



May 14, 2018

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

VIA EMAIL

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RE: Request for the Community Air Protection Program Framework to Implement Recommendations of the California Council on Science and Technology Regarding Oil and Gas Extraction Operations

Chair Nichols and Members of the Board,

The Center on Race, Poverty & the Environment, Central Valley Air Quality Coalition, Central California Environmental Justice Network, Central California Asthma Collaborative, Californians Against Fracking, Communities for a Better Environment, Physicians for Social Responsibility-Los Angeles and the California Environmental Justice Alliance submit the following comment regarding the implementation of Assembly Bill (“AB”) 617, and specifically, the Community Air Protection Program Framework (“Framework”) for meeting AB 617’s requirements to develop a statewide strategy and monitoring plan for Air Resources Board (“ARB”) consideration by October 1, 2018.

For decades, our communities have been impacted by insufficient regulation of oil and gas extraction operations. Approximately 5.4 million California residents live within a mile of

one or more oil and gas wells.¹ 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.² We are pleased that ARB has solicited these same residents' recommendations for what immediate action the State can take under the AB 617 Framework. The Framework provides a distinct opportunity for the State to take long overdue action to directly address the harms and risks from oil and gas extraction operations through implementation of the California Council on Science and Technology's ("CCST") recommendations to improve public health in and around those facilities in California.³ The implementation of these recommendations to safeguard public health and air quality are a prime example of one early action that ARB must take, and should include in its statewide strategy under the Framework. These recommendations include the following:

- Establishing a setback between wells and residences, schools, hospitals or other sensitive receptors.
- Limiting production from oil and gas extraction operations.
- Implementing other recommendations from the CCST Report, such as reducing air toxics from wells.

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, in some cases, cancer.⁴ Oil and gas extraction produces air toxics, including volatile organic compounds ("VOCs") like benzene and formaldehyde, particulate matter ("PM"), and hydrogen sulfide. Other inadequately mitigated harms include noise pollution, spills of toxic chemicals, and explosions.

Implementation of the CCST's recommendations is long overdue and is not only well within ARB's authority, but is also ARB's responsibility given the inaction of local and regional government in regards to oil and gas extraction operations. In addition, evidence included with this comment concludes that a 2500 foot setback between wells and residences, schools, and other sensitive receptors is the minimum necessary to begin to address public health risks. Moreover, ARB has implemented a similar setback in the past to protect public health; we once again call on the Board to exercise its authority to meet the intent of AB 617, and ARB's obligations to reduce toxic air contaminants ("TACs") and greenhouse gases ("GHGs") to protect public health in the State and, in particular, environmental justice communities.

¹ Tanja Srebotnjak and Miriam Rotkin-Ellman, "Drilling in California: Who's at risk?," Natural Resources Defense Council, October 2014, at 4, *available at* <https://www.nrdc.org/sites/default/files/california-fracking-risks-report.pdf>.

² *Id.*

³ In 2013, under SB 4, the California Natural Resources Agency commissioned the California Council on Science and Technology (CCST) to conduct an independent scientific assessment of oil and gas extraction operations, including fracking, in California. The Report was published in 2015.

⁴ See CCST Report, Volume II, Chapter 6, July 2015, *available at* <http://ccst.us/publications/2015/160708-sb4-vol-II-6.pdf>; and "Health Professional Statement on the Risks Posed by Urban Oil & Gas Extraction," November 28, 2017, *available at* http://www.stand.la/uploads/5/3/9/0/53904099/health_professional_statement_on_the_risks_posed_by_urban_oil_and_gas_extraction_final_11.28.17.pdf

I. CCST Report Recommendations

Pursuant to Senate Bill 4 (2013), the California Natural Resources Agency commissioned the CCST to conduct an independent scientific assessment of well stimulation treatments, including hydraulic fracturing, in California. The assessment resulted in the “CCST Report.”⁵ The CCST Report concludes with a series of recommendations (“CCST Report Recommendations”) focused on water resources, air quality, seismic impacts, and potential impacts on wildlife, vegetation, and human health. Those recommendations include: a setback between wells and the public; limiting production from oil and gas operations; and other recommendations to protect air quality and public health.

