visited Apr. 27, 2018).

increase by 15 percent by 2030.¹⁰ In an estimated Ammonia Emissions Inventory conducted by CARB in 2000, cattle accounted for 32 percent of the state's ammonia emissions. In that same inventory, the San Joaquin Valley accounted for more than half of the state's beef and dairy ammonia emissions.¹¹ The San Joaquin Valley air basin is currently in nonattainment for PM 2.5 and eight-hour Ozone under federal standards.¹²

Rural sources of pollution coupled with additional criteria air pollutants and toxic air contaminants exacerbate public and environmental health hazards in already overburdened communities. In order to uphold the intent of AB 617, CARB must seek to ensure that contributing sources of pollution from irrigated agricultural, dairy, and livestock operations are incorporated in technical assessments by both air district and CARB staff.

II. CRITERIA AND REQUIREMENTS FOR COMMUNITY EMISSIONS REDUCTION PROGRAMS

- A. We appreciate the criteria and requirements for CERPs as described in Appendix C of the Draft Blueprint, and we agree that CERP emissions reduction targets should be "quantitative, specific, and measurable."¹³ As in our previous comments, we strongly recommend adding the following specific minimum baseline metrics as enforceable requirements for all CERPs.
 - All CERPs should result in substantial and quantifiable annual reductions that are above and beyond what is already required by existing law and regulations and ensure no net increase in criteria air pollutant and toxic air contaminant emissions.
 - a. Substantial, quantifiable annual reductions and no net increase in emissions AB 617 clearly states that "[t]he programs shall result in emission reductions in the community, based on monitoring or other data."¹⁴ CERPs must result in substantial emissions below existing levels. In the absence of monitoring data, CERPs should at least ensure no net increase in criteria or toxic emissions.¹⁵
 - b. *Require that CERPs result in emissions reductions each year.* We appreciate the inclusion of the implementation schedule in the CERP criteria and the five-year timeframe with immediate and three-year milestones.¹⁶ To ensure immediate

¹⁰ Alyssa M. McQuilling & Peter J. Adams, *Modeling Livestock ammonia Emissions in the United States: From Farms to Emissions to Particulate Matter*, CTR. FOR ATMOSPHERIC PARTICLE STUDIES 1 (2015), https://www.epa.gov/sites/production/files/2015-09/documents/mcquilling.pdf.

¹¹ Dr. Michael T. Benjamin, *Estimating Ammonia Emissions in California*, CARB (Sept. 28, 2000) (PowerPoint presentation).

¹² Ambient Air Quality Standards & Valley Attainment Status, SAN JOAQUIN VALLEY AIR POLLUTION CONT. DIST., <u>http://www.valleyair.org/aqinfo/attainment.htm</u>

¹³ Draft Blueprint, Appendix C, p. 13.

¹⁴ Cal. Health & Safety Code Sec. 44391.2(c)(5).

¹⁵ This is consistent with the mandates in Cal. Health & Safety Code Sec. 38570(b).

¹⁶ Draft Blueprint Appendix C.

emissions reductions and progress on a strict timeline, CARB should require air districts to demonstrate measurable reductions attributable to CERPs every year in their annual reports on implementation progress.

27-1

cont.

- c. Emissions reductions attributed to CERPs should be *above and beyond reductions already required by existing law and regulations*. This should be a bare minimum requirement of AB 617 implementation. CARB should clearly state that meeting existing standards and/or maintaining current programs within air districts is not sufficient to meet the mandates of AB 617. Many areas in the state are not in attainment of Clean Air Act standards; AB 617 should provide emissions reductions and improvements in air quality that meet and exceed Clean Air Act standards.
- 2. CERPs and the measures within them should be **consistent with priorities identified by community residents** through documented outreach and engagement processes.
- 3. All CERPs should include actionable metrics and timeframes for reductions from each significant stationary, mobile, indirect, and area source of criteria or toxic emissions in the selected communities.

These minimum requirements are consistent with AB 617 as well as Senate Bill (SB) 856, which was approved by the Governor on June 27, 2018 and provides incentive funding for early actions to complement the implementation of the Community Air Protection Program. Importantly, SB 856 specifically requires the following:

"As such, the funds shall be allocated for projects that are intended to benefit communities that the State Air Resources Board has selected or is considering for selection in future years pursuant that section.

(a) Funds shall be allocated to projects consistent with priorities identified by the affected community in a transparent, meaningful public process.

(b) Funds shall only be allocated to projects that will provide emission reductions that are in excess of those otherwise required by law or regulation."¹⁷

SB 856 also ties the incentive funding to "the rules and regulatory requirements that the State Air Resources Board and air districts have established or are in the process of developing to reduce or mitigate emissions from mobile and stationary sources in affected communities pursuant to Section 44391.2 of the Health and Safety Code."¹⁸

Thus, consistent with the requirements of AB 617 and the language of SB 856, CARB should

¹⁷ SB 856, Section 36 (approved June 27, 2018).

¹⁸ SB 856, Section 36 (approved June 27, 2018).

clearly define these minimum substantive requirements for all CERPs and require that they spell out, through actions to be taken, timelines, and enforcement mechanisms, how they will meet these metrics. This will provide a level of consistency statewide and provide a clear and transparent way to evaluate all CERPs and the Program overall.

- B. Add the health-based goals outlined below for all CERPs in addition to the above recommended minimum standards. We appreciate that health-based air quality objectives and community health indicators are discussed in the Draft Blueprint,¹⁹ but we recommend that CARB include more specific health-based goals as minimum baseline criteria for all CERPs. In Appendix C, the Draft Blueprint states two health-based objectives:
 - "Reducing exposure caused by local sources to achieve healthful levels of PM2.5 within the community.
 - Maximizing progress on reducing exposure to toxic air contaminants that contribute to the cumulative exposure burden."²⁰

While we agree with these objectives, we recommend stronger, more specific goals, as the core intent of AB 617 is to improve the health of communities impacted by air pollution.²¹

- Establish target cancer and noncancer health hazard goals and timelines for all California communities, such as those listed below. While the target goals would not have regulatory authority, they would provide concrete and measurable criteria for evaluation of the healthfulness of California's ambient air.
 - a. Cumulative cancer health risk from ambient air no higher than 100/million at any residence, park, or school, by 2025, including cancer risk attributable to diesel exhaust. Define "residence" to include publicly accessible locations where homeless people may sleep or spend time.
 - b. Cumulative cancer health risk from ambient air no higher than 50/million at any residence, park, or school, by 2030.
 - c. Cumulative noncancer health risk from ambient air no higher than 3 at any residence, park or school, by 2025.
 - d. Cumulative noncancer health risk from ambient air no higher than 1 at any residence, park, or school, by 2030.

¹⁹ Draft Blueprint, Appendix C, p. 4-5, and Appendix F, p. 26-27.

²⁰ Draft Blueprint Appendix C, p. 5.

²¹ Assembly Floor Analysis p. 9 (July 14, 2018); Senate Floor Analysis p. 12 (July 13, 2017); Senate Committee on Environmental Quality Analysis p. 11-12 (July 17, 2017).

- 2. Ensure that CERPs contain **new**, additional strategies to meet state and federal ambient air quality standards for criteria pollutants at sensitive receptors.
- 3. Ensure that CERPs contain **new**, additional strategies to reduce exposure to toxic air contaminants at sensitive receptors.
- C. In addition, we recommend that CARB take the following actions to complement and further the health-based goals above:
 - Track progress towards meeting the above health-based goals using an emissions inventory and modeling approach similar to the one used by South Coast Air Quality Management District (SCAQMD) in its Multiple Air Toxics Exposure Study IV (MATES IV) of health risks of ambient air in Los Angeles, to be updated at least every three years using the most current Office of Environmental Health Hazard Assessment (OEHHA) methodology for assessing health risks from toxic air contaminants.

Although CEJA recommends a methodology such as the MATES, we do not endorse all aspects of it. For instance, we note that communities such as the Eastern Coachella Valley were not included, and we strongly recommend that all communities be included in the emissions inventory and modeling.

- 2. Make data and maps from these analyses available to the public. The level of detail should allow residents to identify sources of pollution that contribute to health risks in their communities and to identify the magnitude of the health risk from major sources. Do not use population weighting in reporting results.
- 3. Use the results to further inform and develop other criteria and requirements for CERPs.
- 4. Establish a statewide advisory group to continue development of health goals, metrics, and timelines and to assess the progress of AB 617 in reducing health risks related to air quality in California communities. The group should function similarly to the EPA's Clean Air Scientific Advisory Committee (CASAC), and its purpose, role, and responsibilities should be clearly and explicitly defined. It should include individuals and organizational representatives that work directly in and with communities impacted by heavy air pollution, public health experts including researchers and academics, and community health providers. In addition, we suggest including and collaborating with staff from the OEHHA, Department of Public Health, and Office of Health Equity.
- D. Ensure that rural pollution from agricultural, dairy, and livestock operations are meaningfully assessed and addressed in CERPs. As discussed earlier in this comment letter, CARB must do more to ensure that pollution from these sources are included and meaningfully considered. The Draft Blueprint merely mentions rural sources of pollution, including those from agricultural

activities and fugitive dust, as additional considerations in the selection of first year communities²² but does not define how these specific sources will be addressed in CERPs and air monitoring plans. In addition to ensuring inclusion of these sources in technical assessments for year one community selections, CARB must require air districts to conduct air quality monitoring of these sources and enforceable strategies in CERPs to ensure reductions and no increases in any criteria or toxic emissions. CARB should also require the establishment of baseline emissions data from agricultural sources.

III. COMMUNITY STEERING COMMITTEES

- A. While we appreciate the intention of establishing Community Steering Committees to provide a structure and mechanism for community members to meaningfully engage in CERP development and implementation processes, we believe that communities, rather than CARB or air districts, should define the structure and process for their engagement.
- B. Community Steering Committees or alternative structures defined by communities should have real decision-making authority and a clearly defined role and responsibilities. We agree with CARB that: "Most importantly, underpinning AB 617 is the understanding that community residents must be active partners in envisioning, developing, and implementing actions to clean up the air in their communities."²³ To that end, community residents should have a genuine decision-making and oversight role over Community Emissions Reduction Plans (CERPs) in their communities rather than being advisory. To ensure that CERPs reflect and are consistent with the priorities that communities have identified, community approval, through Community Steering Committees or alternative structures, should be a required step in the CERP development and approval process.
- C. A supermajority of Community Steering Committee members or members of an alternative structure defined by the community should reside in the community. This will help ensure strong, authentic community representation and participation in the CERP development process.
- D. Allow Community Steering Committees or alternative structures to define their ongoing role and responsibilities after CERP approval and through the implementation process. If a selected community decides on an alternative to the Community Steering Committee, the alternative body should define their role and responsibilities for developing and approving the CERP as well as their ongoing review of implementation progress.
- E. **Provide financial and other resources to support community engagement and participation**. We agree that: "Building an effective community emissions reduction program will require

²² Draft Blueprint, p. 12.

²³ Draft Blueprint, p. 2.

consistent and frequent engagement with community members."²⁴ To facilitate community residents' participation on Community Steering Committees or an alternative structure, they should be compensated for their time and any associated travel, transportation, or other costs of participation. Attending meetings will require a significant commitment of time, resources, and energy, particularly for working people with families. CARB and air districts should provide assistance to minimize these barriers to participation.

F. **Provide technical assistance to Community Steering Committees or alternative structures**. This will help ensure that community members have adequate and accessible information to participate meaningfully. While air districts should provide community profiles and technical assessments of pollution sources and potential emission reduction measures, community members should have the ability to request additional information and analyses and to have the information presented in accessible formats. Assistance should include language translation and interpretation as needed.

IV. STRATEGIES TO REDUCE EMISSIONS AND EXPOSURE

As the intent and purpose of AB 617 is to reduce emissions in overburdened communities, the specific strategies to achieve that are of utmost importance. We offer the following comments and recommendations on specific emissions reduction measures that residents in some of the communities we work with have identified as priority measures to reduce emissions from the pollution sources in their neighborhoods. These are not meant to be comprehensive; CARB and air districts have the tools and resources to develop many other new rules and regulations not listed here that would further reduce air pollution and benefit our communities, and we strongly and wholeheartedly urge them to do so.

- A. **Speed up timelines for statewide actions in Appendix F and prioritize implementation in highly burdened communities.** We agree that CARB needs to take action on statewide measures in addition to CERPs as a necessary step to ensure emissions reductions and improved air quality across the state, including communities not selected for CERPs. We appreciate and commend CARB for including specific statewide strategies and upcoming actions in Appendix F, and we are pleased to see some that reflect the priorities in our communities. As described below, we recommend that CARB strengthen some of them, revise its timelines for faster action, and identify highly burdened communities for priority implementation.
 - Commercial Harbor Craft We support the strategy to amend the existing Commercial Harbor Craft regulation to include more stringent in-use and new vessel requirements for both freight-related and passenger vessels, and we also support prioritizing implementation in or near communities with high cumulative exposure burdens. We

²⁴ Draft Blueprint, Appendix C, p. 7.

recommend that CARB provide more clarity on what this prioritized implementation will look like and establish aggressive zero emissions targets and timelines for this measure.

- 2. Cargo handling equipment We support this measure to transition cargo handling equipment to zero emissions technology. We recommend that CARB include cargo handling equipment that operates at warehouses, logistics facilities, and similar freight-related facilities, in addition to ports. We urge CARB to consider an earlier timeline for this rule, given that the technology for zero emissions equipment is currently close to full commercialization.
- 3. Drayage trucks at seaports and railyards We support this measure to transition drayage trucks to zero emissions technology. We urge CARB to include drayage trucks that serve warehouses, logistics centers, and similar freight related facilities, as well as ports. We believe that the timeline for implementation of this measure could be shortened, given that commercialization of this technology is proceeding rapidly. We support prioritizing implementation in or near communities with high cumulative exposure burdens and request clarity from CARB on what this prioritized implementation process will look like.
- 4. Reducing idling for all railyard sources CARB states that this regulatory action will begin development in 2020 and implementation in 2023+.²⁵ We recommend that CARB develop and implement a regulation on this immediately, as there is sufficient information to act on.
- 5. Reducing emissions from locomotives not preempted under the Clean Air Act We support required "retrofit, repower, remanufacture, or replacement of freight and passenger locomotives" rather than "a voluntary agreement with the major railroads"²⁶ and recommend immediate implementation in the most highly impacted communities.
- 6. Chrome plating control measure We support amending and strengthening the current Airborne Toxic Control Measure (ATCM). Hexavalent chromium is a highly toxic substance, and emissions of even small amounts are a threat to public health. A stronger ATCM is urgently needed, and we urge CARB to set a short timeline for development and implementation of this measure. We urge CARB to require maximum pollution prevention, such as alternatives to hexavalent chromium. We also recommend that T-BACT for hexavalent chromium be as strong as possible and include the option of discontinuation of hexavalent chrome plating in locations in close proximity to homes or schools.

²⁵ Draft Blueprint Appendix F, p. 3.

²⁶ Draft Blueprint Appendix F, p. 4.

- Heavy-duty on-road and off-road engine in-use testing We recommend that CARB specify the "selected communities"²⁷ where this will be implemented, prioritizing those with high cumulative burdens from concentrations of heavy-duty truck traffic and goods movement activities.
- B. In addition to the actions described above and in Appendix F, we strongly urge CARB to act on the following statewide strategies:
 - 1. Coordinate with relevant implementing agencies such as the California Energy Commission and California Public Utilities Commission to ensure that electric vehicle and equipment charging infrastructure support the full transition to zero emission technologies, particularly for medium and heavy-duty trucks and cargo handling equipment, and target implementation in highly impacted communities. We are encouraged by the proposed statewide strategies to transition to zero emission technologies, as described in Appendix F and discussed in our comments above, as well as recent actions to support and prioritize zero emission technologies, including CARB's own Community Air Protection Funds Supplement to the Carl Moyer Memorial Air Quality Standards Attainment Program 2017 Guidelines approved in April 2018, Governor Brown's Zero Emission Vehicle Executive Order, and the language of SB 856. To build on these, CARB should ensure that it works to coordinate and collaborate with other agencies to support necessary and adequate electric vehicle charging infrastructure and prioritize implementation in communities with high cumulative burdens from concentrated truck traffic and goods movement activities.
 - 2. Ensure that all AB 617 related activities, funding, and regulatory decisions require zero emission solutions, and ensure that relevant permitting reflects this. Our communities have been clear and consistent in demanding zero emission solutions only. As the purpose and intent of AB 617 are to uplift overburdened communities, and, as quoted earlier in this comment letter, the language of SB 856 reflects that incentive funds for early actions should be "consistent with priorities identified by the affected community,"²⁸ CARB should uphold this. Requiring zero emission solutions builds upon the prioritization of zero emission technologies in recent actions, including, as mentioned above in this comment letter, CARB's Community Air Protection Funds Supplement to the Carl Moyer Memorial Air Quality Standards Attainment Program 2017 Guidelines approved in April 2018.

Zero emission technologies are increasingly available to replace transportation sources as well as electric generating resources. These types of technologies should be evaluated as alternatives to the continued use of fossil fuels in all permitting and other 27-2

²⁷ Draft Blueprint Appendix F, p. 7.

²⁸ SB 856, Section 36 (approved June 27, 2018).

regulatory decisions. Development of zero emission technologies to replace polluting technologies is an important way to provide communities with a just economic and environmental transition to a healthier, more sustainable future.

3. We continue to support comments submitted by the Center on Race, Poverty, and the Environment and related efforts led by our members to urge CARB to implement a statewide setback of 2,500 feet around all oil and gas wells. While some California municipalities have local surface setback requirements between oil and gas development and residences, schools, and other sensitive receptors, they are minimal and inadequate, and there are no such regulations at the state level.

For far too long, low income communities and communities of color, primarily in Los Angeles County and Kern County, have borne the severe health burdens of oil and gas extraction and production in our state. Studies have linked proximity to oil and gas wells to a host of health impacts, including increased risk of asthma and other respiratory illnesses, premature births and high-risk pregnancies, and cancer. Oil and gas extraction produces air toxics, including volatile organic compounds (VOCs) like benzene and formaldehyde, particulate matter (PM), and hydrogen sulfide.

