CALIFORNIA RURAL LEGAL ASSISTANCE, INC.

Community Equity Initiative

FIGHTING FOR JUSTICE, CHANGING LIVES

October 30, 2015

Mary D. Nichols, Chairperson
California Air Resources Board
1001 I Street
Sacramento, CA 95814

Electronically submitted at:
http://www.arb.ca.gov/lispub/comm2/bcsubform.php?listname=slcpdraftstrategy-ws&comm_period=1

Re: Comments on the California Air Resources Board (ARB) 2015 Draft Short Lived Climate Pollutant (SLCP) Reduction Strategy

Dear Chairperson Nichols:

We thank the ARB for this opportunity to provide public comment on the 2015 Draft SLCP Reduction Strategy. ARB is tackling an admirable goal of reducing SLCPs in California.

Introduction

The Community Equity Initiative (CEI) is a program of California Rural Legal Assistance Inc. (CRLA) and submits these comments on behalf of our client communities. CEI represents low-income disadvantaged communities in rural California, often comprised of farmworker households, on matters related to their rights to a healthy built and physical environment. Our clients live in rural, disadvantaged unincorporated communities throughout California and face significant daily environmental, transportation, housing, and infrastructure challenges.

I. SLCPs have a differential impact on disadvantaged, rural farmworker communities

Our client communities are the most vulnerable in California and often the hardest hit by pollutants. The scientific community has determined that we are already seeing the impacts of climate change and that more dire changes are imminent. These current and forthcoming changes will particularly harm disadvantaged communities in California as they face: food and job insecurity due to crop failure and drought conditions; water scarcity and contamination related to the devastating impact of the drought; serious health conditions stemming from a combination of poor air quality and lack of access to medical services; and, continued disinvestment in transportation, housing and infrastructure improvements due to inherent density

bias and unintended consequences in awarding funds aimed at reducing greenhouse gas emissions.

California agencies are increasingly considering the needs of disadvantaged rural communities on climate change strategies. For example, the Strategic Growth Council has taken an important first step in recognizing how important it is to include rural disadvantaged communities in climate change investment and has carved out a rural set aside for its funding stream in the Affordable Housing Sustainable Communities program. This is not an answer to decades of unjust exclusion from investment into their communities, but it is a step in the right direction toward recognizing that these rural disadvantaged communities have borne the overwhelming brunt of the harmful effects of industry activity and now deserve investment in projects designed to restore and prevent future harm. These communities derive little benefit from the industrial and agricultural activities in their areas and while these uses provide jobs, low wage jobs with little opportunity for advancement are not sufficient to address environmental and social harm caused by these activities. These communities should receive tangible and specific benefit from the remedial efforts now underway to halt and reverse pollutants, greenhouse gases and climate change.

II. SB 605 requires consideration of disadvantaged communities and sensitive populations, such as farmworkers in rural communities

The Air Resources Board should address the mandate set forth in SB 605 (Lara) and meaningfully include rural farmworker communities that fit squarely in the definition of disadvantaged communities. SB 605 is codified in California's Health and Safety Code and excerpted in pertinent part at § 39730(a)(4)(emphasis added):

> Prioritize the development of new measures for short-lived climate pollutants that offer cobenefits by improving water quality or reducing other air pollutants that **impact community health and benefit disadvantaged communities**, as identified pursuant to Section 39711.

Cal. Health and Safety Code § 39711 (emphasis added):

> The California Environmental Protection Agency shall identify disadvantaged communities for investment opportunities related to this chapter. These communities shall be identified based on geographic, socioeconomic, public health, and environmental hazard criteria, and may include, but are not limited to, either of the following:
>
> (a) **Areas disproportionately affected by environmental pollution** and other hazards that can lead to negative public health effects, exposure, or environmental degradation.
>
> (b) Areas with concentrations of people that are of low income, high unemployment, low levels of homeownership, high rent burden, **sensitive populations**, or low levels of educational attainment.