(i) *A Setback Between Wells and the Public*

The CCST Report recommends the State to develop policies such as science-based surface setbacks to protect public health by limiting exposures to harmful pollutants.⁶ While some California counties and municipalities have minimal – and inadequate - surface setback requirements between oil and gas development and residences, schools, and other sensitive receptors, there are no such regulations at the state level.⁷ The CCST Report also concluded that the “need for setbacks applies to all oil and gas wells, not just those that are stimulated.”⁸ Importantly, the CCST Report also states that, to protect public health, these setbacks are needed now, while monitoring is underway, and not after obtaining such results.⁹

Furthermore, ample scientific literature supports at least a 2500 foot setback 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.¹⁰ More recently, the Los Angeles Department of Public Health released a report detailing the need for increased

⁵ “CCST Report,” summary report and three volumes available at:

http://ccst.us/projects/hydraulic_fracturing_public/SB4.php

⁶ “Develop policies such as science-based surface setbacks, to limit exposures” CCST Report, Volume II, Recommendation 6.3, available at <http://ccst.us/publications/2015/160708-sb4-vol-II.pdf>.

⁷ CCST Report, Volume II, Chapter 6 at 431.

⁸ *Id.*

⁹ *Id.*, see also Volume II, Chapter 6, at 373 (“*In the interim* [to monitoring], increased application and enforcement of emission control technologies to limit air pollutant emissions and science-based minimum surface setbacks between oil and gas development and human populations could help to reduce these risks.”)

¹⁰ See CCST Report Recommendations, and “State of the Air: California,” The American Lung Association, 2013, available at <http://www.lung.org/associations/states/california/assets/pdfs/sota-2013/sota-2013-statewide-fact.pdf>; “Health Effects of Chemicals Used in Fracking,” Physicians for Social Responsibility, Los Angeles. August, 2013, available at <http://www.psr-la.org/health-effects-of-chemicals-used-in-fracking/>; “Existing Scientific Literature on Setback Distances From Oil and Gas Development Sites,” Nicole J. Wong, MPH. June 2017, available at http://www.stand.la/uploads/5/3/9/0/53904099/2500_literature_review_report-v2-share.pdf; and Letter from 250 LA Doctors, Nurses and Health Experts to LA City Council, November 2017, available at http://www.stand.la/uploads/5/3/9/0/53904099/health_professional_statement_on_the_risks_posed_by_urban_oil_and_gas_extraction_final_11.28.17.pdf.

mitigation measures in addition to minimum setback distances.¹¹ The report details other jurisdictions that have already adopted setbacks: for instance, since 2013, Dallas, Texas has implemented a 1500 foot setback.¹² Furthermore, adequately mitigating exposure to toxic emissions from oil and gas wells requires at least a one-half mile, or a 2,640 foot setback,¹³ and the Department of Public Health finds that a setback of 1500 feet does not protect against all public health risks, such as episodic spikes in emissions of toxics and criteria pollutants as a result of fires, explosions or other emergencies.¹⁴

(ii) *Limiting Production from Oil and Gas Operations*

Even with emission control technologies, local pollution still increases as oil and gas production increases, whether under improved efficiency measures (still allowing pollution up to permitted limits) or, worse, the use of offsite offset mechanisms. Further, given the prevalence of emission sources for TACs and other pollutants from the California oil and gas sector, “a significant induced increase of oil and gas production due to well stimulation could result in meaningful additional indirect air impacts.”¹⁵ As such, emission control technologies will not be effective unless oil and gas production also stops increasing, in part due to stimulated activities. Sources of environmental pollution include hydrocarbon production and processing activities (for instance, drilling, well stimulation, hydrocarbon processing and production, and wastewater disposal) and the transportation of water, sand, chemicals, and wastewater before, during, and after well stimulation.¹⁶ ARB should take appropriate action to limit production, and thereby decrease these consequential indirect impacts, in order to protect public health.

(iii) *Other Recommendations from the CCST Report*

Other CCST Report Recommendations provide a comprehensive range of strategies that ARB should also include as early action strategies in the Framework. In addition to those detailed above, other recommendations include: applying regulations across the board to include all oil and gas development, and not just the portion of development enabled by well stimulation or hydraulic fracturing;¹⁷ controlling emissions from leaks and spills;¹⁸ applying reduced-air-emission completion technologies to production wells, including stimulated wells, to limit direct

¹¹ “Public Health and Safety Risks of Oil and Gas Facilities in Los Angeles County,” Los Angeles County Department of Public Health, February 2018, *available at* http://publichealth.lacounty.gov/eh/docs/PH_OilGasFacilitiesPHSafetyRisks.pdf.