CARB must directly regulate oil and gas operations in our state to adequately and meaningfully address the mandates and intent of AB 617 -- to reduce criteria air pollutants and toxic air contaminants in California's most burdened communities. As mentioned in the letter we submitted to CARB in May 2018, the implementation of a statewide setback for all oil and gas wells in the state is within CARB's legal authority.

- 4. CEJA supports comments submitted by Communities for a Better Environment regarding statewide and district rules to regulate oil refinery technologies and emissions. These include:
 - a. Prohibit refinery-level emissions increases.
 - b. Begin a plan for at least 80 percent phaseout of oil refineries by 2050.
- 5. Land Use and Transportation We appreciate CARB's consideration of land use and transportation strategies to reduce emissions and exposure in Appendix C, and we agree that "air quality officials have an important role to play as they work with city and county governments."²⁹ We commend CARB for recognizing this and for working to compile resources³⁰ as well as encouraging air districts through CERPs to engage with local agencies that implement and have direct authority over land use and transportation planning and permitting decisions.³¹ CEJA members and partners and

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27-2 cont.

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²⁹ Draft Blueprint Appendix C, p. 21.

³⁰ Draft Blueprint Appendix F, p. 19.

³¹ Draft Blueprint Appendix C, p. 21-23.

other organizations have worked for years with local authorities and land use processes to address disproportionate burdens in communities and to transform communities into green zones.³² The progress that community groups have made can be replicated in other communities and applied more broadly, and decisions related to air quality play a critical role in these transformations.

To further support and assist local land use planning efforts, we recommend that CARB take the following additional actions:

a. We request that CARB update its *Air Quality and Land Use Handbook* to ensure that it reflects the mandates of AB 617 as well as current tools and recommendations for applying cumulative impacts analysis. CARB should also require air districts to meaningfully consider and include these tools and recommendations in CERPs.

CARB's updated and additional guidance on utilizing and applying cumulative impacts analysis in land use and transportation planning and permitting should make clear that *cumulative impacts analysis should evaluate the true impacts of continuing to allow harmful pollution in overburdened communities*. Rather than assessing the impacts of a single source, CARB and air districts must consider the cumulative pollution burdens of multiple sources and other related factors in a community. For instance, while an individual facility may not violate its permits or other regulations, it is common in many of our communities for there to be a large number of polluting facilities in the area that produce a cumulative pollution burden.

To reduce the disproportionate and inequitable impacts of these high concentrations of local emissions, CARB should provide guidance on specific strategies to utilize and apply analyses of cumulative pollution burdens. Below is a nonexhaustive list of example strategies.³³

- i. Use CalEnviroScreen indicators to provide an analysis of existing environmental burdens in order to set the baseline conditions and metrics to improve.
- Use an analysis of cumulative pollution burdens in a specific community or census tract(s) to set strict emissions thresholds and deny permits when a potential new facility or expansion of an existing facility would

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 ³² CEJA Green Zones report: https://caleja.org/wp-content/uploads/2015/09/GREENZONES.2015.30MB.pdf
 ³³ CEJA has a forthcoming brown paper on CalEnviroScreen that provides an additional resource on cumulative impacts and suggested applications.
	increase total emissions and exceed the threshold for the defined area, even if the region as a whole would not become noncompliant.	T	
iii.	Set strict health-based community or census level exposure thresholds and deny permits when a potential new facility or expansion of an existing facility would increase exposure at sensitive receptors.		
iv.	Update criteria for approving or denying permits to facilities that could increase emissions in communities with high cumulative pollution burdens.		
v.	Include pollution burdens caused by indirect sources, such as increased truck traffic to a facility, in cumulative impacts analysis in applicable communities.	27-4 cont.	
vi.	Prioritize implementation and/or targeted enforcement activities in areas with high cumulative pollution burdens.		
vii.	Limit new facilities and expansion of existing facilities in close proximity to disadvantaged communities.		
viii.	Echoing our March 2018 comments, explore other ways to limit, oppose, or disincentivize projects that would result in increased emissions in a specified community area. For example, CARB should withhold relevant funding to local jurisdictions that continue to allow new siting and permitting or expansions of incompatible land uses.		

b. We request that CARB require all CERPs to demonstrate consistency with the goals and intent of SB 1000 (Leyva), passed in 2016. We appreciate CARB's reference to SB 1000 and to our CEJA SB 1000 Toolkit: Planning for Healthy Communities,³⁴ and we recommend that CARB ensure that CERPs be consistent with the following aspects of SB 1000:

"(A) Identify objectives and policies to reduce the unique or compounded health risks in disadvantaged communities by means that include, but are not limited to, the reduction of pollution exposure, including the improvement of air quality, and the promotion of public facilities, food access, safe and sanitary homes, and physical activity.

(B) Identify objectives and policies to promote civil engagement in the public decision-making process.

³⁴ Draft Blueprint Appendix C, p. 21, and Appendix F, p. 19.

(C) Identify objectives and policies that prioritize improvements and programs that address the needs of disadvantaged communities.³⁵

- C. Require air districts to implement prescribed emission reduction measures. CARB should provide a list of specific prescriptive strategies to reduce emissions and exposure in selected communities and require air districts to implement them based on the sources located in their jurisdictions. These should be the strongest possible, most stringent measures to ensure the highest possible, most ambitious level of reductions. CARB should specify that air districts begin implementation immediately and not wait for CERPs to be developed and approved.
 - 1. As stated previously in this comment letter, CEJA supports the comments submitted by Communities for a Better Environment recommending that CARB direct air districts to develop and implement the following new rules for refineries:
 - a. **Replace low and medium efficiency refinery boilers & heaters, add retrofits, and improve maintenance** (achieves NOx, SOx, GHG reductions, more).
 - b. Require best catalytic cracking unit PM and PM precursor (SOx, NOx) control technology (e.g., wet scrubbers) at all refineries.
 - c. Prohibit air districts from granting in-basin particulate matter (PM) pollution trading credits and instead require PM emissions limits and reductions.
 - 2. CARB should **provide guidance and support to air districts to develop and implement new rules to regulate indirect sources**. Our March 2018 comments include examples of indirect source rules.
 - 3. As stated previously, CARB must ensure that air districts meaningfully incorporate and address emissions from agricultural, dairy, and livestock operations. CARB should require air districts to include enforceable strategies in CERPs to ensure reductions and no increases in any criteria or toxic emissions from these sources.
- D. Technology Clearinghouse We believe that the Technology Clearinghouse, as CARB has noted, will be a helpful tool in both the development of the CERPs as well as the BARCT determinations. In particular, Phase II will provide important information about zero emission technologies as well as the most stringent technologies. We will continue to follow this process as it moves forward and have a few general comments here.
 - We request that the implementation of Phase II prioritize refinery equipment and technologies, as these are the largest emissions sources in the state and would account for

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³⁵ Cal. Government Code § 65302(h)(1).

most of the total reductions from control technologies. The information for Phase II should be included in the tool as soon as possible so as not to delay CERP or BARCT decisions. The 2020 timeline may be too late for communities selected in the first and second years of the Program and for facilities that could upgrade equipment or technologies in the meantime.

- 2. In addition, we request that efforts be made to **ensure that the clearinghouse is as comprehensive as possible** and that it look beyond California to include cleanest available practices and technologies in other states and parts of the world.
- 3. Finally, we request a concrete and a specific timeline for when Phase II will be completed for specific source technologies. This increased transparency will help ensure that communities and regulators are looking at the most up-to-date information.

V. CARB OVERSIGHT: REVIEW AND APPROVAL OF COMMUNITY EMISSIONS REDUCTION PROGRAMS AND ONGOING IMPLEMENTATION PROGRESS

We appreciate the Draft Blueprint's inclusion of ongoing Community Air Protection Program review in Appendix A³⁶ as well as annual review processes and requirements for CERPs for both initial approval and ongoing implementation progress in Appendix C.³⁷ We request that CARB provide more specific details and clarity about the review processes and standards in order to ensure transparency and meaningful oversight.

CARB has a duty under AB 617 to provide oversight and approval of the CERPs. In particular, AB 617 sets forth clear requirements for CARB approval of the program. Specifically, AB 617 requires that:

"The community emissions reduction programs shall be submitted to the state board for review and approval within 60 days of the receipt of the program. Programs that are rejected shall be resubmitted within 30 days. To the extent that a program, in whole or in part, is not approvable, the state board shall initiate a public process to discuss options for achievement of an approvable program. Concurrent with the public process to achieve an approvable program, the state board shall develop and implement the applicable mobile source elements in the draft program to commence achievement of emission reductions."³⁸

AB 617 also details some of the minimum requirements of an approvable plan:

³⁶ Draft Blueprint Appendix A, p. 7.

³⁷ Draft Blueprint Appendix C, p. 31-35.

³⁸ Cal. Health & Safety Code § 44391.2(c)(4)

"The community emissions reduction programs shall be consistent with the state strategy and include emissions reduction targets, specific reduction measures, a schedule for the implementation of measures, and an enforcement plan.³⁹

The programs shall result in emissions reductions in the community, based on monitoring or other data."40

To ensure that the plans are on track, AB 617 includes a regular reporting requirement: "A district encompassing a location selected pursuant to this subdivision shall prepare an annual report summarizing the results and actions taken to further reduce emissions pursuant to the community emissions reduction program."⁴¹

Consistent with these mandates in the legislation, we recommend the following:

- A. Include our recommended statewide baseline minimum standards as requirements that CERPs must include to be approved. We appreciate the Checklist for CERP Evaluation in Appendix C.⁴² This list, however, does not provide clear minimum substantive requirements that a CERP must meet for approval. Rather, the list in Appendix C only requires air districts to specify, describe, and identify what is included within the plan. Without more direction about the minimum threshold that these plans must meet, it is not clear what constitutes an approvable plan. CARB should include the statewide baseline minimum standards recommended above as criteria by which CERPs will be evaluated. The checklist should include the following benchmarks:
 - 1. Emissions reduction targets must include enforceable requirements and health-based goals.
 - 2. CERP must result in substantial and quantifiable emissions reductions and no net emissions increase in the community.
 - 3. CERP emissions reductions must be above and beyond existing rules and regulations.
 - 4. CERP and measures within it must align with community priorities.
 - 5. CERP must have a plan to document reduced emissions each year and attribute emissions reductions to specific measures, actions, or components of the CERP.
 - 6. CERP must be designed with specific strategies to meet the health-based goals and requirements.
- B. Provide clear and specific criteria and processes for both approval and annual review of implementation progress of CERPs. As these are the main mechanisms for CARB to exercise its oversight authority, we request more specificity to ensure accountability and progress on implementation.

³⁹ Cal. Health & Safety Code § 44391.2(c)(3).

⁴⁰ Cal. Health & Safety Code § 44391.2(c)(5).

⁴¹ Cal. Health & Safety Code § 44391.2(c)(7).

⁴² Draft Blueprint Appendix C, p. 37-42.

Although CARB states that it will conduct an approval process for CERPs and review annual reports of progress on implementation, the Draft Blueprint does not describe the procedures or details of these review processes. We agree that, pursuant to AB 617, "CARB's responsibility is to ensure that community emissions reduction programs have been designed with sufficient rigor and technical foundation to deliver the needed community benefits."⁴³ Yet there are no clear requirements of what this approval process will include. The description in Appendix C includes some general ideas of what "may" be required during review, but it does not include a description of what will be required, and there is no specification of when CARB will not approve a CERP.

AB 617 contemplates that the approval review will occur in a public process.⁴⁴ The Draft Blueprint does not describe how this public process will be conducted. Rather, CARB states its commitment to work with air districts and community steering committees, but this does not explain exactly what CARB's approval process will look like and how the public will be able to participate. This is not consistent with AB 617, which clearly requires plans to be consistent with law and the statewide strategy that CARB sets forth.

In addition, the Draft Blueprint does not describe the procedures for its review of annual progress reports. As CARB correctly notes, AB 617 also specifies that air districts "shall prepare an annual report summarizing the results and actions taken to further reduce emissions pursuant to the community emissions reduction program."⁴⁵ These reports provide the main mechanism for tracking progress of CERPs. The Draft Blueprint states that "Annual reports must be made available to the public no later than October 1 of every year after community emissions reduction program implementation begins"⁴⁶ and further specifies process requirements for air districts to present annual progress reports, but it does not specify CARB's review process. Rather, it simply states that "CARB staff will report to CARB's Governing Board on key community emissions reduction program milestones, including emissions reductions and regulatory action."⁴⁷

We urge CARB to spell out the details of its review processes to provide transparency and accountability as well as opportunities for public engagement at the statewide level.

 For CERP approval, CARB should define the public review and approval process. At minimum, the CERP should be presented and decided on in a public CARB Governing Board meeting, and the public should be given the opportunity to comment. CARB staff should present the recommendation related to approval of the CERP with a written explanation that clearly evaluates how the CERP meets requirements. CARB should

⁴³ Draft Blueprint, Appendix C, p. 31-32.

⁴⁴ Cal. Health & Safety Code § 44391.2(c)(4).

⁴⁵ Cal. Health & Safety Code § 44391.2(c)(7).

⁴⁶ Draft Blueprint Appendix C, p. 35.

⁴⁷ Draft Blueprint Appendix C, p. 35.

consider using a scoring system or rubric to make the decision clear, objective, and transparent.

- 2. For annual review, CARB should provide written evaluation of whether a CERP is meeting its requirements.
- 3. If a CERP does not meet its annual metrics, CARB should provide a process to consider what steps to take to ensure that the CERP meets the timeline as soon as possible. CARB should evaluate options in a public process, and the options should include CARB stepping in.⁴⁸ CARB should also consider enforcement and penalty options, including withholding relevant funds from an air district that is not meeting its requirements.
- C. Provide clear and specific information on additional review and evaluation procedures and include all relevant materials in annual progress reports on CERP implementation. Appendix A states that "CARB will also conduct outreach to communities to obtain detailed perspectives on [Community Air Protection] Program progress and success. This could include surveys to solicit community perspectives to supplement air district reports, CARB community meetings, and other activities."⁴⁹ We appreciate this intention and recommend that CARB provide clear and specific steps to be taken. In particular, the results from surveys of community perspectives and community meetings should be well documented and included in annual reports to the CARB Governing Board as part of overall Program and annual CERP review processes.

VI. EMISSIONS REPORTING REQUIREMENTS

CEJA supports the comments submitted by Environmental Health Coalition on Proposed Regulation for Criteria Pollutant and Toxic Air Contaminant Emissions Reporting, submitted on June 29, 2018. In addition, we emphasize the following two points.

- A. CARB should **connect emissions reporting requirements to cumulative impacts analysis in CERPs** to support and supplement existing data and tools. A consideration should be that some communities have high concentrations of multiple sources, including small stationary sources and indirect sources, and all of them should be included in emissions reporting data.
- B. We also request **independent review of facility reporting** to ensure that facilities are accurately reporting current baselines. Currently, refineries report their own emissions and can set their own baselines, which has resulted in data manipulation. To ensure accuracy, CARB should require independent analysis.

⁴⁸ Cal. Health & Safety Code § 39002.

⁴⁹ Draft Blueprint Appendix A, p. 7.

CONCLUSION

We appreciate the opportunity to comment and look forward to continuing to work with CARB to ensure significant emissions reductions and improvements in air quality in our communities and many others across California. Please do not hesitate to contact Stephanie Tsai at stephanie@caleja.org with questions or to discuss any of this further.

Sincerely,

Stephanie Tsai California Environmental Justice Alliance

Allen Hernandez Center for Community Action and Environmental Justice

Paulina Torres Center on Race, Poverty, and the Environment

Julia May Communities for a Better Environment

Joy Williams EHC

Veronica Garibay Leadership Counsel for Justice and Accountability

Martha Dina Arguello PSR-LA



July 23, 2018

Mss. Karen Magliano and Veronica Eady California Air Resources Board 1001 I Street Sacramento, CA 95814

CC: Mr. Kurt Karperos Mr. Richard Corey California Air Resources Board Members

RE: San Joaquin Valley Recommendations for Implementation of Assembly Bill 617

Dear Ms. Magliano and Ms. Eady,

On behalf of the San Joaquin Valley AB 617 Environmental Justice (EJ) Steering Committee and allies, we respectfully submit the following comments regarding the Draft Community Air Protection Blueprint (Draft Blueprint).

I. Community Steering Committee

<u>Committee</u> Structure: We appreciate the California Air Resources Board (CARB)'s incorporation of the community steering committee concept in the Draft Blueprint. While our regional EJ Committee discussed many different formulations for potential steering committee structures, the principle of democracy stood out as the loudest item of consensus. We believe communities chosen under AB 617 should determine the makeup of their steering committee and

its processes and procedures through a democratic process, rather than a process that relies on air districts or other outside groups. So as to strengthen CARB's proposal, we offer the following suggestions:

- **A.** Within 30 days of community selection, Air Districts and CARB hold a public meeting in selected geography to notify the community and give them an opportunity to discuss the concept of a steering committee and its many potential iterations. Air districts should be required to work with community-based organizations (CBOs) to select dates and engage in outreach.
- **B.** Within 30 days of initial meeting, Air Districts and CARB hold 2nd meeting whereby community residents vote on their preferred committee structure and process.

Based on our regional committee's many conversations about the potential makeup of the community steering committees, we propose two options to be presented to communities. These options include (1) a direct democracy whereby individuals from the selected area, those who own a business in the selected area, and environmental justice advocates that represent the area have one vote each on the steering committee, and (2) a representative democracy whereby community residents, those who own businesses in the selected area, and the environmental justice community nominates and votes for their chosen representatives to serve on the steering committee. These options are illustrated below.



In addition to the proposal for democratically-elected committees rather than District-convened committees, we also suggest:

- **A.** Local government, land-use agencies, CARB, the District, and public health officials a are included on the steering committee but given an ex officio status;
- **B.** Community residents remain the majority on the steering committee; and
- **C.** Community-based environmental justice organizations are included in the process. Having representation on the local steering committees of EJ advocates with a track record of working locally with disadvantaged communities is essential. Most community members are not familiar with the terminology commonly used by regulatory staff and lack the foundational knowledge many regulated entities and advocates have. Including EJ representatives will ensure community members have the support and guidance needed to decipher and navigate the air monitoring and emission reduction planning processes. We propose EJ organizations are defined as "groups whose primary mission and goal are to work with and for communities that face a disproportionate burden of environmental pollution and seek ways to create a healthier environment for these communities."