The ARB should take action consistent with these goals and priorities. A good first step is to actively engage the community and partner with community based organizations (CBOs) in order to successfully engage disadvantaged communities. That will assist the ARB in determining language needs for public workshops, setting times and locations for maximum participation, and identifying groups *within* disadvantaged communities who are at a high risk of facing further marginalization. Indigenous people from Mexico or Central America who speak distinct languages make up about 25% of farmworkers in California and are an example of sensitive populations at risk of extreme marginalization within disadvantaged communities. Extremely marginalized groups run the risk of being unable to report environmental effects due to linguistic and cultural barriers.

The 2015 Draft SLCP Reduction Strategy does not yet address these goals. The ARB strategy also should more closely follow the mandates set forth in §§ 39730 and 39711 of the Health and Safety Code.

III. Black carbon and incentive programs in disadvantaged rural communities

The SLCP draft strategy describes the significant progress California already has made curtailing black carbon pollutants through on-road vehicle emissions reductions standards. The remaining contributors are off-road mobile sources, fuel combustion from industrial and power sources, and residential wood burning. While there is room for consideration of disadvantaged rural communities in the forthcoming regulations devised to reduce off-road mobile sources and industrial and power fuel combustion sources, we will address those specific programs as they emerge and go through the public rulemaking process. Residential wood burning stoves are used in many of our client communities and warrant immediate analysis for possible impacts and methods to ensure compliance with Health and Safety Code §§ 39730 and 39711.

Many low-income rural households use wood as the primary fuel source for home heating and, to a much lesser degree, for cooking purposes. This renewable fuel source can provide a short term benefit to the household because it is affordable, however, the long term costs of wood as a fuel source include dramatically lowered indoor air quality (adversely affecting the health of household members) and contribution to SLCPs in the form of black carbon released into the atmosphere. The draft strategy includes many incentive programs. An incentive program that could be successful in disadvantaged rural communities is a low or no cost wood stove replacement program that would trade old carbon-heavy stoves for newer, less carbon-producing models and heavily subsidize or entirely cover the cost of the stove and installation. Any remaining costs borne by the homeowner should be repayable over a generous term with a zero percent interest rate. This type of program would reduce black carbon emissions and achieve the co-benefits described in Cal. Health and Safety Code §39730 (emphasis added):

> Prioritize the development of new measures for short-lived climate pollutants that offer cobenefits by improving water quality or **reducing other air pollutants** that impact community health and benefit disadvantaged communities.

IV. F Gases and incentive programs in disadvantaged rural communities

New protocols aimed at phasing hydrofluorocarbons (HFCs) out of refrigerant usage will gradually decrease the harm caused by HFCs as older appliances are discarded and newer, ozone friendly appliances are purchased. This attrition will be gradual and, like many new technologies, will be realized first in higher income households with older appliances cascading down through the second hand market for years to come. The draft strategy's reliance on voluntary measures and incentive programs, however, should address the need for equity and the need to make these programs accessible and beneficial to disadvantaged communities, not just to businesses or facilities. Our client communities would benefit from a low or zero cost trade-in program in which they could swap older model appliances using HFCs for newer models using one of the three new EPA-approved refrigerants described in the EPA's Significant New Alternatives Program (SNAP). This type of program would reduce F gases released into the atmosphere and achieve the co-benefits described in Cal. Health and Safety Code §39730 (emphasis added):

> Prioritize the development of new measures for short-lived climate pollutants that offer cobenefits by improving water quality or **reducing other air pollutants** that impact community health and benefit disadvantaged communities.

V. Methane emissions and disadvantaged rural communities

Disadvantaged rural communities often endure many of the environmental consequences of methane-producing industries including commercial dairy and livestock operations, oil and gas activities, wastewater treatment facilities, and landfills. Any strategies, programs, or other consideration of reducing methane emissions should carefully contemplate possible co-benefits to disadvantaged communities as well as try to anticipate any potential harm caused, intentionally or unintentionally, by mitigation efforts.

Commercial livestock operations

Commercial dairies and livestock operations are a ubiquitous presence in disadvantaged rural communities throughout California. Their negative impact on air and water quality is well documented. Methane emissions emanate roughly equally from commercial dairies from two predominant sources: enteric fermentation and biological waste storage and disposal. There might be an increased cost to large scale commercial dairies taking remediation measures, but the ARB should consider that aligning their current methods with best available technology is not an unduly burdensome expense; it is the *real cost* of large scale for profit industrial or agricultural activity.