¹² *Id.*

¹³ CCST Report Recommendations Summary Report at 63, *available at* <http://ccst.us/publications/2015/2015SB4summary.pdf>.

¹⁴ “Public Health and Safety Risks of Oil and Gas Facilities in Los Angeles County,” Los Angeles County Department of Public Health, February 2018, *available at* http://publichealth.lacounty.gov/eh/docs/PH_OilGasFacilitiesPHSafetyRisks.pdf.

¹⁵ CCST Report, Volume II, Chapter 3.

¹⁶ CCST Report, Volume II, Chapter 6 at 413.

¹⁷ *See supra*, CCST Report Recommendations, Volume II, Recommendation 3.3.

¹⁸ *Id.*, Recommendation 3.1

emissions of air pollutants, including TACs near stimulated and un-stimulated wells;¹⁹ and, controlling emissions of toxics and criteria pollutants from wells.²⁰

Overall, the CCST Report Recommendations have already undergone review with the State’s own independent experts; this was over three years ago.²¹ There has been unfortunate local and regional inaction, still requiring the mitigation measures proposed by the State’s independent review in 2015. It is imperative for the Framework to correct such unreasonable delay and take early action to address such areas of community resident concern.

II. ARB Must Take Early Action in its Framework and Prioritize Direct Emission Reductions

AB 617 provides a community-focused action framework to improve air quality in communities most impacted by air pollution. We remind the Board that AB 617 was adopted in part to address the disproportionate environmental impacts on low-income communities of color by the passage of its companion bill, AB 398. Given the many environmental justice community-based organizations that opposed the passage of both AB 398 and AB 617, the climate bill’s legislative history is critical to its interpretation. The mechanics of AB 32 and AB 398 create pollution hot spots in and around environmental justice communities, and in particular those that reside in close proximity to oil and gas extraction operations.²² Implementation of AB 617 must, therefore, specifically mitigate such impacts.

In addition, AB 197 explicitly calls on ARB to “prioritize direct emission reductions” in its climate strategy.²³ AB 32’s most recent Climate Change Scoping Plan failed to provide or prioritize adequate direct emission reduction measures, instead relying on the cap-and-trade regime;²⁴ that oversight nevertheless emphasizes the importance for the companion AB 617 to address such necessary and mandated mitigation. AB 617’s plain language is consistent: in addition to developing a monitoring plan for the state and selecting the highest priority locations to deploy community air monitoring systems,²⁵ AB 617 *also* directs ARB to prepare a statewide strategy to reduce toxic air contaminants and criteria pollutants in communities affected by a high cumulative exposure burden.²⁶ Both of these provisions – the monitoring plan *and* the statewide strategy – must be completed on or before October 2018. The Legislature’s identification of these two separate tracks, differentiated by a monitoring component, clarifies the intent of AB 617 to include specific measures geared towards early action to reduce pollution

¹⁹ See CCST Report, Volume II, Chapter 3, Recommendation 6.2.; Volume III, Chapter 4.

²⁰ CCST Report, Volume II, Chapter 3 and Chapter 6 (recommendations).

²¹ Although ARB has referenced the CCST Report Recommendations in regards to ARB’s relatively recent methane regulation, addressing “co-benefits” for environmental justice communities, such regulation still does not prioritize direct emission reductions pursuant to AB 197.

²² See “A preliminary Environmental Equity Assessment of California’s Cap-And-Trade Program,” Cushing, Morello-Frosch, Pastor, Sadd, Wander, and Zhu, September 2016, available at https://dornsife.usc.edu/assets/sites/242/docs/Climate_Equity_Brief_CA_Cap_and_Trade_Sept2016_FIN_AL2.pdf.

²³ Cal. Health and Safety Code § 38562.5(a) and (b).

²⁴ See ARB 2017 Revised Climate Change Scoping Plan.

²⁵ Cal. Health and Safety Code § 42705.5.