<u>Cultural Competency that Ensures Public Participation:</u> Equal language access must be guaranteed in order to ensure meaningful participation. Interpretation at every meeting should be provided without imposing the burden on non-English speakers to request it before each meeting. Translation of all materials including notes and planning documents and supporting information should also be provided. Additionally, the agencies should make information available in different ways, including a dedicated website for each community along with more conventional paper mailings, local print, radio and television media - as is determined appropriate by committee members - to ensure all community members have access to relevant information. A website alone is not sufficient, especially for residents that may lack home computers, wifi, or easy access to either. Specifically, in Table 1, Public Outreach, the table should include a variety of ways to inform and educate community members (i.e. distributing information among EJ groups, faith-based groups, schools, etc.).

<u>Minimum Requirements for Community Meetings</u>: The following should be minimum requirements for community meetings:

- **A.** Public workshops and community meetings must be participatory and encourage and give time for comments and discussion;
- **B.** Evening-time workshops (5:30-8 pm), preferably with food and childcare provided;
- **C.** Workshops held in the community, preferably at community centers, schools or churches with on-site parking;

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- **D.** Meeting materials and interpretation services provided in Spanish and/or other threshold languages from the community where planning is anticipated; and
- **E.** Meeting materials provided 5-7 days in advance.

<u>CERP Approval & Implementation Process</u>: With respect to the community emission reduction program (CERP) approval process, the steering committee should vote on and approve the CERP and there should be an opportunity for public review and comment prior to Air District and CARB approval. Steering committees should also lead all implementation activities including CERP implementation and development and deployment of air monitoring systems. This includes all oversight of all air district and CARB activities related to CERP implementation and air quality data gathering through regular ongoing meetings and the creation of opportunities for public review and comment.

II. Agriculture

Agriculture accounts for a significant portion of both greenhouse and air pollution in the form of manure and enteric emissions from livestock and the application of fertilizers and pesticides. The San Joaquin Valley in specific accounts for more than half of the state's beef and dairy ammonia emissions and two-thirds of the state's 209 million pounds of pesticide application. While we appreciate CARB's inclusion of rural sources of pollution as additional considerations in defining communities to be recommended in the first year of the program, CARB must ensure that emissions from agriculture are meaningfully assessed and incorporated throughout the 617 process.

46 pesticides, including many fumigants that are carcinogenic and drift-prone, are classified as Toxic Air Contaminants (TACs) in California. Dairies produce TACs and emit ²/₃ of the Valley's ammonia emissions, a key precursor to particulate matter (PM). According to a new study led by the University of California, Davis, agricultural fields - especially fertilized soils in the Central Valley region - contribute between 25 and 41 percent of the NOx emissions in California, a key component of ozone. Despite the significant contribution of agricultural operations to air pollution in California, very little is included in the Draft Blueprint that addresses agriculture.

In order to uphold the intent of AB 617, we urge CARB to use its authority to ensure pesticide-related volatile organic compounds (VOCs) and toxic air contaminants (TACs), NOx from fertilizers and animal livestock, and TACs, VOCs, and ammonia from livestock are monitored as part of the community monitoring process, reduced through community emission reduction programs (CERPs), and included in CARB's statewide actions. Specifically, we suggest that CARB:

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- Require the establishment of baseline emissions data from agricultural sources at a facility or farm-level;
- Incorporate agricultural emissions in technical assessments by both Air District and CARB staff;
- Require Air Districts to conduct air quality monitoring of these sources;
- Include enforceable strategies in CERPs to ensure reductions and no increases in any criteria air pollutant or TAC from those sources; and
- Ensure these sources are addressed by statewide action strategies.

There are agricultural solutions that can bring health, environmental and productivity co-benefits to local populations. The UN Special Rapporteur's report to the 16th Session of the UN Human Rights Council, Agroecology and the Right to Food, which is an extensive review of recent scientific literature, concludes that growing food using agroecological practices is highly productive and, if sufficiently supported, could double food production in entire regions within 10 years while mitigating climate change and alleviating rural poverty.¹ CARB should use its authority over toxic air contaminants and oversight over Districts to help alleviate public health harms associated with livestock operations and the use of pesticides and fertilizers.

III. Oil and Gas

For far too long, low-income communities and communities of color, primarily in Los Angeles County and Kern County, have borne the severe health burdens of oil and gas extraction and production in our state. Studies have linked proximity to oil and gas wells to a host of health impacts, including increased risk of asthma and other respiratory illnesses, premature births and high-risk pregnancies, and cancer. Oil and gas extraction produces air toxics, including volatile organic compounds ("VOCs") like benzene and formaldehyde, particulate matter ("PM"), and hydrogen sulfide. We therefore continue to urge CARB to implement a *statewide setback of 2,500 feet around all oil and gas wells*. While some California municipalities have local surface setback requirements between oil and gas development and residences, schools, and other sensitive receptors, they are minimal and inadequate, and there are no such regulations at the state level. CARB must directly regulate oil and gas operations in our state to adequately and meaningfully address the mandates and intent of AB 617 -- to reduce criteria air pollutants and toxic air contaminants in California's most burdened communities. As mentioned in the letter submitted by the Center on Race, Poverty and the Environment to CARB in May 2018, the

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¹ De Schutter O. 2011. "Agroecology and the Right to Food." United Nations Special Rapporteur on the Right to Food. A/HRC/16/49.<u>http://www.srfood.org/index.php/en/component/content/article/1174-report-agroecologyand-the-right-to-food</u>

implementation of a statewide setback for all oil and gas wells in the state is within CARB's legal authority.

IV. Land Use

- Land Use Regional Convening: We suggest and would appreciate if CARB organized public regional convenings with local government and transportation agencies to share land-use tools, resources and strategies. We believe it is not enough to put together a website and hope these local agencies will use them. Rather, CARB should invite agencies and create a safe, non-confrontational space to encourage the use of these resources and encourage dialogue among local entities and community residents. Additionally, such a convening would be a great opportunity to provide concrete things cities and counties can do to implement the Environmental Justice requirements of SB 1000.
- <u>Disincentives:</u> CARB and local air districts should use their permitting authority to prevent, where possible, and discourage local land uses and permitting decisions that contravene State Implementation Plans, the goals of AB 617, and the goals stated in the California 2030 Greenhouse Gas Scoping Plan.
- <u>CEJA Land Use Recommendations</u>: In addition, we support and recommend the suggestions regarding land use that are laid out in the California Environmental Justice Alliance (CEJA)'s letter on the Draft Blueprint.

V. Funding

Assembly Bill 398 (E. Garcia, 2017) declares it the intent of the Legislature that moneys appropriated from the Greenhouse Gas Reduction Fund (GGRF) are prioritized to projects that produce air toxic and criteria air pollutant reductions, among other benefits. It also states that the State Air Resources Board should design greenhouse gas emissions reduction measures in a manner that maximizes environmental co-benefits and complements the state's efforts to improve air quality, among other priorities. Following from this, communities should be made aware of the wealth of programs emanating from the Greenhouse Gas Reduction Fund. Not only does CARB have access to GGRF funds within their mobile source programs, but cities and organizations have access to low-income energy efficiency and renewable energy projects, urban greening and urban forestry programs, and active transportation facilities. By bringing these options to the local community steering committees, and allowing community members and other organizations the opportunity to propose and elect projects, community plans could leverage pre-existing funding programs for the benefit of air quality and public health.

In addition, CARB should set up an audit schedule of all 617-related funded to ensure monies are used in a way consistent with community feedback and that equipment once installed is continuously used over time.

VI. Air Monitoring

Each of the three largest Air Districts (SCAQMD, SJVAPCD, BAAQMD) have existing technology and expertise that would allow the launch of fenceline and community air monitoring to start sooner than July 2019. Giving them 4 to no more than 6 months should be enough time.

SPECIFIC LANGUAGE IN THE DRAFT BLUEPRINT:

• VI. Public Engagement (page 9)

EJ advocates have expressed that it is important for CARB to put in place mechanisms to hold Air Districts accountable. We suggest a bullet is included that summarizes this common theme.

• VII. Selection of Communities, Step 2 - Assessment of the Cumulative Air Pollution (page 11)

The bullet point that describes "Sensitive Populations" needs to more clearly define "close proximity." We suggest that distance be clearly notated in conventional feet, yards or miles. Define the term "sensitive populations" more specifically. In addition, CARB should describe how the six factors discussed are weighted in assessing cumulative air pollution exposure burdens.

• VII. Selection of Communities, Step 3 - Selection of First Year Communities (page 12)

The bullet that states "Rural Sources of Air Pollution" must be more specific regarding agricultural emission sources including pesticides, fertilizers and fumigants, along with fugitive dust, diesel, methane, black carbon and VOC's. Clearly define the term "agricultural activities within that context."

• VII. Requirement for CERPs - Implementation Strategies (page 15)

The bullet that describes "Measures to mitigate the impacts of ongoing air pollution..." should develop various recommendations for incentive programs specific to local sources as they are identified. Examples include incentive programs for schools, small businesses, and low-income homes to support energy efficiency, indoor air quality improvement, vehicle programs such as EFMP and CVRP.

We appreciate the effort CARB staff has already made to include the community in the development of this important program and we thank you for considering the San Joaquin Valley's AB 617 Environmental Justice Steering Committee's recommendations.

Dolores Barajas-Weller Central Valley Air Quality (CVAQ) Coalition

Nayamin Martinez Central California Environmental Justice Network (CCEJN)

Tom Helme, Valley Improvement Projects (VIP)

Veronica Garibay Leadership Counsel for Justice and Accountability

Caroline Farrell Center on Race, Poverty and the Environment (CRPE)

Keith Nakatani, Clean Water Action

Bradley Angel, Greenaction for Health and Environmental Justice *Yolanda Park* Catholic Charities Diocese of Stockton

Kevin Hamilton, RRT Central California Asthma Collaborative (CCAC)

Rey Leon Valley Latino Environmental Advancement Project (Valley LEAP)

Joel Ervice Regional Asthma Management and Prevention (RAMP)

Baldwin Moy, Madera Coalition for Community Justice

Sarah Aird, Californians for Pesticide Reform

Miguel Alatorre Jr. El Pueblo Para el Aire y Agua Limpia



CREATING GOOD JOBS, A CLEAN ENVIRONMENT, AND A FAIR AND THRIVING ECONOMY

July 19, 2018

California Air Resources Board AB 617 Draft Blueprint

Dear Colleagues,

The BlueGreen Alliance is pleased to provide initial comments on the AB 617 Draft Blueprint, which provides a framework for mitigating emissions of toxic air contaminants and PM 2.5 in California's most polluted communities. We are continuing to gather input from our labor and community partners regarding the Blueprint. In general, however, we believe that AB 617 represents an important and long-overdue initiative, and we stand behind the principles of environmental justice on which it was established.

At the same time, there are a number of considerations that we believe would strengthen the Blueprint and the effectiveness of AB 617. These include the role that labor can play in helping to identify the pollution reduction technologies contemplated under AB 617, known as Best Available Retrofit Control Technologies (BARCT), as well as the role of a trained and skilled workforce role in ensuring the success of these technologies through proper installation, operation and maintenance.

We also believe that the analyses performed for various BARCTs should consider the potential implications on worker safety and health. While it is difficult to anticipate what those effects might be at this time, we are certainly aware of well-intentioned and appropriate pollution control measures that ended up introducing new workplace hazards, primarily because the work environment was not included in the evaluation of those measures.

Finally, the AB 617 Draft Blueprint would benefit by including a discussion of the hierarchy of hazard controls analysis and inherent safety measures that are required of petroleum refiners under the newly adopted Process Safety Management (PSM) and Accidental Release Program (Cal/ARP) regulations. Inherent safety is akin to pollution prevention, as compared to end-of-pipe strategies, which are often less effective and can ultimately be more costly.

For these and other reasons, we believe the Draft Blueprint and the AB 617 stakeholder process would benefit from the input of organized labor and of occupational safety and health and process safety experts.

We've summarized a number of our concerns below and would welcome the opportunity to discuss each of these with ARB.

1) The role of apprenticeship in ensuring a trained and skilled workforce.

- ARB's Draft Blueprint describes new requirements where industrial facilities will be required to install BARCTs to drive down emissions of air pollutants.
- There is no substantive discussion of how this work should be performed, which potentially opens the door for some facilities to seek out lower-bid contractors with poor safety and health records, both within and from outside California.
- The Draft Blueprint would benefit from language pertaining to the importance of a skilled and trained workforce—as established through the state's apprenticeship programs, for example—in the installation, operation and maintenance of BARCTs.
- California's process safety management (PSM) regulation for petroleum refineries (CCR General Industry Safety Order §5189.1) requires that "when selecting a contractor, the refinery employer shall obtain and evaluate information regarding the contractor's safety performance, including programs used to prevent employee injuries and illnesses, and shall require that its contractors and any subcontractors use a skilled and trained workforce pursuant to Health and Safety Code Section 25536.7."

2) The role of organized labor in BARCT decision-making and implementation.

- Organized labor is not listed as a stakeholder in the AB 617 outreach plan, and yet several unions have expertise in various aspects of BARCTs.
- This includes knowledge about the selection of BARCTs as well as the technical skills necessary to provide for the appropriate installation, operation and maintenance of BARCTs, as noted above, and the training necessary to ensure that workers with those skills are in the pipeline to effectively perform BARCT-related work in coming years.
- The Draft Blueprint would benefit from language pertaining to the role of the labor in developing and evaluating BARCT options and in the role of technical training that underpins the long-term effectiveness of BARCTs.

3) Effects on employment.

- BARCTS that are required under AB 617 could be beneficial for California workers, increasing the demand for new skills, apprenticeship training, and expanded employment opportunities.
- On the other hand, some companies might argue that jobs could be jeopardized if certain BARCTs go forward. This could end up placing workers and unions at odds with some of the objectives of AB 617.
- The Draft Blueprint would benefit from language pertaining to the need to understand the range of potential effects of BARCTs on employment in the most highly affected sectors.

4) Worker safety and health hazards

- In general, the intensity, frequency and duration of workplace exposures to hazardous chemicals are higher compared to exposures that occur in the community, so the health risks—including among women of reproductive age—are generally greater.
- New regulations to reduce air pollution can sometimes worsen worker safety and health hazards. For example, when ARB phased-out the use of chlorinated solvents from aerosol degreasing products in the automotive repair shops (because they were a hazardous air contaminant), some solvent manufacturers responded by introducing hexane as an alternative degreasing agent. Hexane causes nerve damage among exposed workers. The solvent industry's decision resulted in several automotive repair workers becoming disabled or otherwise affected with hexane-induced peripheral neuropathy, a disabling nerve disease characterized by a progressive loss of sensory and motor function in the limbs.
- Similarly, introducing new kinds of scrubbers into emissions systems can introduce new workplace safety and health hazards for maintenance workers, including confined space entries, if those hazards are not addressed at the design or installation phase.
- The Draft Blueprint would benefit from additional language requiring ARB to include an assessment of the potential impacts on worker safety and health of BARCTs that a selected for implementation.

5) Inherent Safety Measures

• The state's new refinery process safety management (PSM) regulations (CCR General Industry Safety Order §5189.1) that went into force on October 1,

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32-3

2017 require refiners to implement inherent safety measures to "the greatest extent feasible." The regulations describe inherent safety as an "approach to safety that focuses on eliminating or reducing the hazards associated with a set of conditions."

- Under the PSM regulations, an industrial process is inherently safer if "it eliminates or reduces the hazards associated with materials or operations used in the process, and this elimination or reduction is permanent and inseparable from the material or operation." Inherently safer systems are more effective (as well as more resilient and enduring) compared to safety systems that "surround" industrial hazards with passive, active or procedural safeguards.
- In pollution-reduction technologies, source reduction strategies (e.g. pollution prevention) would be considered an inherent safety approach, as compared to end-of-pipe approaches.
- The Draft Blueprint would benefit from a discussion of the hierarchy of hazard controls and inherent safety measures that are now required under the state's PSM regulations might apply in the context of BARCT.

We would be happy to discuss each of these items with ARB.

Sincerely,

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Michael P. Wilson, Ph.D, MPH National Director Occupational and Environmental Health

1300 Godward Street NE, Suite 2625 Minneapolic, MN 55413 32-3 cont.

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July 23, 2018

California Air Resources Board 1001 I Street Sacramento, CA 95814

RE: CEJA Comments on Draft Community Air Protection Blueprint

To the California Air Resources Board:

The California Environmental Justice Alliance (CEJA) respectfully submits these comments regarding the Draft Community Air Protection Blueprint (Draft Blueprint) released in June 2018.

CEJA is a statewide coalition of grassroots community-based organizations working to advance environmental justice in state policy. Our members work across California in low-income communities and communities of color that are disproportionately burdened by air pollution and suffer from the severe negative health impacts.

We appreciate the work of CARB staff to develop this Draft Blueprint, and we are pleased to see some of our previous recommendations reflected in it. We offer these comments to supplement our previous comments submitted in March 2018 and October 2017. In addition, we agree with and support comments submitted by our member and partner organizations.

SUMMARY OUTLINE OF COMMENTS

Our communities are breathing some of the most polluted air in California and the U.S.¹ and are bearing the severe health, social, and economic costs. The core purpose and intent of Assembly Bill (AB) 617 is to produce real, significant emissions reductions and better air in our neighborhoods – this is the bottom line requirement for the Community Air Protection Program overall. We offer our comments and recommendations with the aim of ensuring effective implementation, community participation and

¹ "California Metropolitan Areas among Top Ten most impacted by air pollution in the US" from American Lung Association 2018 State of the Air report: <u>http://www.lung.org/local-content/california/documents/state-of-the-air/2018/sota-2018 ca___most-polluted.pdf</u>

decision-making, and CARB oversight authority over air districts in order to accomplish this bottom line objective of emissions reductions.

We note that this comment letter is not organized in order of priority or intended to be exhaustive. We recommend several specific regulatory measures because they have been identified by residents in the communities we work with as high priority strategies to address the pollution in their neighborhoods. These measures are not intended to constitute a comprehensive list of strategies or actions to be taken, and we strongly urge and support the development of additional rules and regulations by CARB and air districts to reduce emissions.

- I. Community Selection
 - 1. Provide a clear and specific process for how the community assessments will be used to recommend communities for selection.
 - 2. Include community representation and a public process for the research consortium.
 - 3. Clearly identify other communities to be targeted and define actions and timelines.
 - 4. Minimize competition between communities and support community capacity-building and collaboration.
 - 5. Meaningfully consider rural pollution from agricultural, dairy, and livestock operations.
- II. Criteria and Requirements for Community Emissions Reduction Programs
 - 1. Require specific minimum baseline metrics for all community emissions reduction programs (CERPs).
 - a. Require that all CERPs result in substantial and quantifiable annual reductions that are above and beyond what is already required by existing law and regulations and ensure no net increase in criteria air pollutant and toxic air contaminant emissions.
 - b. Require that all CERPs and the measures within them be consistent with priorities identified by community residents through documented outreach and engagement processes.
 - c. Require all CERPs to include actionable metrics and timeframes for reductions from each significant stationary, mobile, indirect, and area source of criteria or toxic emissions in the selected communities.
 - 2. Require specific health-based goals for all CERPs.
 - a. Establish target cancer and noncancer health hazard goals and timelines for all California communities, such as the ones we recommend.
 - b. Require that all CERPs contain new, additional strategies to meet state and federal ambient air quality standards for criteria pollutants at sensitive receptors.
 - c. Require that all CERPs contain new, additional strategies to reduce exposure to toxic air contaminants at sensitive receptors.
 - 3. Ensure that rural pollution from agricultural, dairy, and livestock operations are meaningfully assessed and addressed in CERPs.
 - a. Require air districts to conduct air quality monitoring of these sources.
 - b. Include enforceable strategies in CERPs to ensure reductions and no increases in any criteria or toxic emissions from these sources.

- c. Require the establishment of baseline emissions data from agricultural sources.
- III. Actions and Tools to Support Health Objectives and Data
 - 1. Track progress towards meeting health-based goals.
 - 2. Make data and maps from these analyses publicly available.
 - 3. Use the results to continually inform and develop other criteria and requirements for CERPs.
 - 4. Establish a statewide advisory group to continue developing health goals, metrics, and timelines and to assess the progress of AB 617 in reducing health risks related to air quality in California communities.
- IV. Community Steering Committees
 - 1. Communities should define the structure and process for their engagement.
 - 2. Communities should have real decision-making authority and clearly defined roles and responsibilities in the development, approval, and implementation of community emissions reduction programs.
 - 3. A supermajority of Community Steering Committees or alternative structures defined by communities should be residents.
 - 4. Allow Community Steering Committees or alternative structures to define their ongoing role and responsibilities after CERP approval to continue through the implementation process.
 - 5. Provide financial and other resources to support community engagement and participation.
 - 6. Provide technical assistance to support meaningful participation.
- V. Strategies to Reduce Emissions and Exposure
 - 1. Speed up timelines for statewide actions in Appendix F and prioritize implementation in highly burdened communities.
 - 2. Take immediate action on our recommended additional statewide strategies.
 - a. Support the development and placement of medium and heavy-duty electric truck charging infrastructure in highly impacted communities.
 - b. Require zero emission solutions wherever possible.
 - c. Implement a statewide setback of 2,500 feet around all oil and gas wells.
 - d. Implement statewide refinery rules.
 - e. Additional land use and transportation strategies
 - 3. Require air districts to implement specific prescribed emission reduction measures.
 - a. Direct and support air districts to implement new refinery rules.
 - b. Provide guidance and support to air districts to develop and implement new rules to regulate indirect sources.
 - c. Ensure that air districts meaningfully incorporate and address emissions from agricultural, dairy, and livestock operations.
 - 4. General recommendations regarding the Technology Clearinghouse:
 - a. Prioritize refinery equipment and technologies.
 - b. Ensure that the clearinghouse is as comprehensive and stringent as possible.
 - c. Provide a concrete and specific timeline for Phase II completion.

- VI. Review and Approval of Community Emissions Reduction Programs and Ongoing Implementation Progress
 - 1. Provide clear and specific criteria and processes for both approval and annual review of progress.
 - 2. Provide clear and specific information on additional review and evaluation procedures.

VII. Emissions Reporting Requirements

- 1. Emissions reporting requirements should support cumulative impacts analysis.
- 2. Provide independent review of emissions inventories.

I. COMMUNITY SELECTION

1. Provide a clear and specific process for how the community assessments will be used to recommend communities for selection.

Appendix B of the Draft Blueprint describes a three-step process to identify, assess, and select communities, with six assessment factors and numerous additional considerations to be used in the selection process,² but the actual method of comparing communities to each other and the rationale for how CARB staff will actually decide which communities to recommend for selection remain unclear. The Draft Blueprint states that "CARB will release [its] assessment [of all identified potential communities] in summer 2018" and that "CARB staff will develop recommendations on the selection of communities."³

To provide clarity and objectivity, we request that CARB lay out a clear and specific process for how the assessment will be used to compare communities and how exactly staff will decide which communities to recommend for selection. As we have stated in our previous comments, the comparison should be based on objective data and be transparent so as to leave no question or doubt as to how and why communities have been selected or will be selected in the future. Potential examples of an objective decision-making process are a simple point system or a weighted scoring rubric such as that in CalEnviroScreen.

2. Include community representation and a public process for the research consortium.

We appreciate that "CARB and the Department of Toxic Substances Control (DTSC) are contracting with a consortium of researchers to provide analytical support to identify appropriate datasets and to develop novel indicators that can be integrated into existing cumulative impacts screening approaches such as CalEnviroScreen."⁴ We recommend that community representatives be included in this consortium to provide input on research questions and goals and that this research be made available to

² Draft Blueprint, Appendix B.

³ Draft Blueprint, p. 11-12.

⁴ Draft Blueprint, Appendix B, p. 7-8.

the public. CARB should hold public meetings to present the research plan and questions and gather input and clearly explain how the results will be used in the community selection process.

3. Clearly identify other communities to be targeted and define actions and timelines.

We appreciate that, in addition to providing the selection of communities for community emissions reduction programs and monitoring, CARB plans to "also include a description of near-term actions to be taken in communities not yet selected, to underscore efforts to reduce emissions and exposure in all heavily impacted communities."⁵ In this description, the communities to be targeted should be clearly identified, as should the actions to be taken and timelines.

4. Minimize competition between communities and support community capacity-building and collaboration.

CARB should strive to uphold this intention in all aspects of implementing AB 617. A clear, objective, and transparent process for choosing communities, as described above, will help to better ensure fairness and reduce competition among communities.

5. Meaningfully consider rural pollution from agricultural, dairy, and livestock operations.

While we appreciate CARB's inclusion of rural sources of pollution as additional considerations in recommending communities to be selected in the first year of the program, we request that CARB do more to ensure that emissions from agricultural, dairy and livestock operations are meaningfully assessed and define specific data sources to be included in technical assessments.

In California, agriculture accounts for a significant portion of both greenhouse and air pollution emissions, including from fertilizer use, pesticide use, livestock enteric fermentation and manure⁶ and is of particular concern in rural regions. Agriculture's contribution to air pollution is, of course, even greater in regions of the state that contain the majority of irrigated agriculture and livestock operations. Agriculture also accounts for the majority of nitrous oxide emissions in California, primarily from fertilizer and manure added to the soil.⁷ Ammonia emissions are also of particular concern due to their propensity to react with other emissions in the atmosphere to create particulate matter (PM).⁸ Some estimates suggest that ammonia may increase by 15 percent by 2030.⁹ In an estimated Ammonia Emissions Inventory conducted by CARB in 2000, cattle accounted for 32 percent of the state's ammonia emissions. In that same inventory, the San Joaquin Valley accounted for more than half of the state's

⁵ Draft Blueprint, Appendix B, p. 10.

⁶ <u>https://www.arb.ca.gov/cc/inventory/background/ch4.htm;</u> INVENTORY OF U.S. GREENHOUSE GAS EMISSIONS AND SINKS: 1990–2016, EPA Ch. 5, 5-1 (2018), https://www.epa.gov/sites/production/files/2018-

^{01/}documents/2018_chapter_5_agriculture.pdf.; Zifei Liu et al., *Ammonia and Methane Emission Factors from Cattle Operations Expressed as Losses of Dietary Nutrients or Energy*, 3 AGRICULTURE 1, 1 (Feb. 23, 2017). ⁷ https://www.arb.ca.gov/cc/inventory/background/n2o.htm

⁸ Air Emission Sources, EPA, <u>https://www.epa.gov/air-emissions-inventories/air-emissions-sources</u> (last visited Apr. 27, 2018).

⁹ Alyssa M. McQuilling & Peter J. Adams, *Modeling Livestock ammonia Emissions in the United States: From Farms to Emissions to Particulate Matter*, CTR. FOR ATMOSPHERIC PARTICLE STUDIES 1 (2015), https://www.epa.gov/sites/production/files/2015-09/documents/mcquilling.pdf.

beef and dairy ammonia emissions.¹⁰ The San Joaquin Valley air basin is currently in nonattainment for PM 2.5 and eight-hour Ozone under federal standards.¹¹

Rural sources of pollution coupled with additional criteria air pollutants and toxic air contaminants exacerbate public and environmental health hazards in already overburdened communities. In order to uphold the intent of AB 617, CARB must ensure that contributing sources of pollution from irrigated agricultural, dairy, and livestock operations are incorporated in technical assessments by both air district and CARB staff.

II. CRITERIA AND REQUIREMENTS FOR COMMUNITY EMISSIONS REDUCTION PROGRAMS

1. Require specific minimum baseline metrics for all community emissions reduction programs. We appreciate the information about criteria and requirements for community emissions reduction programs (CERPs) in Appendix C of the Draft Blueprint, and we agree that CERP emissions reduction targets should be "quantitative, specific, and measurable."¹² As in our previous comments, we strongly recommend adding these specific minimum baseline metrics as enforceable requirements for all CERPs.

a. Require that all CERPs result in substantial and quantifiable annual reductions that are above and beyond what is already required by existing law and regulations and ensure no net increase in criteria air pollutant and toxic air contaminant emissions.

<u>All CERPs should result in substantial, quantifiable annual reductions and ensure no net increase in</u> <u>emissions.</u>

AB 617 clearly states that community emissions reduction programs "shall result in emissions reductions in the community, based on monitoring or other data."¹³ CERPs should result in substantial emissions below existing levels. In the absence of monitoring data, CERPs should at least ensure no net increase in criteria or toxic emissions.¹⁴

All CERPs should result in emissions reductions each year.

We appreciate the inclusion of the implementation schedule in the CERP criteria and the five-year timeframe with immediate and three-year milestones.¹⁵ To ensure immediate emissions reductions and progress on a strict timeline, CARB should require air districts to demonstrate measurable reductions attributable to CERPs every year in their annual reports on implementation progress.

¹⁰ Dr. Michael T. Benjamin, *Estimating Ammonia Emissions in California*, CARB (Sept. 28, 2000) (PowerPoint presentation).

¹¹ Ambient Air Quality Standards & Valley Attainment Status, SAN JOAQUIN VALLEY AIR POLLUTION CONT. DIST., <u>http://www.valleyair.org/aqinfo/attainment.htm</u>

¹² Draft Blueprint, Appendix C, p. 13.

¹³ Cal. Health & Safety Code Sec. 44391.2(c)(5).

¹⁴ This is consistent with the mandates in Cal. Health & Safety Code Sec. 38570(b).

¹⁵ Draft Blueprint, Appendix C.

Emissions reductions attributed to CERPs should be above and beyond reductions already required by existing law and regulations.

This should be a bare minimum requirement of AB 617 implementation. CARB should clearly state that meeting existing standards and/or maintaining current programs within air districts is not sufficient to meet the mandates of AB 617. Many areas in the state are not in attainment of Clean Air Act standards; AB 617 should provide emissions reductions and improvements in air quality that meet and exceed Clean Air Act standards.

- b. Require that all CERPs and the measures within them be consistent with priorities identified by community residents through documented outreach and engagement processes.
- c. Require all CERPs to include actionable metrics and timeframes for reductions from each significant stationary, mobile, indirect, and area source of criteria or toxic emissions in the selected communities.

These minimum requirements are consistent with AB 617 as well as Senate Bill (SB) 856, which was approved by the Governor on June 27, 2018 and provides incentive funding for early actions to complement the implementation of the Community Air Protection Program. Importantly, SB 856 specifically states:

"As such, the funds shall be allocated for projects that are intended to benefit communities that the State Air Resources Board has selected or is considering for selection in future years pursuant that section.

(a) Funds shall be allocated to projects consistent with priorities identified by the affected community in a transparent, meaningful public process.

(b) Funds shall only be allocated to projects that will provide emission reductions that are in excess of those otherwise required by law or regulation."¹⁶

SB 856 also ties the incentive funding to "the rules and regulatory requirements that the State Air Resources Board and air districts have established or are in the process of developing to reduce or mitigate emissions from mobile and stationary sources in affected communities pursuant to Section 44391.2 of the Health and Safety Code."¹⁷

Thus, consistent with the requirements of AB 617 and the language of SB 856, CARB should clearly define these minimum substantive requirements for all CERPs and require that they spell out, through actions to be taken, timelines, and enforcement mechanisms, how they will meet these metrics. This will provide a level of consistency statewide and provide a clear and transparent way to evaluate all CERPs and the Program overall.

¹⁶ SB 856, Section 36 (approved June 27, 2018).

¹⁷ SB 856, Section 36 (approved June 27, 2018).

2. Require specific health-based goals for all community emissions reduction programs.

We appreciate that the Draft Blueprint discusses health-based air quality objectives and community health indicators.¹⁸ In Appendix C, the Draft Blueprint states two health-based objectives:

- "Reducing exposure caused by local sources to achieve healthful levels of PM2.5 within the community.
- Maximizing progress on reducing exposure to toxic air contaminants that contribute to the cumulative exposure burden."¹⁹

While we agree with these objectives, we recommend that CARB add the following specific goals for all CERPs, as the core intent of AB 617 is to improve the health of communities impacted by air pollution.²⁰

a. Establish target cancer and noncancer health hazard goals and timelines for all California communities, such as those listed below.

While the target goals would not have regulatory authority, they would provide concrete and measurable criteria for evaluation of the healthfulness of California's ambient air.

- (i.) Cumulative cancer health risk from ambient air no higher than 100/million at any residence, park, or school, by 2025, including cancer risk attributable to diesel exhaust. Define "residence" to include publicly accessible locations where homeless people may sleep or spend time.
- (ii.) Cumulative cancer health risk from ambient air no higher than 50/million at any residence, park, or school, by 2030.
- (iii.)Cumulative noncancer health risk from ambient air no higher than 3 at any residence, park or school, by 2025.
- (iv.) Cumulative noncancer health risk from ambient air no higher than 1 at any residence, park, or school, by 2030.
- b. Require that all CERPs contain new, additional strategies to meet state and federal ambient air quality standards for criteria pollutants at sensitive receptors.
- c. Require that all CERPs contain new, additional strategies to reduce exposure to toxic air contaminants at sensitive receptors.

¹⁸ Draft Blueprint, Appendix C, p. 4-5, and Appendix F, p. 26-27.

¹⁹ Draft Blueprint, Appendix C, p. 5.

²⁰ Assembly Floor Analysis p. 9 (July 14, 2018); Senate Floor Analysis p. 12 (July 13, 2017); Senate Committee on Environmental Quality Analysis p. 11-12 (July 17, 2017).

3. Ensure that rural pollution from agricultural, dairy, and livestock operations are meaningfully assessed and addressed in CERPs.

As discussed earlier in this comment letter, CARB must do more to ensure that pollution from these sources is included and meaningfully considered in CERPs. The Draft Blueprint merely mentions rural sources of pollution, including those from agricultural activities and fugitive dust, as additional considerations in the selection of first year communities²¹ but does not define how these specific sources will be addressed in CERPs and air monitoring plans. In addition to ensuring inclusion of these sources in technical assessments for year one community selections, CARB should do the following:

a. Require air districts to conduct air quality monitoring of these sources.

- b. Include enforceable strategies in CERPs to ensure reductions and no increases in any criteria or toxic emissions from these sources.
- c. Require the establishment of baseline emissions data from agricultural sources.

III. ACTIONS AND TOOLS TO SUPPORT HEALTH OBJECTIVES AND DATA

To complement and further the health-based objectives above, we recommend that CARB take the additional actions outlined below.

1. Track progress towards meeting the above health-based goals.

Use an emissions inventory and modeling approach similar to the one used by South Coast Air Quality Management District (SCAQMD) in its Multiple Air Toxics Exposure Study IV (MATES IV) of health risks of ambient air in Los Angeles, to be updated at least every three years using the most current Office of Environmental Health Hazard Assessment (OEHHA) methodology for assessing health risks from toxic air contaminants.

Although we recommend a methodology such as the MATES, we do not endorse all aspects of it. For instance, we note that communities such as the Eastern Coachella Valley were not included, and we strongly recommend that all communities be included in the emissions inventory and modeling.

2. Make data and maps from these analyses available to the public.

The level of detail should allow residents to identify sources of pollution that contribute to health risks in their communities and to identify the magnitude of the health risk from major sources. Do not use population weighting in reporting results.

3. Use the results to further inform and develop other criteria and requirements for CERPs.

²¹ Draft Blueprint, p. 12.

4. Establish a statewide advisory group to continue development of health goals, metrics, and timelines and to assess the progress of AB 617 in reducing health risks related to air quality in California communities.

The group should function similarly to the EPA's Clean Air Scientific Advisory Committee (CASAC), and its purpose, role, and responsibilities should be clearly and explicitly defined. It should include individuals and organizational representatives that work directly in and with communities impacted by heavy air pollution, public health experts, such as researchers and academics, and community health providers. In addition, we suggest including and collaborating with staff from the OEHHA, Department of Public Health, and Office of Health Equity.

IV. COMMUNITY STEERING COMMITTEES

1. Communities, rather than CARB or air districts, should define the structure and process for their engagement in the development and implementation of CERPs.

While we appreciate the intention of establishing Community Steering Committees to provide a structure and mechanism for community members to meaningfully engage in CERP development and implementation processes, we believe that communities, rather than CARB or air districts, should define the structure and process for their engagement. With that said, we offer the following general comments and recommendations on Community Steering Committees or alternative structures to be defined by communities.

2. Community Steering Committees or alternative structures defined by communities should have real decision-making authority and a clearly defined role and responsibilities.