²⁶ Cal. Health and Safety Code § 44391.2.

with strategies that have already been identified and where no additional monitoring is required. Echoing the CCST Report Recommendations, the plain language of AB 617 forecloses the possibility that ARB must wait for monitoring before achieving any direct emission reductions, let alone “prioritizing” them pursuant to AB 197. This is further in line with ARB’s authorizing statutes.²⁷

III. Environmental Justice Communities Have Requested Implementation of the CCST Report Recommendations as One Strategy for the Framework’s Early Actions

Although ARB Staff’s engagement of community stakeholders has been met with criticism, it has nevertheless been clear that Staff seek input and recommendations for such early action pollution reduction measures. This meets AB 617’s intent to consult with “environmental justice organizations ... [to prepare] a statewide strategy to reduce emissions of toxic air contaminants and criteria pollutants in communities affected by a high cumulative exposure burden.”²⁸

It is critical not only to solicit our communities’ opinions and recommendations, but to also adhere to those recommendations, especially in such instances as detailed throughout this comment, where community recommendations match scientific evidence and the law. Otherwise, ARB Staff’s attempts to obtain such recommendations would merely perpetuate environmental injustice in a sham process with predetermined outcomes. ARB’s Staff have solicited recommendations for early action, and the community residents that we represent have appeared and voiced the need to implement the CCST Report Recommendations as soon as possible.

During ARB’s initial informational meetings, presentations to the public detailed the need to focus on “early action” strategies.²⁹ On February 22, at the Community Air Protection Program Technical Summit held in Oakland, ARB Staff affirmed ARB’s intent to take early action to achieve direct emission reductions. At that time, ARB Staff clarified that such early actions would be in addition to incentive programs, such as the Carl Moyer Program. Thereafter, during the February 27 Technical Summit in Bakersfield, community residents specifically requested that ARB address the impacts of oil and gas extraction operations, especially in regards to those in close proximity to residences, calling for at least a 2,500 foot setback between active wells and residents. More recently on March 22, community residents from across California similarly voiced such concerns at the ARB Board Meeting.³⁰

²⁷ See Cal. Health and Safety Code § 39650 (“While absolute and undisputed scientific evidence may not be available to determine the exact nature and extent of risk from toxic air contaminants, it is necessary to take action to protect public health.”)

²⁸ Cal. Health and Safety Code § 44391.2(b).

²⁹ AB 617 Community Air Protection Program Informational Meetings October-November 2017 <https://ww2.arb.ca.gov/sites/default/files/2017-10/ab617-informational-meeting-presentation-10-16-17.pdf>

³⁰ See Public Comment on March Board Meeting, Discussion Item 18-2-7: Public Meeting to Hear an Update on Implementation of Assembly Bill 617, March 22, 2018.

IV. ARB Has the Authority and Obligation to Adopt the CCST Report Recommendations

ARB has the authority and obligation to adopt the CCST Report Recommendations under AB 617 given the inaction of local and regional authorities to protect public health from the impacts of oil and gas extraction operations. Moreover, implementation of these necessary and overdue recommendations 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.³¹

Adoption of the CCST Report Recommendations, especially the recommendation for setbacks, would protect the health of low-income communities of color disproportionately impacted by air pollution, making these ideal recommendations under the Framework. In 2005, CalEPA and ARB released the report, "Air Quality and Land Use Handbook: A Community Health Perspective." The Handbook provides ARB's recommendations to local land use authorities regarding suggested best practices to reduce local pollution, and in particular the cumulative impact of industrial pollution on public health.³² The Handbook finds that "localized air quality impacts ... can be avoided by providing an adequate distance or setback between the source of emissions and nearby sensitive land uses."³³ In line with the CCST Report, the Handbook also discusses oil and gas extraction operations, and significant related emissions of NO_x, PM, VOCs, CO, SO_x and PM₁₀.³⁴ 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.³⁵ At the same time, the Handbook stated that such recommendations addressing actions to protect public health, such as setbacks, were traditionally within the purview of local authority.

As Staff have discussed at the various workshops and Technical Summits for implementation of the Framework, it is important for the AB 617 process to also engage local authorities. The importance of such coordination necessarily implies that there has been local inaction, or the potential for further local action. Language in the Health and Safety Code is consistent:

The Legislature, therefore, declares that this public interest [to protect air quality] shall be safeguarded by an intensive, coordinated state, regional, and local effort to protect and enhance the ambient air quality of the state.³⁶

³¹ ARB mission, available at <https://www.arb.ca.gov/html/mission.htm>; see also Cal. Health and Safety Code § 39003, ARB is the "state agency charged with coordinating efforts to attain and maintain ambient air quality standards."