We agree with CARB that: "Most importantly, underpinning AB 617 is the understanding that community residents must be active partners in envisioning, developing, and implementing actions to clean up the air in their communities."²² To that end, community residents should have a genuine decision-making and oversight role over CERPs in their communities rather than being advisory. To ensure that CERPs reflect and are consistent with the priorities that communities have identified, community approval, through Community Steering Committees or alternative structures, should be a required step in the CERP development and approval process.

3. A supermajority of Community Steering Committee members or members of an alternative structure defined by the community should reside in the community.

This will help ensure strong, authentic community representation and participation in the CERP development process.

4. Allow Community Steering Committees or alternative structures to define their ongoing role and responsibilities after CERP approval and through the implementation process.

²² Draft Blueprint, p. 2.

If a selected community decides on an alternative to the Community Steering Committee, the alternative body should define their role and responsibilities for developing and approving the CERP as well as their ongoing review of implementation progress.

5. Provide financial and other resources to support community engagement and participation.

We agree that: "Building an effective community emissions reduction program will require consistent and frequent engagement with community members."²³ To facilitate community residents' participation on Community Steering Committees or an alternative structure, they should be compensated for their time and any associated travel, transportation, or other costs of participation. Attending meetings will require a significant commitment of time, resources, and energy, particularly for working people with families. CARB and air districts should provide assistance to minimize these barriers to participation.

6. Provide technical assistance to Community Steering Committees or alternative structures.

This will help ensure that community members have adequate and accessible information to participate meaningfully. While air districts should provide community profiles and technical assessments of pollution sources and potential emission reduction measures, community members should have the ability to request additional information and analyses and to have the information presented in accessible formats. Assistance should include language translation and interpretation as needed.

V. STRATEGIES TO REDUCE EMISSIONS AND EXPOSURE

As the intent and purpose of AB 617 is to reduce emissions in overburdened communities, the strategies to achieve that are of utmost importance. We offer the following comments and recommendations on specific statewide and district level emissions reduction measures that residents in some of the communities we work with have identified as priority measures to reduce emissions from the pollution sources in their neighborhoods. These are not meant to be comprehensive; CARB and air districts have the tools and resources to develop many other new rules and regulations not listed here that would further reduce air pollution and benefit our communities, and we strongly and wholeheartedly urge them to do so.

1. Speed up timelines for statewide actions in Appendix F and prioritize implementation in highly burdened communities.

We agree that CARB needs to take action on statewide measures in addition to CERPs as a necessary step to ensure emissions reductions and improved air quality across the state, including communities not selected for CERPs. We appreciate and commend CARB for including specific statewide strategies and upcoming actions in Appendix F, and we are pleased to see some that reflect the priorities in our communities. As described below, we recommend that CARB strengthen some of them, revise its timelines for faster action, and identify highly burdened communities for priority implementation.

²³ Draft Blueprint, Appendix C, p. 7.

<u>Commercial Harbor Craft</u> - We support the strategy to amend the existing Commercial Harbor Craft regulation to include more stringent in-use and new vessel requirements for both freight-related and passenger vessels, and we also support prioritizing implementation in or near communities with high cumulative exposure burdens. We recommend that CARB provide more clarity on what this prioritized implementation will look like and establish aggressive zero emissions targets and timelines for this measure.

<u>Cargo handling equipment</u> - We support this measure to transition cargo handling equipment to zero emissions technology. We recommend that CARB include cargo handling equipment that operates at warehouses, logistics facilities, and similar freight-related facilities, in addition to ports. We urge CARB to consider an earlier timeline for this rule, given that the technology for zero emissions equipment is currently close to full commercialization.

<u>Drayage trucks at seaports and railyards</u> - We support this measure to transition drayage trucks to zero emissions technology. We urge CARB to include drayage trucks that serve warehouses, logistics centers, and similar freight related facilities, as well as ports. We believe that the timeline for implementation of this measure could be shortened, given that commercialization of this technology is proceeding rapidly. We support prioritizing implementation in or near communities with high cumulative exposure burdens and request clarity from CARB on what this prioritized implementation process will look like.

<u>Reducing idling for all railyard sources</u> - CARB states that this regulatory action will begin development in 2020 and implementation in 2023+.²⁴ We recommend that CARB develop and implement a regulation on this immediately, as there is sufficient information to act on.

<u>Reducing emissions from locomotives not preempted under the Clean Air Act</u> - We support required "retrofit, repower, remanufacture, or replacement of freight and passenger locomotives" rather than "a voluntary agreement with the major railroads"²⁵ and recommend immediate implementation in the most highly impacted communities.

<u>Chrome plating control measure</u> - We support amending and strengthening the current Airborne Toxic Control Measure (ATCM). Hexavalent chromium is a highly toxic substance, and emissions of even small amounts are a threat to public health. A stronger ATCM is urgently needed, and we urge CARB to set a short timeline for development and implementation of this measure. We urge CARB to require maximum pollution prevention, such as alternatives to hexavalent chromium. We also recommend that T-BACT for hexavalent chromium be as strong as possible and include the option of discontinuation of hexavalent chrome plating in locations in close proximity to homes or schools.

²⁴ Draft Blueprint, Appendix F, p. 3.

²⁵ Draft Blueprint, Appendix F, p. 4.

<u>Heavy-duty on-road and off-road engine in-use testing</u> - We recommend that CARB specify the "selected communities"²⁶ where this will be implemented, prioritizing those with high cumulative burdens from concentrations of heavy-duty truck traffic and goods movement activities.

2. CARB should take immediate action on additional statewide strategies outlined below to reduce emissions and improve air quality in communities across the state.

In addition to the actions described above and in Appendix F, we strongly urge CARB to act swiftly on these statewide strategies.

a. Coordinate with implementing agencies such as the California Energy Commission and California Public Utilities Commission to prioritize the development and placement of electric vehicle charging infrastructure for medium and heavy-duty trucks and other goods movement equipment in highly impacted communities.

We are encouraged by the proposed statewide strategies to transition to zero emission technologies, as described in Appendix F and discussed in our comments above, as well as recent actions to support and prioritize zero emission technologies, including CARB's own Community Air Protection Funds Supplement to the Carl Moyer Memorial Air Quality Standards Attainment Program 2017 Guidelines approved in April 2018, Governor Brown's Zero Emission Vehicle Executive Order, and the language of SB 856. To build on these, CARB should collaborate with the appropriate agencies to prioritize the development and placement of charging infrastructure for medium and heavy-duty trucks and other goods movement equipment that operate in communities with high cumulative pollution burdens.

b. Ensure that all AB 617 related actions, funding, regulatory, and permitting decisions require zero emission solutions wherever possible.

Our communities have been clear and consistent in demanding zero emission solutions only. As the purpose and intent of AB 617 are to uplift overburdened communities, and, as quoted earlier in this comment letter, the language of SB 856 reflects that incentive funds for early actions should be "consistent with priorities identified by the affected community,"²⁷ CARB should uphold this. Requiring zero emission solutions builds upon the prioritization of zero emission technologies in recent actions, including those mentioned above.

Zero emission technologies are increasingly available to replace transportation sources and many types of stationary sources, including electric power generation and smaller sources, as well as area sources. Zero emission technologies should be evaluated and prioritized as alternatives to the continued use of fossil fuels and other polluting technologies in all permitting and other regulatory decisions and funding decisions. The early adoption of zero emission technologies to replace polluting technologies can help spur and incentivize more development of these clean solutions, and it is an important way to transition communities to a healthier, more sustainable future.

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²⁶ Draft Blueprint, Appendix F, p. 7.

²⁷ SB 856, Section 36 (approved June 27, 2018).

c. Implement a statewide setback of 2,500 feet around all oil and gas wells.

We continue to urge CARB to implement a statewide setback of 2,500 feet around all oil and gas wells. We support related comments submitted by the Center on Race, Poverty, and the Environment (CRPE) and other efforts led by our members and other environmental justice organizations advocating for this. While some California municipalities have local surface setback requirements between oil and gas development and residences, schools, and other sensitive receptors, they are minimal and inadequate, and there are no such regulations at the state level.

For far too long, low income communities and communities of color, primarily in Los Angeles County and Kern County, have borne the severe health burdens of oil and gas extraction and production in our state. Studies have linked proximity to oil and gas wells to a host of health impacts, including increased risk of asthma and other respiratory illnesses, premature births and high-risk pregnancies, and cancer. Oil and gas extraction produces air toxics, including volatile organic compounds (VOCs) like benzene and formaldehyde, particulate matter (PM), and hydrogen sulfide.

CARB must directly regulate oil and gas operations in our state to adequately and meaningfully address the mandates and intent of AB 617 -- to reduce criteria air pollutants and toxic air contaminants in California's most burdened communities. As described in the comments submitted by CRPE to CARB in May 2018, the implementation of a setback for all oil and gas wells in the state is within CARB's legal authority.

d. Implement statewide refinery rules.

We support comments submitted by Communities for a Better Environment regarding statewide and district rules to regulate oil refinery technologies and emissions. These include:

- (i.) Prohibit refinery-level emissions increases.
- (ii.) Begin a plan for at least 80 percent phaseout of oil refineries by 2050.

e. Land Use and Transportation Strategies

We appreciate CARB's consideration of land use and transportation strategies to reduce emissions and exposure in Appendix C, and we agree that "air quality officials have an important role to play as they work with city and county governments."²⁸ We commend CARB for recognizing this and for working to compile resources²⁹ as well as encouraging air districts through CERPs to engage with local agencies that implement and have direct authority over land use and transportation planning and permitting decisions.³⁰ CEJA members and partners and other organizations have worked for years with local authorities and land use processes to address disproportionate burdens in communities and to

²⁸ Draft Blueprint, Appendix C, p. 21.

²⁹ Draft Blueprint, Appendix F, p. 19.

³⁰ Draft Blueprint, Appendix C, p. 21-23.

transform communities into green zones.³¹ The progress that community groups have made can be replicated in other communities and applied more broadly, and decisions related to air quality play a critical role in these transformations.

To further support and assist local land use planning efforts, we recommend that CARB take the following additional actions:

- (i.) Update the CARB <u>Air Quality and Land Use Handbook</u> to ensure that it reflects the mandates of AB 617 as well as current tools and recommendations for applying cumulative impacts analysis.
- (ii.) Require air districts to meaningfully consider and include these tools and recommendations in CERPs.

CARB's updated and additional guidance on utilizing and applying cumulative impacts analysis in land use and transportation planning and permitting should make clear that *cumulative impacts analysis should evaluate the true impacts of continuing to allow harmful pollution in overburdened communities*. Rather than assessing the impacts of a single source, CARB and air districts must consider the cumulative pollution burdens of multiple sources and other related factors in a community. For instance, while an individual facility may not violate its permits or other regulations, it is common in many of our communities for there to be a large number of polluting facilities in the area that produce a cumulative pollution burden.

To reduce the disproportionate and inequitable impacts of these high concentrations of local emissions, CARB should provide guidance on specific strategies to utilize and apply analyses of cumulative pollution burdens. Below is a nonexhaustive list of example strategies.³²

- Use CalEnviroScreen indicators to provide an analysis of existing environmental burdens in order to set the baseline conditions and metrics to improve.
- Use an analysis of cumulative pollution burdens in a specific community or census tract(s) to set strict emissions thresholds and deny permits when a potential new facility or expansion of an existing facility would increase total emissions and exceed the threshold for the defined area, even if the region as a whole would not become noncompliant.
- Set strict health-based community or census level exposure thresholds and deny permits when a potential new facility or expansion of an existing facility would increase exposure at sensitive receptors.

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³¹ CEJA Green Zones report: https://caleja.org/wp-content/uploads/2015/09/GREENZONES.2015.30MB.pdf ³² CEJA has a forthcoming brown paper on CalEnviroScreen that provides an additional resource on cumulative impacts analysis and suggested applications.

- Update criteria for approving or denying permits to facilities that could increase emissions in communities with high cumulative pollution burdens.
- Include pollution burdens caused by indirect sources, such as increased truck traffic to a facility, in cumulative impacts analysis in applicable communities.
- Prioritize implementation and/or targeted enforcement activities in areas with high cumulative pollution burdens.
- Limit new facilities and expansion of existing facilities in close proximity to disadvantaged communities.
- Echoing our March 2018 comments, explore other ways to limit, oppose, or disincentivize projects that would result in increased emissions in a specified community area. For example, CARB should withhold relevant funding to local jurisdictions that continue to allow new siting, permitting, and/or expansions of incompatible land uses.

(iii.) Require all CERPs to demonstrate consistency with the goals and intent of SB 1000. We appreciate CARB's reference to SB 1000 (Leyva), which passed in 2016, and to our CEJA SB 1000 Toolkit: Planning for Healthy Communities,³³ and we recommend that CARB ensure that CERPs be consistent with the following aspects of SB 1000:

"(A) Identify objectives and policies to reduce the unique or compounded health risks in disadvantaged communities by means that include, but are not limited to, the reduction of pollution exposure, including the improvement of air quality, and the promotion of public facilities, food access, safe and sanitary homes, and physical activity.

(B) Identify objectives and policies to promote civil engagement in the public decision-making process.
(C) Identify objectives and policies that prioritize improvements and programs that address the needs of disadvantaged communities.³⁴

3. Require air districts to implement prescribed emission reduction measures.

CARB should provide a list of specific prescriptive strategies to reduce emissions and exposure in communities and require air districts to implement them to address the sources located in their jurisdictions. These should be the strongest possible, most stringent measures to ensure the highest possible, most ambitious level of reductions. CARB should specify that air districts begin implementation immediately and not wait for CERPs to be developed and approved.

a. Direct and support air districts to develop and implement new refinery rules.

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³³ Draft Blueprint, Appendix C, p. 21, and Appendix F, p. 19.

³⁴ California Government Code Section 65302(h)(1).

As stated previously in this comment letter, we support the comments submitted by Communities for a Better Environment recommending that CARB direct air districts with refineries in their jurisdiction to develop and implement the following new rules:

- (i.) Replace low and medium efficiency refinery boilers & heaters, add retrofits, and improve maintenance.
- (ii.) Require best catalytic cracking unit PM and PM precursor (SOx, NOx) control technology (e.g., wet scrubbers) at all refineries.
- (iii.) Prohibit air districts from granting in-basin particulate matter (PM) pollution trading credits and instead require PM emissions limits and reductions.
- b. Provide guidance and support to air districts to develop and implement new rules to regulate indirect sources.

Our March 2018 comments include examples of indirect source rules.

c. Ensure that air districts meaningfully incorporate and address emissions from agricultural, dairy, and livestock operations.

CARB should require air districts to include specific enforceable strategies in CERPs to ensure reductions and no increases in any criteria or toxic emissions from agricultural, dairy, and livestock operations.

4. Technology Clearinghouse

We believe that the Technology Clearinghouse, as CARB has noted, will be a helpful tool in both the development of the CERPs as well as the BARCT determinations. In particular, Phase II will provide important information about zero emission technologies as well as the most stringent technologies. We have a few general comments here.

a. Prioritize refinery equipment and technologies.

Refineries are the largest sources of emissions in the state and would account for most of the total reductions from control technologies. In developing and updating the technology clearinghouse, CARB should prioritize equipment and technologies used at refineries.

b. Ensure that the clearinghouse is as comprehensive and stringent as possible.

The clearinghouse should look beyond California, to other states and parts of the world, to include the cleanest and most stringent practices and technologies possible.

c. Provide a concrete and specific timeline for when Phase II will be completed for specific source technologies.

This increased transparency will help ensure that communities and regulators are looking at the most up-to-date information. Phase II should be completed as soon as possible so as not to delay CERP or
BARCT decisions. The 2020 timeline may be too late for communities selected in the first and second years of the Program and for facilities that could upgrade equipment or technologies in the meantime.

VI. CARB OVERSIGHT: REVIEW AND APPROVAL OF COMMUNITY EMISSIONS REDUCTION PROGRAMS AND ONGOING IMPLEMENTATION PROGRESS

We appreciate the Draft Blueprint's inclusion of ongoing Community Air Protection Program review in Appendix A³⁵ as well as annual review processes and requirements for CERPs for both initial approval and ongoing implementation progress in Appendix C.³⁶ As these are the main mechanisms for CARB to exercise its oversight authority, we request more clear and specific details about the review processes and standards in order to ensure transparency and accountability.

1. Provide clear and specific criteria and processes for both approval of CERPs and annual review of implementation progress.

CARB has a duty under AB 617 to provide oversight and approval of the CERPs. In particular, AB 617 sets forth clear requirements for CARB approval of the program. Specifically, AB 617 requires that:

"The community emissions reduction programs shall be submitted to the state board for review and approval within 60 days of the receipt of the program. Programs that are rejected shall be resubmitted within 30 days. To the extent that a program, in whole or in part, is not approvable, the state board shall initiate a public process to discuss options for achievement of an approvable program. Concurrent with the public process to achieve an approvable program, the state board shall develop and implement the applicable mobile source elements in the draft program to commence achievement of emission reductions."³⁷

AB 617 also details some of the minimum requirements of an approvable plan:

"The community emissions reduction programs shall be consistent with the state strategy and include emissions reduction targets, specific reduction measures, a schedule for the implementation of measures, and an enforcement plan.³⁸

The programs shall result in emissions reductions in the community, based on monitoring or other data."³⁹

To ensure that the plans are on track, AB 617 includes a regular reporting requirement:

³⁵ Draft Blueprint, Appendix A, p. 7.

³⁶ Draft Blueprint, Appendix C, p. 31-35.

³⁷ Cal. Health & Safety Code § 44391.2(c)(4)

³⁸ Cal. Health & Safety Code § 44391.2(c)(3).

³⁹ Cal. Health & Safety Code § 44391.2(c)(5).

"A district encompassing a location selected pursuant to this subdivision shall prepare an annual report summarizing the results and actions taken to further reduce emissions pursuant to the community emissions reduction program."⁴⁰

Consistent with these mandates in the legislation, we recommend the following:

a. Include our recommended statewide baseline minimum standards in the Checklist for Community Emissions Reduction Program Evaluation and use these standards to review and evaluate annual implementation progress.

We appreciate the Checklist for Community Emissions Reduction Program Evaluation in Appendix C.⁴¹ This list, however, does not provide clear minimum substantive requirements that a CERP must meet for approval. Rather, the list in Appendix C only requires air districts to specify, describe, and identify what is included within the program. Without more direction about the minimum threshold that these programs must meet, it is not clear what constitutes an approvable program. CARB should include our recommended statewide baseline minimum standards as criteria by which CERPs will be evaluated for approval and annual progress. The checklist should include the following:

- (i.) Emissions reduction targets must include enforceable requirements and health-based goals.
- (ii.) CERP must result in substantial and quantifiable emissions reductions annually and no net emissions increase in the community.
- (iii.) CERP emissions reductions must be above and beyond existing rules and regulations.
- (iv.) CERP and measures within it must align with community priorities.
- (v.) CERP must include specific strategies to meet emissions reduction targets and have a plan to document reduced emissions each year and attribute emissions reductions to specific measures, actions, or components of the CERP.

(vi.) CERP must include specific strategies to meet the health-based goals and requirements.

b. Define the review processes for approval and ongoing implementation of community emissions reduction programs.

Although CARB states that it will conduct an approval process for CERPs and review annual reports of progress on implementation, the Draft Blueprint does not describe the procedures or details of these review processes.

⁴⁰ Cal. Health & Safety Code § 44391.2(c)(7).

⁴¹ Draft Blueprint, Appendix C, p. 37-42.

We agree that, pursuant to AB 617, "CARB's responsibility is to ensure that community emissions reduction programs have been designed with sufficient rigor and technical foundation to deliver the needed community benefits."⁴² Yet there are no clear requirements of what the approval process will include. The description in Appendix C includes some general ideas of what "may" be required during review, but it does not include a description of what will be required, and there is no specification of when CARB will not approve a CERP.

AB 617 contemplates that the approval review will occur in a public process.⁴³ The Draft Blueprint does not describe how this public process will be conducted. Rather, CARB states its commitment to work with air districts and community steering committees, but this does not explain exactly what CARB's approval process will look like and how the public will be able to participate. This is not consistent with AB 617, which clearly requires plans to be consistent with law and the statewide strategy that CARB sets forth.

The Draft Blueprint also does not describe the procedures for its review of annual progress reports. As CARB correctly notes, AB 617 also specifies that air districts "shall prepare an annual report summarizing the results and actions taken to further reduce emissions pursuant to the community emissions reduction program."⁴⁴ These reports provide the main mechanism for tracking progress of CERPs. The Draft Blueprint states: "Annual reports must be made available to the public no later than October 1 of every year after community emissions reduction program implementation begins"⁴⁵ and further specifies process requirements for air districts to present annual progress reports, but it does not specify CARB's review process. Rather, it simply states that "CARB staff will report to CARB's Governing Board on key community emissions reduction program milestones, including emissions reductions and regulatory action."⁴⁶

We urge CARB to spell out the details of its review processes to provide transparency and accountability as well as opportunities for public engagement at the statewide level.

- (i.) For approval, each CERP should be presented and decided on in a public CARB Governing Board meeting, and CARB staff should present their recommendation related to approval for each CERP with a written explanation that clearly evaluates how the CERP meets requirements. The public should be given the opportunity to comment.
- (ii.) For annual review, CARB should provide written evaluation of whether or not and how a CERP is meeting its requirements.

⁴² Draft Blueprint, Appendix C, p. 31-32.

⁴³ California Health & Safety Code § 44391.2(c)(4).

⁴⁴ California Health & Safety Code § 44391.2(c)(7).

⁴⁵ Draft Blueprint, Appendix C, p. 35.

⁴⁶ Draft Blueprint, Appendix C, p. 35.

- (iii.)CARB should consider using a point system or rubric to have a clear, objective, and transparent method of evaluating CERPs for approval and implementation progress.
- (iv.) If a CERP does not meet its annual metrics, CARB should provide a process to consider what steps to take to ensure that the CERP meets the timeline as soon as possible. CARB should evaluate options in a public process, and the options should include CARB stepping in.⁴⁷ CARB should also consider enforcement and penalty options, including withholding relevant funds from an air district that is not meeting its requirements.
- 2. Provide clear and specific information on additional review and evaluation procedures and include all relevant materials in annual progress reports on community emissions reduction program implementation.

Appendix A states that "CARB will also conduct outreach to communities to obtain detailed perspectives on [Community Air Protection] Program progress and success. This could include surveys to solicit community perspectives to supplement air district reports, CARB community meetings, and other activities."⁴⁸ We appreciate this intention and recommend that CARB provide clear and specific steps to be taken. In particular, the results from surveys of community perspectives and community meetings should be well documented and included in annual reports to the CARB Governing Board as part of overall Program and annual CERP review processes.

VII. EMISSIONS REPORTING REQUIREMENTS

CEJA supports the comments submitted by Environmental Health Coalition (EHC) on Proposed Regulation for Criteria Pollutant and Toxic Air Contaminant Emissions Reporting, submitted on June 29, 2018. In addition, we emphasize the following two points.

1. Design emissions reporting requirements to support cumulative impacts analysis.

Many of our communities have high concentrations of pollution from multiple types of sources, such as small stationary sources and indirect sources that are often overlooked, underreported, or not reported. It is imperative to be able to evaluate the true cumulative air pollution burdens in communities. We support including more sources and standardizing emissions reporting with a uniform statewide system. We urge CARB to make every effort to design emissions reporting requirements with highly impacted communities in mind and to ensure accurate and comprehensive emissions data to facilitate cumulative impacts analysis.

2. Provide independent review of emissions inventories.

CARB should conduct its own review and analysis of refinery emissions inventories to ensure accuracy and objectivity. Currently, refineries self-report their own emissions and calculate their own baselines,

⁴⁷ Consistent with California Health & Safety Code Section 39002.

⁴⁸ Draft Blueprint, Appendix A, p. 7.

which has resulted in data manipulation and mischaracterization. CARB should also provide an opportunity and process for the public to petition for review.

CONCLUSION

We appreciate the opportunity to comment and look forward to continuing to work with CARB to ensure significant emissions reductions and improvements in air quality in our communities and many others across California. Please do not hesitate to contact Stephanie Tsai at stephanie@caleja.org with questions or to discuss any of this further.

Sincerely,

Stephanie Tsai California Environmental Justice Alliance

Allen Hernandez Center for Community Action and Environmental Justice

Paulina Torres Center on Race, Poverty, and the Environment

Julia May Communities for a Better Environment

Joy Williams Environmental Health Coalition

Veronica Garibay Leadership Counsel for Justice and Accountability

Martha Dina Arguello Physicians for Social Responsibility-Los Angeles Coalition For A Safe Environment California Kids IAQ Community Dreams Apostolic Faith Center EMERGE American Legion Wilmington Improvement Network San Pedro & Peninsula Homeowners Coalition NAACP- San Pedro-Wilmington Branch # 1069 California Communities Against Toxics California Safe Schools Del Amo Action Committee Action Now St. Philomena Social Justice Ministry

- Re: California Air Resources Board Draft Community Air Protection Blueprint
- Su: Public Comment Recommendations

Dear CARB,

The undersigned organizations submit our joint public comments which include our recommendations and requested changes to the Draft Community Air Protection Blueprint. The draft provided an excellent starting point for discussion. We further request a 15 day extension to the public comment deadline to allow time to comment on the Draft Community Air Protection Blueprint attached addendums.

Jesse N Marquez will be the primary point of contact regarding these comments

Respectfully Submitted,

Jesse N Marquez

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Draft Community Air Protection Blueprint

For Selecting Communities, Preparing Community Emissions Reduction Programs, Identifying Statewide Strategies, and Conducting Community Air Monitoring

Draft for Public Comment

Draft Release Date: June 7, 2018 Comments Due: July 23, 2018

Please submit any written comments on this draft document by July 23, 2018 to: <u>https://www.arb.ca.gov/lispub/comm/bclist.php</u>.



For more information:

Community Air Protection Program: <u>https://ww2.arb.ca.gov/our-work/programs/Community-Air-Protection-Program-AB617</u>.

To receive email updates from the "Community Air" program, please subscribe at: <u>https://ww2.arb.ca.gov/our-work/programs/Community-Air-Protection-Program-AB617</u>.

The Draft Community Air Protection Blueprint, including all appendices, is available at: <u>https://ww2.arb.ca.gov/our-work/programs/Community-Air-Protection-Program-AB617</u>.

Email: <u>CommunityAir@arb.ca.gov</u> or <u>AireComunitario@arb.ca.gov</u>.

Comments: Please submit any written comments on this draft document by July 23, 2018 to: <u>https://www.arb.ca.gov/lispub/comm/bclist.php</u>.

I. INTRODUCTION

Assembly Bill (AB) 617,¹ signed into law in July 2017, continues California's environmental leadership in establishing innovative new policies to improve air quality. The bill requires new community-focused and community-driven action to reduce air pollution and improve public health in communities that experience disproportionate burdens from exposure to air pollutants.

California's air quality programs are responsible for significant public heath improvements through statewide and regional air quality planning requirements, advancement of technology-based solutions, and risk reduction efforts near industrial facilities. Over the last 25 years, ozone levels have dropped over 40 percent throughout the greater Los Angeles region, and the number of unhealthy ozone days has decreased 40 percent in the San Joaquin Valley. Levels of lead measured in the air are now 90 percent lower, and diesel particulate matter, which accounts for over two-thirds of the total known cancer risk in the State, has dropped nearly 70 percent statewide.

However, certain communities continue to experience environmental and health inequities from air pollution. Communities near ports, rail yards, warehouses, and freeways, for example, experience a higher concentration of air pollution due to emissions from mobile sources such as cars, diesel trucks, locomotives, and ships than other areas. Many of the same communities also experience pollution impacts from large industrial facilities such as oil refineries. High concentrations of smaller sources like chrome platers, metal recycling facilities, oil and gas operations, and pesticide use, likewise contribute to localized air toxics impacts in many communities across the State.

The greater air pollution burden in these communities can be measured. For example, while exposure to cancer-causing diesel particles has decreased substantially across all communities, exposure to diesel particles in disadvantaged communities is on average twice that experienced in non-disadvantaged communities.²

COMMUNITY AIR PROTECTION PROGRAM

¹ Assembly Bill 617, Garcia, C., Chapter 136, Statutes of 2017, modified the California Health and Safety Code, amending § 40920.6, § 42400, and § 42402, and adding § 39607.1, § 40920.8, § 42411, § 42705.5, and § 44391.2. See separate appendix for complete bill language.

² California Air Resources Board, *Air Quality Progress in California Communities*, July 23, 2016, available at: <u>https://www.arb.ca.gov/board/books/2016/062316/16-6-2pres.pdf</u>.

II. NEW COMMUNITY-FOCUSED FRAMEWORK

AB 617 is a significant step in transforming California's air quality programs to address air pollution disparities at the neighborhood level. It requires community-focused emissions reduction programs to reduce exposure to air pollution in disproportionately burdened communities throughout the State. The legislation also includes requirements for accelerated installation of pollution controls on industrial sources, expanded air quality monitoring within communities, improved public health, increased penalties for violations of emissions control standards, and greater transparency and improved public access to air quality and emissions data through enhanced online web tools (Figure 1).



Most importantly, underpinning AB 617 is the understanding that community residents must be active partners in envisioning, developing, and implementing actions to clean up the air in their communities. Figure 2 outlines the new actions that form the core of the California Air Resources Board's (CARB) vision for AB 617 and implementation of the Community Air Protection Program (Program). As part of this process, we will align Program priorities and objectives with other CARB and air district actions for air pollution reduction and financial support to help expedite implementation. Together, these actions are designed to deliver new emissions reductions in impacted communities, provide accountability and transparency, and promote a collaborative process for working with communities as partners to identify and implement solutions.

2 DRAFT COMMUNITY AIR PROTECTION BLUEPRINT – June 7, 2018

II – NEW COMMUNITY-FOCUSED FRAMEWORK

Figure 2 New Actions under the Community Air Protection Program

Partnerships with community members in Program development through community assistance grants and community steering committees, where community members and local air districts will work together to craft solutions for each selected community.

Community-specific emissions reduction programs that will target new **and expanded** local actions to reduce **all sources and types of** emissions directly within selected communities.

Mechanisms for community members to assess the effectiveness of the Program through measurable outcomes, metrics to track progress, and annual public reports.

Engagement with local land use and transportation agencies to help reduce the current impacts of sources that **are approved and permitted** too close to residents and to avoid these situations in the future.

Incentive investments to help purchase cleaner vehicles and equipment, with a focus on advancing zero emission technologies and emissions capture and treatment technologies within impacted communities.

New statewide actions to reduce emissions and public health impacts from sources that are concentrated within heavily impacted communities throughout the State and consider ways to target these actions to reduce localized exposure to zero impacts.

More detailed information on air pollution within communities through new community air monitoring programs led by both air districts and community-based organizations.

Better information on pollution sources and public health impacts within communities through new requirements for reporting emissions and public health data and making data more accessible and userfriendly.

COMMUNITY AIR PROTECTION PROGRAM

3

III. BUILDING THE COMMUNITY AIR PROTECTION PROGRAM

The Program adds the new actions shown in Figure 2 to California's existing clean air efforts. Reflecting the vision of AB 617, it also includes a formal mechanism for empowering community members to engage in cleaning the air in their communities. At the direction of AB 617, CARB and local air districts will work with community members to identify individual communities where more needs to be done to reduce air pollution burdens. In these communities, CARB and the air districts will work with the residents and community-based organizations to develop new community-focused actions to further reduce emissions and exposure. Our agencies will also consider more directly how we can address community-level benefits in developing our statewide and regional programs to reduce air pollution.

To jump start action to reduce emissions in these communities, the Legislature appropriated \$250 million in 2017 to help clean up heavily polluting mobile sources, like diesel trucks and buses. Further, Governor Brown's proposed 2018-2019 State budget includes funding for additional AB 617 emissions reduction efforts.

A central requirement in AB 617 is for CARB and the air districts to work with local residents to identify what information is already available, and what additional data needs to be collected to understand air quality in their communities. This includes reviewing community-based air quality monitoring done by air districts and community members themselves, and considering whether there are new technologies capable of providing cost-effective methods to measure air quality in the future. For example, lower cost sensors and other emerging technologies can be located in more locations within communities than more expensive regulatory-grade monitoring systems in place today.

Under AB 617, air quality data from community-operated and agency-operated regulatory monitoring will be made available to the public through easily accessible online tools. Similarly, CARB will be providing greater access to community-level source and emissions data. California is already taking its detailed regional-scale inventories down to the community level so that the public can easily see the emissions sources near where they live.

Full development and implementation of AB 617 will take time as we work to understand and develop tailored solutions for specific communities impacted by different combinations of pollution sources. One of the first steps is for CARB to identify the communities for the first set of emissions reduction programs. Part of that effort will be an assessment of the range of emissions types and sources impacting different

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III – BUILDING THE COMMUNITY AIR PROTECTION PROGRAM

communities. These communities will see targeted action through new regulations, new permit requirements, industry air emission caps, no net increase policies, focused incentive investments, and engagement with local land use authorities to reduce emissions and exposure to air pollution.

CARB must also select communities where air districts will conduct community air monitoring. Community air monitoring under AB 617 will complement community-led monitoring programs to expand coverage across the State. CARB expects there to be overlap in the communities selected for air monitoring and the communities selected for the first set of emissions reduction programs. The air monitoring data will provide more information about local air pollution throughout the State, help to evaluate the effectiveness of specific emissions reduction strategies, and track progress in reducing air pollution within the community.

We expect to select up to 10 communities in the first year of the Program, with the majority selected for community emissions reduction programs, many of which may also include an associated monitoring component. Selecting initial communities impacted by a range of pollution sources will drive the development of strategies that can serve as models for action in other communities. In addition, the combination of air district and community-led air monitoring will enhance our ability to collect data to support actions to reduce emissions and help place data collection in the hands of community-based organizations. These efforts will provide important lessons that can be leveraged across community-focused lens into our multiple planning efforts statewide.

While reductions in emissions and exposure to air pollution will be the primary tool for tracking the effectiveness of the Program, improvement of public health is mandated to be incorporated throughout the Program. Public health indicators are included as factors in assessing impacted communities, and CARB will provide information on publically available health data, identify public health data gaps, support and sponsor new public health research, establishment of community public health baselines and community health projects through our online Resource Center.³ In addition, collection of community-level air quality data can help researchers better identify connections between air pollution and health outcomes at the community level. AB 617 provides an opportunity and catalyst for greater engagement with both local government and public health agencies to bring public health considerations to the forefront of air quality-related decision making. It will also support the need for additional public health data collection and tracking by State and local public health agencies.

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³CARB's online Resource Center is described in more detail in a separate set of appendices.

IV. COMMUNITY-DRIVEN ACTION

Community members have intimate familiarity with their neighborhoods and a vision for what they want their communities to become. AB 617 creates a way to incorporate community expertise and direction into the development and implementation of clean air programs in their community. CARB is already working to redefine how it engages with community groups to meet the vision and requirements of AB 617. This central focus on community-driven action will include collaborative partnerships to design and implement community air monitoring systems and community emissions reduction programs, public health improvement programs and grants to support community-led efforts and capacity building.

To create the local partnership, air districts will establish local community steering committees composed primarily of individuals who live, work, or own businesses within communities designated for focused action through community emissions reduction programs and community air monitoring. Additional members will include air district staff and participants from schools, land use planning agencies, transportation agencies, local health departments, public health hospitals, clinics, physical rehabilitation centers, public health counseling services, academic researchers and labor organizations, as appropriate. CARB staff will participate as observers and provide technical support and enforcement, other input, as appropriate. This membership brings together an inclusive group of stakeholders with the community knowledge, technical and scientific expertise, and authority to implement effective solutions for cleaner air. Many of the air quality and environmental burdens faced by communities are related to land use authority to address the impacts of past land use decisions and to avoid bad land use decisions in the future.

As an initial commitment to support community organizations, the Legislature provided \$5 million in the fiscal year 2017-2018 budget for community assistance grants. In response, CARB created the Community Air Grants Program (Air Grants). The grants are designed to help local organizations engage closely in the AB 617 process and build capacity to become active partners in identifying, evaluating, and ultimately reducing exposure to harmful air emissions.⁴ CARB received 65 applications, requesting \$18.9 million in funding. Applications were received from communities around the State and included innovative proposals for engaging communities in AB 617's local air quality improvement process. To respond to this high demand, CARB selected 28 projects totaling \$10 million for funding. This amount reflects \$5 million appropriated in the fiscal year 2017-2018 State budget and an additional \$5 million which is contingent on the appropriation of those funds in the final fiscal year 2018-2019 State

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Hease submit any written comments by July 23, 2018 to: <u>https://www.arb.ca.gov/lispub/comm/bclist.php</u>.