³² "Air Quality and Land Use Handbook: A Community Health Perspective," California Environmental Protection Agency and Air Resources Board, April 2005.

³³ *Id.* at 38.

³⁴ *Id.* at 73, 75.

³⁵ *Id.* at 21-23.

³⁶ Cal. Health and Safety Code § 39001.

However, the state board *shall* ... undertake control activities in any area wherein it determines that the local or regional authority has failed to meet the responsibilities given to it by this division or by any other provision of law.³⁷

Kern County remains in nonattainment for ozone and PM, and in some situations, severe and extreme nonattainment.³⁸ Furthermore, oil and gas activities are responsible for a significant percentage (30–60%) of TAC emissions in the San Joaquin Valley; this is particularly the case for VOC-related TACs.³⁹

Under the State’s climate policy statutes, there is a clear nexus between oil and gas extraction operations and the failures of the cap-and-trade mechanism, where “the top 10 users of offsets account for 36 percent of the total covered emissions and 65 percent of the offsets used during the 2011-2014 compliance periods.”⁴⁰ These top offset users are primarily in the oil and gas industry, and include Chevron, Tesoro, Calpine Energy Services and Shell.⁴¹

Both Kern County and the San Joaquin Valley Air Pollution Control District (“SJVAPCD”) have failed to adequately protect public health in regards to oil and gas extraction operations. Although Kern County recently reluctantly adopted a minimal 210 foot setback, it is still pending and subject to litigation.⁴² Community, environmental and environmental justice groups are currently challenging Kern County’s authorization of 3,647 new oil and gas wells each year for 20-25 more years without adequate environmental review.⁴³ In so doing, and reluctantly adopting a clearly insufficient setback,⁴⁴ Kern County failed to evaluate the direct and cumulative public health impacts of authorizing up to 73,000 new oil and gas wells.⁴⁵

Similarly, the SJVAPCD’s regulation of emissions from oil and gas well operations has also failed to protect public health. For instance, the SJVAPCD’s Indirect Source Rule (“ISR”) is intended to target NOx and PM emissions from the combustion of fuels in motor vehicles and

³⁷ Cal. Health and Safety Code § 39002 (emphasis added).

³⁸ Current Nonattainment Counties for All Criteria Pollutants, *available at* <https://www3.epa.gov/airquality/greenbook/ancl.html>.

³⁹ CCST Report, Volume II, Chapter 3, Air Quality Impacts, at 238, *available at* <http://ccst.us/publications/2015/160708-sb4-vol-II-3.pdf>.

⁴⁰ *See supra*, A preliminary Environmental Equity Assessment of California’s Cap-And-Trade Program at 9.

⁴¹ *Id.*

⁴² *See eg.* Public Health and Safety Risks of Oil and Gas Facilities in Los Angeles County,” Los Angeles County Department of Public Health, February 2018, *available at* http://publichealth.lacounty.gov/eh/docs/PH_OilGasFacilitiesPHSafetyRisks.pdf.

⁴³ *Committee for a Better Arvin, Committee for a Better Shafter, Greenfield Walking Group, Natural Resources Defense Counsel, Sierra Club and the Center for Biological Diversity v. County of Kern, Western States Petroleum Association et. al.*, Kern County Superior Court, Case No.: BCV15101679, Verified Petition for Writ of Mandate, filed December 10, 2015, *available at* <http://earthjustice.org/sites/default/files/files/Kern%20121015%20EndorsedPetition.pdf>.

⁴⁴ *See supra*, Los Angeles Department of Public Health Report, at 22, (such a minimal setback will not provide sufficient protections for public health in regards to air quality, noise, odor, and fires, explosions and other emergencies.)

⁴⁵ *Id.*

other off-road vehicles, and PM emissions that can arise from fugitive dust particles or fine particles directly emitted from combustion processes. Oil and gas exploration and extraction activities rely upon a variety of ancillary infrastructure and construction activities, including the use of such vehicles to transport water or extracted product to and from well-sites. Such activities can be regulated through the SJVAPCD's ISR, but are nevertheless exempt from such regulation.⁴⁶ In addition, small oil and gas production facilities are exempt from a majority of similar regulations designed to protect public health, while the other larger oil and gas producers are also the largest industrial source of direct PM2.5 in the valley – a pollutant the Concept Paper explicitly prioritizes.⁴⁷ Neither Kern County nor the SJVAPCD have adequately discharged their respective duties to protect the public health of its residents, especially those that live in close proximity to oil and gas well operations.

The regulatory pattern in Los Angeles is different. The City of Los Angeles, the County, and the South Coast Air Quality Management District (“SCAQMD”), responding to community complaints regarding severe extraction operation impacts, have *begun* adding regulations to address them, but these processes are not completed. For example, the City has improved its California Environmental Quality Act review of extraction permits, previously entirely inadequate, but the oil industry has fought these in court. The County has begun investigating extraction impacts through its Oil and Gas Strike Team, but this is not concluded, and the Strike Team found that additional actions are needed (setbacks are among the actions being evaluated). The County Health Department recently published a study showing many impacts for nearby community members, and finding, “[a]ir emissions from local oil and gas wells have been shown to contribute substantially to the pollution burden from stationary sources in Los Angeles County.”⁴⁸ The SCAQMD has adopted Regulations 1148.1 and 1148.2, which offer important reporting of chemical use, and some limited opportunity for air pollution and odor controls, but these do not go nearly far enough to prevent continuing impacts. Extraction operations in Los Angeles are very close to neighbors, and as the SCAQMD found, dozens of toxic chemicals are used in “enhanced” extraction operations. Although important gains have been started that are missing from the Central Valley, residents in Los Angeles are still in need, and seeking a regional 2,500 foot setback. The State should protect all Californians through a statewide setback, at the same time recognizing that local jurisdictions have the police power to enact stricter regulations to protect public health.⁴⁹

ARB must undertake control activities in any area wherein it determines that the local or regional authority has failed to meet “[its] responsibilities [to protect public health].”⁵⁰ The

⁴⁶ SJVAPCD Rule 9510 § 4.4.3.9.

⁴⁷ See 2015 criteria pollutant data accessed through ARB Facility Search Engine, *available at* www.arb.ca.gov/app/emsinv/facinfo/facinfo.php?dd=

⁴⁸ Public Health and Safety Risks of Oil and Gas Facilities in Los Angeles County, Los Angeles County Department of Public Health, February 2018, *available at* http://publichealth.lacounty.gov/eh/docs/PH_OilGasFacilitiesPHSafetyRisks.pdf

⁴⁹ See Cal. Const. Art XI, sec. 7; Cal. Health and Safety Code § 40000; *Gluck v. County of Los Angeles* (1979) 93 Cal.App.3d 121, 133, the Supreme Court “will be reluctant to infer legislative intent to preempt a field covered by municipal regulation when there is a significant local interest to be served that may differ from one locality to another.”

⁵⁰ Cal. Health and Safety Code § 39002

CCST Report Recommendations have been fielded by the state's own independent experts; yet, these recommendations are long overdue for implementation. Certainly, the CCST Report Recommendations were drafted after review of current oil and gas regulation in respective jurisdictions. Since then, no revision of those regulations has occurred to improve public health. Moreover, ARB has solicited the community's feedback for how best to implement the Framework, and the communities most impacted by such activities have voiced concern over the delay in implementing the CCST Report Recommendations. As local and regional authorities have still failed to do so, ARB is required to implement the CCST Report Recommendations, and should do so under the Framework. Certainly, the Concept Paper for the Framework also details the need for early action and lists suggested mitigation strategies, including "buffers."⁵¹