⁴ California Air Resources Board, 2017-2018 Grant Guidelines, California Assembly Bill 617: Community Air Grants Program, February 26, 2018, available at: <u>https://ww2.arb.ca.gov/our-</u> work/programs/Community-Air-Protection-Program-AB617.

budget bill passed by the Legislature and signed by the Governor. The projects are located in disadvantaged or low-income communities and demonstrate partnershipbuilding or other forms of collaborative efforts. The portfolio of grants reflects geographic distribution from across the State, including rural and urban locations and several tribes.

Projects, programs, and activities funded through the grant program reflect the unique needs of individual communities. These include projects that focus on community-driven air monitoring, dissemination of information on local emission sources, as well as the development of actions to reduce community exposure to pollution, and to track progress. However, the grant recipients also include a broader group of organizations that will enable multiple groups to build overall capacity and community leadership for future community emissions reduction programs in order to achieve the goal of AB 617, which is to broadly address the pollution burdens faced by disadvantaged communities across the State.

V. TIMELINE FOR ACTION

AB 617 sets out an ambitious schedule for Program development and implementation (Figure 3). CARB must set the overall requirements for the Program in a statewide strategy and monitoring plan by October 1, 2018.⁵ This includes selecting communities for immediate action, defining benchmarks for what goes in a community emissions reduction program, identifying new strategies for reducing pollution in all heavily burdened communities, and developing guidelines for the effective deployment of community air monitoring. CARB's Governing Board will consider staff's proposals for these Program requirements and selection of initial communities at its September 2018 meeting.

The bill then directs the local air districts to work with communities to develop and implement the community emissions reduction programs and conduct community air monitoring, to adopt and enforce local regulations and other programs to reduce emissions in these communities, and to annually report on progress. AB 617 also directs CARB to select additional communities each year for further targeted action.

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⁵ California Health and Safety Code § 44391.2 and § 42705.5(b).

V – TIMELINE FOR ACTION

Figure 3 Summary of Milestones		
JULY 2017	AB 617 signed by Governor Edmund G. Brown Jr.	
	CARB Governing Board selects communities for action in the first year and sets the Program requirements.	
BY OCTOBER 2018	CARB launches Technology Clearinghouse for zero emission and the cleanest pollution control technologies: best available control technologies (BACT), best available retrofit control technologies (BARCT), and best available control technologies for air toxics (T-BACT).	
Ву Lате 2018	Air districts form community steering committees for first-year communities and begin to develop the community emissions reduction and public health improvement programs.	
By January 2019	Air districts develop expedited schedules for implementing BARCT and BACT, which must be implemented by the end of 2023.	
BY JULY 2019	Air districts deploy monitoring in first-year communities selected for community air monitoring systems.	
By September 2019	Air districts adopt programs in first-year communities selected for community emissions reduction programs.	
By DECEMBER 2019 AND ANNUALLY THEREAFTER	CARB Governing Board selects additional communities for air monitoring and community emissions reduction programs. CARB identify public health data gaps, support and sponsor new public health research, establishment of community public health baselines. CARB Governing Board considers air districts' community emissions reduction programs.	
BY OCTOBER 2020	Air districts provide annual reports for first-year communities selected for community emissions reduction programs.	
By January 2021 and Annually	Within one year after the selection of additional communities, air districts adopt community emissions reduction programs. CARB adopt Disadvantaged Community Public Health Baselines.	
By September 2023	CARB Governing Board updates the statewide strategy, which must be updated at least once every five years.	
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VI. PUBLIC ENGAGEMENT

Coordination with a wide variety of stakeholders is essential in helping to design and implement the Program at both the statewide and community level, and we have therefore conducted multiple outreach activities and different types of engagement, including community meetings and tours, workshops, town halls, Board meetings, individual and small group meetings, and convening a multi-stakeholder consultation group.⁶ CARB staff are also coordinating with air districts on additional outreach within their regions. This outreach and community participation is critical to the success of the Program.

Common themes expressed during the public engagement process to date are:

- Provide a ground-up, community-based approach for Program implementation. Community members want to participate and be directly involved in designing solutions for their community.
- Ensure transparency throughout the entire process of designing, implementing the Program, the selection of priority communities, the selection of community grant proposals. Work with community members to identify the best ways to make information accessible and user-friendly.
- Focus on air monitoring that will provide residents better information about their community and support actions to reduce emissions and exposure within communities. Establish criteria for developing and implementing community air monitoring to ensure that monitoring data support sound decision-making and action.
- Ensure a strong technical- and science-based foundation for addressing the most significant emissions sources that contribute to elevated health risk.
- Focus on immediate action in communities where the nature of the air pollution burden and contributing sources are well known.
- Include a core regulatory focus through new rulemaking commitments by both CARB and air districts, including a priority for zero emission technologies, new permit requirements, additional CEQA project review for mitigation compliance to ensure the Program does not rely on incentive investments alone.
- Provide assistance through incentive funding programs and ensure the focus of these programs reflect a community-driven process and community approval.

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⁶ Members of the multi-stakeholder consultation group include representative from environmental justice organizations, air districts, affected industry, academic institutions, public health organizations, and local and tribal governments. A roster of consultation group members is available at: <u>https://ww2.arb.ca.gov/our-work/programs/Community-Air-Protection-Program-AB617</u>.

VII – SELECTION OF COMMUNITIES FOR ADDITIONAL FOCUSED ACTION

- Include incentives for small businesses that are part of the community, to support
 efforts to reduce emissions. Enhance outreach efforts to connect small business
 owners to available resources and funding opportunities. Enforce CEQA project
 mitigation requirements to use small businesses which offer zero emission,
 emission capture and treatment technologies, BACT and BARCT.
- Ensure that emissions from all sources, categories and types do not increase in communities that are already heavily impacted.
- Implement measures to reduce the impacts of emissions sources that are approved and permitted close to sensitive populations, such as mandatory setbacks, expedited ZE technology implementation and back-stop rules.
- Include city and county government participation in the development and implementation of the Program and provide improved land use tools and guidance to support community education and advocacy. Introduce supporting legislation.
- Incorporate a strong focus on public health, the identification of public health data gaps, support and sponsor new public health research, establishment of community public health baselines, including the tracking of health data and improving the availability of public health information for the decision-making process.

CARB staff will continue to seek feedback on Program design and adjust and refine outreach approaches. Written comments and more detailed summaries of the feedback and recommendations received to date and how they have been addressed will be available on the Community Air Protection Program website at: <u>https://ww2.arb.ca.gov/our-work/programs/Community-Air-Protection-Program-AB617</u>.

VII. SELECTION OF COMMUNITIES FOR ADDITIONAL FOCUSED ACTION

CARB will follow a three-step public process to select communities for prioritization in the first year of Program implementation as summarized below. AB 617 instructs CARB to prioritize disadvantaged communities and locations where sensitive populations (e.g., where children and older adults live, work, or attend school) using air quality monitoring information, public health data, and other relevant information.

STEP 1 – IDENTIFICATION OF POTENTIAL COMMUNITIES

CARB staff will develop a broad list of communities for inclusion in the Program, drawing from recommendations from local air districts, from communities, and from CARB's own understanding of air pollution data.⁷ This is to ensure that the list of

Tochnical criteria, requirements for public process, and timelines for the 2018 community ations and air district recommendations are provided in CARB's *draft Process and Criteria for munity Selections* available at: <u>https://ww2.arb.ca.gov/our-work/progams/Community-Air-</u> <u>Protection-Program-AB617</u>. June 7, 2018

VII – SELECTION OF COMMUNITIES FOR ADDITIONAL FOCUSED ACTION

communities reflects the first-hand knowledge of local air quality impacts and the concerns of community members and community-based organizations. In addition, as AB 617 tasks the air districts with developing and implementing the community emissions reduction programs and community air monitoring, it is critical they work with local communities throughout the community identification and community emissions reduction program process. CARB staff will also review existing air pollution, health, and environmental data to identify any gaps and supplement the lists received from community members and air districts, as appropriate, to ensure a comprehensive statewide list that informs each year's selection process is established. The list of currently nominated communities can be found at: https://ww2.arb.ca.gov/our-work/programs/Community-Air-Protection-Program-AB617.

STEP 2 – ASSESSMENT OF THE CUMULATIVE AIR POLLUTION EXPOSURE BURDEN IN EACH COMMUNITY

CARB will work with local air districts to examine the six factors described below to assess the cumulative air pollution exposure burden in each community on the list compiled in Step 1, to inform selection of first year communities and the selection of additional communities in subsequent years of the Program's implementation. CARB will release this assessment in summer 2018:

- Exposure to air pollution
 - 1. Concentrations of ozone, particle pollution, all criteria and toxic air pollutants from measurements, air quality modeling, or other information quantifying air pollution exposure burden.
 - 2. Density of air pollution sources and the magnitude of emissions within the community from mobile and stationary pollution sources. Including atmospheric low inversion layers.
 - 3. Cancer risk estimates based on existing or new Health Impact Assessments and Public Health Surveys, air quality modeling that characterizes the burden faced by the community.
- Sensitive populations
 - 4. Sensitive populations including children, pregnant women, preexisting health conditions and the elderly at schools, hospitals, and day care centers located in close proximity to mobile and stationary emissions sources of concern, including roadways.
- Other measures of vulnerability to air pollution
 - 5. Public health indicators that are representative of the incidence or worsening of disease related to air quality such as the prevalence of asthma, heart disease, low birth weights, physical and developmental disabilities and premature death.
 - 6. Socio-economic factors, such as poverty levels and unemployment rates COMMUNITY AIR PROTECTION PROGRAM

STEP 3 – SELECTION OF FIRST YEAR COMMUNITIES

CARB staff will develop recommendations on the selection of communities for the first year of Program implementation. CARB's Governing Board will consider staff's and disadavantaged communities recommendations at its September 2018 public hearing. The full number of California communities with high cumulative air pollution exposure burdens exceeds a single year's capacity to successfully develop and implement community air monitoring or community emissions reduction programs. Therefore, the selection of priority communities will also include a description of near-term actions to reduce emissions and exposure in all communities, not just those selected in the first year.

CARB staff is proposing additional considerations to recommend to the CARB Governing Board in defining a list of up to 10 communities for action in the first year of the Program's implementation. Along with air district and community-based recommendations for first-year communities, these considerations include:

- *Regional diversity* Building capacity and supporting existing community-led solutions in multiple air districts.
- Sources Selecting a mix of communities with varying air pollution sources to support development of a range of emissions reductions strategies that can be transferred to other, similar communities. The pollution source mixes that CARB will consider to support strategies that benefit different types of highly burdened communities include, but are not limited to:
 - Freight-related pollution sources.
 - Specific industrial sources that are common in disproportionately burdened communities (e.g., metal plating and recycling facilities; oil and gas production and refining).
 - o Urban mixes of traffic, commercial, and residential sources of air pollution.
 - Rural sources of air pollution (e.g., agricultural activities, fugitive dust).
 - Pollution sources along the U.S.-Mexico border.

Communities included on the broad list under Step 1, but not selected for the preparation of a community emissions reduction program or community air monitoring in the current year, will remain candidates on the list for selection in Step 3 in future years. CARB and local air districts will also continue to implement broader State and regional programs to improve air quality so all highly burdened communities will see ongoing benefits prior to additional action through the AB 617 process in future years. These efforts include CARB and air district freight-related measures, statewide and local climate investments, and enforcement of emissions rules and regulations throughout the State, which are described in the "Statewide Strategies to Deliver New Reductions in Impacted Communities" section of this document.

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VIII. REQUIREMENTS FOR COMMUNITY EMISSIONS REDUCTION PROGRAMS

Once CARB selects communities for focused action, air districts must develop local community emissions reduction programs in partnership with community members, CARB, and other stakeholders, based on criteria set by CARB. The community emissions reduction programs will reflect the benefits of existing measures to reduce air pollution, and must include new actions (e.g., regulations, new Title V Permit requirements, enforce CEQA project mitigation requirements to use zero emission, emission capture and treatment technologies, BACT and BARCT, enforcement, incentives and AQMD's must include all major emission source reductions in all future AQMP's.) to further reduce air pollution disparities within these communities. The air districts' deadline to adopt the community emissions reduction programs is one year from community selection, which, for the first set of community emissions reduction programs is program process.

Figure 4 Overview of Community Emissions Reduction Program Process



The overall elements for inclusion in the community emissions reduction programs are summarized in the checklist provided in Table 1, with a detailed checklist provided in a separate appendix. CARB will review each air districts' Air Quality Management Plan (AQMP), Regional Transportation Planning Organization's (RTPO) Regional Transportation Plans (TRP), Ports Clean Air Action Plans and community emissions reduction program to ensure they meet the requirements and will reduce air pollution exposure in the designated community. The detailed checklist will form the basis for CARB's review and consideration for approval process for each community emissions reduction program.

WHAT WILL EACH COMMUNITY EMISSIONS REDUCTION PROGRAM INCLUDE?

Figure 5 provides an overview of the required elements of a community emissions reduction program.

VIII - REQUIREMENTS FOR COMMUNITY EMISSIONS REDUCTION PROGRAMS

Figure 5 Community Emissions Reduction Program Required Elements



COMMUNITY STEERING COMMITTEE

To ensure a collaborative partnership in developing the community emissions reduction programs, once communities are selected for action, air districts must form local committees composed primarily of individuals who live, work, or own businesses within each community. Additional members may include air district staff, and participants from schools, land use planning agencies, transportation agencies, local health departments, and academic researchers, as appropriate.

AIR QUALITY & PUBLIC HEALTH OBJECTIVES

While regional planning efforts provide an overall foundation for meeting clean air standards, the community emissions reduction programs will set specific air quality objectives for reducing exposure caused by local sources within the community. These objectives include a community public health improvement program to improve health outcomes, and maximizing progress in reducing exposure to air toxics such as diesel exhaust, benzene, toxic metals, pesticides, herbicides and fumigants.

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VIII – REQUIREMENTS FOR COMMUNITY EMISSIONS REDUCTION PROGRAMS MEASUREABLE TARGETS

To provide concrete metrics to track implementation, each community emissions reduction program will include goals for specific outcomes associated with deployment of clean technologies, compliance with regulations, and reducing exposure due to proximity to air pollution sources, which will inform the emissions reduction targets required by statute. These goals could include for example the number of zero emission trucks, trains, cargo handling equipment, public and school buses, mandatory replacement of pressure release valves on storage tanks with vapor recovery systems, the number of older wood stoves replaced with cleaner units, or commitments to work with local cities and counties to establish defined setbacks from air pollution sources to protect sensitive populations. The air districts must work with the community steering committee to set goals and estimate the emissions reductions targets expected from meeting these concrete milestones to ensure steady progress toward the meeting the air quality objectives.

NEAR-TERM DEADLINES

Each community emissions reduction program will define actions, technologies, new regulations and permit requirements to meet the targets within five years, along with an implementation schedule that includes actions in the immediate, three-year, and five-year timeframes.

IMPLEMENTATION STRATEGIES

CARB is providing specific guidance and direction on the process for air districts to work with the community steering committee to conduct a comprehensive assessment and identify emissions reduction strategies in each of the following areas as applicable. Each strategy will include a timeframe for action and implementation. These strategies will complement actions included in existing programs, but will also require new approaches to accelerate and focus direct reductions in emissions and air pollution exposure within the community to meet the emission reduction targets:

- New rules and regulations including an expedited schedule for zero emission, emission capture and treatment technologies, BACT and BARCT-retrofitting pollution controls on certain industrial sources, evaluation of more stringent control limits for other types of pollution sources, and consideration of indirect source rules and enforceable agreements.
- Permitting and facility-specific risk reduction audits.
- Incentives to promote accelerated turnover to cleaner technologies.
- Enforcement strategies to ensure rules, regulations, AQMD Title V Permits and CEQA projects achieve their expected reductions.
- Engagement with local agencies on land use and transportation strategies such as setbacks, buffer zones, and alternative truck routing.

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VIII – REQUIREMENTS FOR COMMUNITY EMISSIONS REDUCTION PROGRAMS

• Measures to mitigate the impacts from ongoing air pollution such as solid or vegetative barriers and installation of air filters in homes within the community.

Each community emissions reduction program will also include:

- A profile of the community and technical assessment of the nature of the air pollution challenge and contributing sources to provide a sound scientific foundation.
- Establishment of a Community Emissions and Public Health Baseline.
- An enforcement plan, developed in partnership with the community, to ensure effective compliance with all regulations by AQMD's, DTSC, Caltrans, RTPO Counties, Cities and Ports.
- Annual metrics documenting the amount of emissions reduced, the implementation status of each strategy, and quarterly enforcement activities reporting to track progress and clearly communicate how the program will be assessed.

HOW WILL WE ENSURE EACH COMMUNITY EMISSIONS REDUCTION PROGRAM DELIVERS REAL REDUCTIONS?

Ensuring the community emissions reduction programs are not simply a planning exercise but result in real actions to improve air quality is a multi-step process and the responsibility of the air districts, CARB, industry, and community members. This includes the following:

- Active community member participation in the development of the community emissions reduction programs.
- Public Health Research which collaborates that emissions reductions achieve improved public health.
- Requirements for emission reduction targets and measureable outcomes to drive action.
- CARB review and consideration for approval of the community emissions reduction programs after air district adoption. Transparent method for communities who do not approve proposed air district program can challenge program.
- Tracking and public reporting of metrics of progress by air districts, CARB, and community members, to allow all participants to assess implementation and hold agencies accountable.
- Annual public reports to the air district boards and CARB Governing Board on key program milestones, including emissions reductions and regulatory actions.