Finally, even absent local and regional authority inaction, ARB's authority to regulate TACs and GHGs add to its obligation to implement the CCST Report Recommendations under the Framework. "[F]rom a public health perspective, the most significant exposures to [TACs] ... occur within one-half mile (800 meters [or 2,640 feet]) from active oil and gas development."⁵² A variety of TACs can be released from well stimulation activities. Key TACs include VOC or fugitive hydrocarbon emissions, PM, and emission of substances used in hydraulic fracturing fluids.⁵³ In Kern County, oil and gas production is the dominant source of hydrogen sulfide (96%) and a major contributor to emissions of benzene (9%), formaldehyde (26%), hexane (11%), and xylene (14%). Emissions from production involving well stimulation are a small portion (approximately 20%) of these emissions, but, for some pollutants, still an appreciable fraction of total emissions in Kern County (for instance nearly 20% for hydrogen sulfide and greater than 5% for formaldehyde).⁵⁴ Moreover, "to the extent exposure to air contaminants from oil and gas wells is a concern, it is a concern for all wells, not just those that are hydraulically fractured."⁵⁵ The CCST Report includes hydrogen sulfide as an important hydrocarbon-related compound with potential health effects. We note that hydrogen sulfide is not technically classified as a TAC, but serious human health impacts are associated with breathing small amounts of hydrogen sulfide, resulting in the need for stringent safety requirements and controls around hydrogen sulfide releases.⁵⁶

ARB has explicit authority to regulate TACs,⁵⁷ and especially through setbacks and other controls given local and regional inaction to do the same. In addition, ARB already possesses much of this information for TACs through its California Toxics Inventory. ARB has previously implemented a similar setback regulation related to airborne toxic control measures for stationary compression ignition engines, demonstrating its authority to again promulgate a similar setback to protect public health in this instance.⁵⁸

⁵¹ Framework Concept Paper, February 7, 2018, at 11.

⁵² CCST Report Recommendations Summary Report at 63, *available at* <http://ccst.us/publications/2015/2015SB4summary.pdf>

⁵³ CCST Report, Volume II, Chapter 3, at 207.

⁵⁴ CCST Report, Volume III, Chapter 5, at 268.

⁵⁵ *Id.*

⁵⁶ *Id.*

⁵⁷ *See generally*, Cal. Health and Safety Code §§ 39650-39675.

⁵⁸ *See* Cal. Code Regs. tit. 17 § 93115.6. In 2003, ARB promulgated a regulation that prohibits "owners and operators from operating a stationary emergency standby diesel-fueled engine for non-emergency use

ARB is also the agency responsible for ensuring that California meets its GHG emission reduction goals.⁵⁹ Pursuant to SB 32, California must reduce its emissions to 40 percent below 1990 levels.⁶⁰ As ARB states, “this will require California to double the rate at which it has been cutting climate-changing gases.”⁶¹ Continued permitting of new oil wells is incompatible with the achievement of California’s reduction goals and the Paris climate targets. The state must stop issuing permits for new wells and other new fossil fuel projects, and commit to a plan to phase out existing oil extraction. Establishing a 2500 foot setback statewide, within which existing wells would be phased out as quickly as possible, would directly reduce toxic and criteria air pollutants pursuant to both AB 197 and AB 398, while also reducing GHGs and beginning the necessary phase-out of oil extraction.⁶²

V. CONCLUSION

Our organizations and the environmental justice community residents that we work with respectfully request ARB to implement the CCST Report Recommendations under the Framework. We thank ARB Staff for their efforts to solicit recommendations for early action from affected community residents and look forward to continue working with Staff to ensure an adequate implementation of the Framework under AB 617.

Sincerely,

Roger Lin and Paulina Torres
On behalf of Center on Race, Poverty & the Environment

Dolores Barajas-Weller
On behalf of Central Valley Air Quality Coalition

Nayamin Martinez
On behalf of Central California Environmental Justice Network

Kevin Hamilton
On behalf of Central California Asthma Collaborative

Catherine Garoupa White
On behalf of Californians Against Fracking

between 7:30 a.m. and 3:30 p.m, on days when school is in session, if the engine is located *within 500 feet of school grounds.*”

⁵⁹ Cal. Health and Safety Code § 38562(a).

⁶⁰ “California Charts Path to Achieve Ambitious 2030 Climate Goals,” *available at* <https://www.arb.ca.gov/newsrel/newsrelease.php?id=880>

⁶¹ “CARB Approves Plan to Meet California’s Bold Climate and Air Quality Goals,” *available at* <https://ww2.arb.ca.gov/news/carb-approves-plan-meet-californias-bold-climate-and-air-quality-goals>

⁶² *See* Cal. Health and Safety Code §§ 38562.5(a) and (b); 38562(d)(3).

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Stephanie Tsai
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