VIII – REQUIREMENTS FOR COMMUNITY EMISSIONS REDUCTION PROGRAMS

Table 1Checklist for CARB Review of Air District Community Emissions
Reduction Programs

CATEGORY	ELEMENT	DESCRIPTION	✓
COMMUNITY PARTNERSHIPS	Community partnerships	Establishes a community steering committee to develop major program elements. Community vote of approval.	
AND PUBLIC PROCESS	Public outreach	Includes public workshops, community meetings, and a community-specific webpage. Multi-lingual.	
WHAT ARE THE AIR POLLUTION	Community profile	Describes community characteristics including pollution impacting the community and current public health indicators and baseling	<u> </u> าe.
CHALLENGES FACING THE COMMUNITY?	Technical assessment	Identifies all pollutants and all sources contributing to the cumulative exposure burden; compliance issues in the community; sensitive receptor locations; and land use issues impacting exposure.	
	Targets	Specifies commitments for five-year compliance and technology deployment goals, emissions reduction targets for identified pollutants, and proximity-based goals to reduce exposure.	
WHAT ARE THE SOLUTIONS?	Strategies	Evaluates and includes new strategies including direct emissions reductions and engagement with local agencies on land use, transportation, and mitigation.	
	Implementation schedule	Identifies immediate, three-year, and five-year actions.	
	Enforcement plan	Includes a three-year enforcement history, compliance goals, enforcement mechanisms, and community outreach.	
HOW WILL WE TRACK PROGRESS OVER TIME?	Metrics to track progress	Identifies annual and multi-year metrics.	
	Annual reports	Provides public status updates on all strategies and metrics to track progress.	

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IX. STATEWIDE STRATEGIES TO DELIVER NEW REDUCTIONS IN IMPACTED COMMUNITIES

AB 617 directs CARB to develop a statewide strategy to reduce air pollution and public health impacts in impacted communities by October 1, 2018. The disproportionate air pollution burden in these communities is caused by many factors, including the cumulative impacts from multiple pollution sources, and local planning decisions that have placed residents and sources too close together. Identifying effective solutions will require multiple strategies at both the statewide and local level to deliver emission and exposure reductions directly within these communities, as well as the steps necessary to avoid decisions that have the potential to create new burdened communities (e.g., new or expanded warehouses that place warehouses next to homes and result in large volumes of truck traffic through communities).

Ongoing implementation of current programs will continue to reduce emissions throughout the State. However, California will need to build upon these efforts to meet critical air quality and climate goals. CARB has adopted a number of comprehensive air quality and climate plans over the last several years that lay out new emission reduction strategies. These plans include the *State Strategy for the State Implementation Plan*,⁸ the *California Sustainable Freight Action Plan*,⁹ *California's 2017 Climate Change Scoping Plan*,¹⁰ and the *Short-Lived Climate Pollutants Reduction Strategy*,¹¹ along with a suite of incentive programs. These programs provide a broad foundation for the additional emissions reductions needed to reduce pollution in California's most heavily burdened communities.

CARB and local air districts have joint responsibilities for delivering new reductions in these communities. In general, CARB is responsible for measures related to mobile sources, fuels, consumer products, and statewide actions to reduce air toxics. Air districts are responsible for addressing industrial and commercial sources, and sources of residential pollution such as wood burning, through permits and local regulations. CARB staff have therefore identified a multi-pronged set of actions that CARB will be

⁸ California Air Resources Board, *Proposed 2016 State Strategy for the State Implementation Plan*, May 17, 2016, available at: <u>https://www.arb.ca.gov/planning/sip/2016sip/2016statesip.pdf</u>.

⁹ California Department of Transportation, *California Sustainable Freight Action Plan*, July 2016, available at: <u>http://www.dot.ca.gov/hq/tpp/offices/ogm/cs_freight_action_plan/theplan.html</u>.

¹⁰ California Air Resources Board, *California's 2017 Climate Change Scoping Plan*, November 2017, available at: <u>www.arb.ca.gov/cc/scopingplan/scopingplan.htm</u>.

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¹¹ California Air Resources Board, *Short-Lived Climate Pollutant Reduction Strategy*, March 2017, available at: <u>www.arb.ca.gov/cc/shortlived/shortlived.htm</u>.

undertaking, as well as specific guidance on the process for local air districts to follow in identifying new local actions.

These statewide actions reflect a coordinated suite of strategies (Figure 6) that leverage core efforts under our current air pollution and climate planning programs, with additional measures to provide a further focus on specific local exposure issues. As part of providing greater focus on reducing local exposure, CARB will also be considering how land use patterns and proximity to sensitive receptors and more targeted geographic approaches can be incorporated into State and air district regulatory strategies. These actions will provide reductions to support communities selected for preparation of community emissions reduction programs, as well as reduce the air pollution burden in heavily impacted communities throughout the State.

Figure 6 Suite of New Actions

NEW REGULATIONS	Set new requirements for clean air technologies, coupled with enhanced enforcement tools. New Public Health Baseline and PM 1.0 standard to assure public health improvement.
NEW INCENTIVE GRANT FUNDING	Continue to help purchase cleaner vehicles and equipment in heavily impacted communities.
NEW RESOURCES AND TOOLS	Reduce community residents' exposure to air pollution, by working with land use, transportation planning agencies, DTSC, OES and OSHA to develop strategies to reduce emissions.

CARB is also committed to working with communities and air districts to identify additional sources that may require further statewide action and will update the CARB Governing Board on an annual basis on ongoing community-focused efforts and the need for additional regulatory and other actions.

WHAT NEW REGULATIONS ARE BEING DEVELOPED?

CARB MEASURES

New regulatory measures are the focus of statewide actions to deliver more reductions in impacted communities. As part of implementing the air quality and climate plans described above, CARB staff will be developing a number of regulations for the next generation of cleaner vehicles and equipment that will address many of the sources that are concentrated within heavily impacted communities. To maximize community

benefits, this will include a focus on zero emission technologies where the technologies are now feasible. These new regulations cover the following range of sources:

- For communities heavily impacted by freight sources -
 - Expanded standards for clean operation for ships while they are in port and immediate adoption of the At-Berth Rule and Back-Stop Rules.
 - New operating time requirements and transition to zero emission operation for transport refrigeration units at warehouses.
 - Zero emission requirements for all Trucks, Trains and Cargo Handling Equipment.
 - Petitioning the U.S. Environmental Protection Agency (U.S. EPA) for cleaner locomotive standards.
- For communities heavily impacted by traffic
 - o New clean car standards and sales requirements for zero emission cars.
 - New clean truck standards; new testing and warranty requirements to make sure trucks remain clean over their lifetime.
 - o Zero emission requirements for delivery trucks, buses, and airport shuttles.
- For communities heavily impacted by other equipment -
 - Zero emission requirements for airport equipment.
 - Zero emission requirements for lawn and garden equipment.
 - Assessing opportunities for zero emission requirements for other off-road equipment.
 - o Zero emission boilers.
 - o New cleaner jet fuel standards

CARB staff will also be developing other measures to improve energy efficiency, require cleaner fuels, and reduce climate super pollutants, which can also help reduce air pollution in impacted communities.

In addition to these core regulations, CARB staff have identified additional regulatory and enforcement actions CARB plans to take that will provide a specific focus on key sources that significantly contribute to the higher air pollution levels in heavily burdened communities as described below:

- Freight sources Additional freight-related risk reduction measures:
 - o Zero emission requirements for cargo handling equipment.
 - Zero emission requirements for drayage trucks.
 - Evaluating new cleaner requirements for older locomotives and restrictions on idling.
 - New cleaner standards for commercial harbor craft.

- *Trucks and off-road equipment* Screening programs within communities to make sure these vehicles meet emission standards.
- Passenger cars Strategies to help reduce the theft of catalytic converters.
- Stationary sources Statewide CARB measures:
 - Amendments to toxic control measures for chrome plating and composite wood products.
 - Suggested control measure for commercial cooking to reduce emissions of fine particles and air toxics.
 - Enforcement tools Focused enforcement at freight hubs, warehouses, distribution centers, transloading facilities, container, chassis, TRU storage yards, training for multi-media violations, and development of community programs for complaint reporting.

AIR DISTRICT MEASURES

At the local level, AB 617 also requires air districts to develop expedited schedules to implement zero emission, emission capture and treatment technologies, BACT and BARCT-retrofit pollution controls on certain industrial sources by 2023,¹² which will reduce emissions in communities located near these sources. CARB will support this effort by developing an online searchable database with information on current and emerging pollution control technologies. Air districts will also continue to implement regional plans for ozone and fine particles, along with local risk reduction measures for specific sources in their region.

As described in the prior section, CARB will also provide specific guidance on the types of actions and the process for identifying and evaluating further local pollution reduction strategies to be included as part of each community emissions reduction program. While the individual strategies will vary by community, the criteria establish a minimum baseline for the types of strategies to be considered and discussed with the community steering committees, including adopting more stringent control limits, new permitting requirements for existing and new sources, enhanced enforcement to deal with local compliance issues, prohibition of expansion of certain high emission industries and commitments for coordination with local land use and transportation agencies.

WHAT NEW INCENTIVE GRANT FUNDING IS AVAILABLE FOR EARLY ACTIONS?

Incentive programs are an important complement to regulations by providing grant funding to help purchase cleaner vehicles and equipment that provide early or extra

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¹² California Health and Safety Code § 40920.6(c).

pollution reductions. The 2017-2018 State budget included \$250 million provided from proceeds from the State's Cap-and-Trade program to achieve immediate reductions through grants for cleaner vehicles and equipment in impacted communities. Administered by the local air districts, this grant funding focuses on the replacement of vehicles and equipment that spend a substantial amount of time in impacted communities, with a priority on zero emission technologies. Air districts, working with communities, are identifying the types of investments that best support community needs, with at least 70 percent of the funds invested in projects that benefit disadvantaged communities. The proposed 2018-2019 State budget includes an additional \$250 million for incentive funding for continued support of early actions under AB 617, including both mobile and stationary sources.

In addition to this new incentive funding, CARB will work with the air districts to leverage other incentive programs such as the Low Carbon Transportation Investments,¹³ Volkswagen Environmental Mitigation Trust,¹⁴ and other low-income equity funding, along with local district funding programs, as community emissions reductions programs are developed and implemented. This will also include increasing outreach activities to community members and small business owners in the community to help deliver funding to those who need it the most.

WHAT NEW LAND USE RESOURCES AND TOOLS ARE BEING DEVELOPED?

Land use and transportation planning policies are primarily under the jurisdiction of local municipalities, counties, and regional planning agencies. However, CARB is developing a number of tools and resources to better support engagement on land use and transportation strategies in impacted communities. These include:

- Identifying best practices for outreach, land use, and transportation planning.
- Providing comment letters on proposed projects throughout the State, which emphasize the importance of air quality considerations and zero emission technologies.

¹³ Additional information for the California Air Resources Board, *Low Carbon Transportation Investments* is available at: <u>www.arb.ca.gov/msprog/moyer/moyer.htm</u>.

¹⁴ Additional information for the *Volkswagen Environmental Mitigation Trust* is available at: <u>https://www.arb.ca.gov/msprog/vw_info/vsi/vw-mititrust/vw-mititrust.htm</u>.

- Developing a Freight Handbook¹⁵ that will identify best practices for siting, design, and operation of freight facilities.
- Developing updated guidance on conducting risk assessments for gas stations.
- Compiling resources on health data to enhance the consideration of public health in the local decision-making process.
- Requiring a Health Impact Assessment (HIA) and Public Health Survey to establish a Community Public Health Baseline for each new project and every major source of emissions.

CARB will compile these materials and make them publicly available by October 1, 2018 through an online Resource Center, which will provide a one-stop shop to obtain data, guidance, and information on tools and resources that can help achieve cleaner, healthier air.

X. DEVELOPING ACTION-ORIENTED COMMUNITY AIR MONITORING PLANS

As discussed previously, in addition to selecting communities for the development of community emissions reduction programs, CARB must also annually select communities where air districts will conduct community air monitoring. This monitoring will enhance our understanding of pollution impacts within selected communities, and support effective implementation of community emissions reduction programs. For the first set of communities selected, community air monitoring must begin by July 1, 2019.¹⁶ AB 617 also directs CARB to prepare a statewide monitoring plan by October 1, 2018,¹⁷ which includes review of air monitoring technologies and existing community air monitoring systems.

As part of this statewide monitoring plan effort, CARB will be providing criteria and guidance for community air monitoring so that air districts and communities throughout the State can implement a process that results in action-oriented data to meet the needs of each community. Community organizations and air districts have conducted successful community air monitoring programs that provide best practices and valuable lessons learned to jumpstart implementation under AB 617. A number of activities that are essential to support the successful implementation of community air monitoring include developing criteria and best practices, supporting collaborative partnerships between communities, air districts, and CARB in conducting community air monitoring, and making the data accessible, transparent, and understandable.

¹⁵ More information on the development of a Freight Handbook is available at: <u>http://dot.ca.gov/hq/tpp/offices/ogm/cs_freight_action_plan/main.html</u>.

¹⁶ California Health and Safety Code §42705.5(c).

¹⁷ California Health and Safety Code §42705.5(b).

Building on these existing programs, CARB has developed a checklist for community monitoring consisting of 14 elements that are flexible enough to apply to a variety of monitoring needs, yet stringent enough to ensure that the data collected will support taking action. These 14 elements are summarized in the checklist provided in Table 2, with a detailed checklist provided in a separate appendix. The planning elements fall into three key categories shown in Figure 7.

Figure 7 Key Categories for Community Air Monitoring Planning Elements



HOW WILL COMMUNITY AIR MONITORING TRANSLATE INTO ACTION?

Importantly, community air monitoring conducted as part of AB 617 plays a key role in supporting the actions to communicate current air quality and reduce emissions and exposure to air pollution within heavily burdened communities. This can include better communication of current air pollution conditions within a community, identifying the pollutants of concern, as well as measuring the success of the community emissions reduction programs over time. Communities selected for air district-led community air monitoring will complement community-led programs, as well as other ongoing community-focused monitoring such as requirements for fence-line monitoring around refineries, and monitoring in neighborhoods impacted by oil and gas operations and pesticides. Community air monitoring can generate data to support a variety of policy actions, including:

• Providing real-time air quality data to support public health warning notification systems for residents to inform their daily activities and school flag programs to protect children during school activities.

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- Identifying all sources, categories of emissions and emission types contributing to air pollution burdens and public health impacts within the community to support development of a community emissions reduction program.
- Tracking progress toward improving air quality and public health within the community to measure the effectiveness of the community emissions reduction program.

HOW CAN I LEARN MORE ABOUT COMMUNITY AIR MONITORING?

CARB is developing an online community air monitoring "toolbox" that will contain information on air monitoring technologies, air monitoring activities, and resources for developing effective community air monitoring programs. This resource will support both air districts and community scientists. The toolbox will describe existing community air monitoring programs, and provide information on best practices such as how to select appropriate air monitoring methods along with methods for effective operation. It will also describe different air quality monitoring methods and equipment, and provide examples of air quality monitoring plans and templates. We will collaborate with work being done by the South Coast Air Quality Management District and the U.S. EPA to evaluate new low-cost air pollution sensors. The monitoring toolbox will be available by October 1, 2018 and CARB will regularly update the toolbox with new information.

HOW CAN I ACCESS DATA FROM COMMUNITY AIR MONITORING PROGRAMS?

CARB is also developing a new community air monitoring data portal (data portal) to provide an easily accessible location to view community air monitoring data collected under AB 617. This statewide data portal will complement local data displays developed by air districts and community organizations. The statewide data portal will help users understand how air quality data was collected, what it means, and how the data can be used.

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Table 2 Checklist for Developing Community Air Monitoring

CATEGORY	PLANNING ELEMENT	DESCRIPTION	1
	1. Community partnerships	Establishes community steering committee to develop community air monitoring.	
WHAT IS	2. Community-specific purpose for air monitoring	Characterizes the air pollution concern within the community (e.g., pollutants, locations of pollution) and monitoring	
THE PURPOSE		need(s). Describes the range of potential	
THE AIR MONITORING WILL	3. Scope of actions	communication and actions that air monitoring data will support.	
ADDRESS?	4. Air monitoring objectives	Defines the purpose of monitoring - what will be measured, when and where it will be measured, and why (e.g., to document	
		highest concentration).	
	5. Roles and responsibilities	Identifies all parties responsible for air monitoring.	
	6. Data quality objectives	Establishes level of data quality required to meet objective (e.g., precision, bias, sensitivity).	
	7. Monitoring methods and equipment	Identifies selected method and suitability of method to meet data quality objectives.	
HOW WILL MONITORING	8. Monitoring areas	Indicates where monitoring will be	
BE CONDUCTED?	9. Quality control	conducted and the rationale for selecting those areas.	
	procedures	Specifies procedures that will be utilized to ensure data is scientifically defensible.	
	10. Data management	Describes how data will be collected, managed, and stored.	
	11. Field	conducting monitoring.	
	measurements 12. Evaluating	Designates a procedure to check that original objectives are being met.	
HOW WILL THE DATA BE	effectiveness	Outlines approach for analyzing data (e.g., comparing trends, identifying	
	13. Analyze and interpret data		
	14. Lays out the air monitoring timeline and		
	field procedures		
	for those		



We will continue to seek recommendations and feedback on this document through a variety of forums and opportunities for discussion with stakeholders (Figure 8).

XI – NEXT STEPS

Figure 8 Engagement Opportunities

CALENDAR OF EVENTS	A calendar of engagement opportunities at both the CARB- and air district-level can be found at: <u>https://ww2.arb.ca.gov/our-work/programs/Community-Air-Protection-Program-AB617</u> .
Comments	Formal comments can be submitted to the online public comment log at: <u>https://www.arb.ca.gov/lispub/comm/bclist.php</u> . Please submit comments by July 23, 2018.
	Direct comments and questions can be submitted to CARB staff via email at: <u>CommunityAir@arb.ca.gov</u> or <u>AireComunitario@arb.ca.gov</u> .

These comments, recommendations, and discussions will inform development of an updated draft to be released in August, for consideration by the CARB Governing Board in September 2018.

CARB staff have also developed detailed implementation requirements and checklists in a separate set of appendices.

Additionally, CARB staff seeks comments on the draft Environmental Analysis associated with this Blueprint, as discussed in a separate appendix. The draft Environmental Analysis is intended to disclose potential environmental impacts and identify potential mitigation specific to the Program, as required by the California Environmental Quality Act (CEQA).

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Fresno Workshop June 19, 2018

An unknown participant in the "Community Emissions Reduction Program" discussion made a comment that we need to look at the big picture so we don't just move an emissions source from one place to another. For example, if we selected a community and the CERP strategies said they need emissions reductions from a chrome electroplater, we don't want that electroplater to just move to another community where they continue emitting and increase the exposure burden in their new location. -

Letter Verbal 1

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