Commercial dairies (enteric fermentation)

The draft strategy does not contain any concrete new approaches to reduce methane emissions from enteric fermentation, but does list several ideas warranting further research, for example on p. 47:

> "Further research is needed to fully evaluate the viability of these strategies to California; and to assess their associated costs and co-benefits, potential impacts on animal productivity, on animal and human health, other environmental impacts, and GHG and air toxic emissions associated with feed lifecycles."

The ARB should ensure fairness in the research process and solicit input from a variety of sources in addition to industry funded sources. The ARB also should consider additional factors when evaluating various strategies: immediate and long-term health and safety impact on commercial dairy employees; direct or incidental impacts on groundwater supply and quality; and, direct or incidental impacts on other environmental factors in surrounding communities.

Commercial dairies (manure management and displacing synthetic fertilizers)

Flush water lagoon storage of waste from commercial dairy cows account for about 50% of California's dairy and livestock related methane discharge. These unlined storage ponds also are responsible for significant degradation of groundwater quality, pest infestation issues from insects and vermin attracted to the unlined ponds, and decreased quality of life from pervasive odors in the communities surrounding the commercial dairies.

The strategy outlines potential alternatives to flush water lagoon storage (without methane capture) manure management: dry or slurry manure management and anaerobic digesters (with methane capture) used with flush, dry or slurry manure management systems. The draft strategy acknowledges that it will be difficult to balance the merits of each manure management system without negatively affecting another environmental factor, but it does not report on the potential of biofilters to both reduce methane emissions and improve air and water quality on land-constrained dairies.

ARB should consider the co-benefits of each strategy for improving water quality and reducing other air pollutants that have an effect on community health. ARB also should consider the health and safety of dairy employees, groundwater quality, and air quality above the potential financial impact on the dairy industry. Dairies currently polluting groundwater in disadvantaged rural communities through unlined waste lagoons should be the first to change manure management practices. Progressive measures aimed at reducing methane emissions from dairy cow manure could secure extremely important co-benefits described in Cal. Health and Safety Code § 39730:

> Prioritize the development of new measures for short-lived climate pollutants that offer cobenefits by **improving water quality or reducing other air pollutants that impact community health and benefit disadvantaged communities**.

Spreading some or all of the scraped manure on land as fertilizer also has the potential to degrade water quality if excessive manure is spread on too small an area of land, resulting in the manure seeping into groundwater or running off into surface water without subjection to the proper compliance and enforcement.

A federal court recently found that a factory dairy farm violated the Resource Conservation and Recovery Act (RCRA) by over-applying solid manure to agricultural fields and allowing seepage from single-lined manure holding ponds. *CARE and Center for Food Safety v. Cow Palace, et al*., 80 F. Supp. 3d 1180 (E.D.Wash. 2015). The manure was applied without regard to fertilization needs and without accounting for residue from previous applications, and the court found that it had an impact on groundwater quality and constituted solid waste as regulated by RCRA.

The draft strategy should recognize the additional environmental and economic benefits, both on- and off-dairy, that can be achieved by composting manure or digestate and report on research being done on extracting nutrients from manure or digestate that can be turned into a fertilizer product, and on filtration technology that would allow manure to be applied to fields in a well-treated non-toxic manner. These practices can not only displace synthetic fertilizers made from fossil fuels, but also allow farmers to better monitor nutrients to avoid leaching, conserve water, and reduce emissions.

ARB recognizes that manure management has an enormous impact on methane emissions in California, but the draft strategy relies overwhelmingly on voluntary measures, incentive programs, and market support to achieve these reduction goals, citing regulatory action as a final effort if all else fails. The language in SB 605 and Cal. Health and Safety Code § 39730 requires additional more stringent strategies for achieving emission reduction that the legislature envisioned for ARB when they designated ARB as the lead agency for reducing SLCPs.

SB 605 (emphasis added):

> The California Global Warming Solutions Act of 2006 designates the State Air Resources Board as the state agency charged with monitoring and regulating sources of emissions of greenhouse gases. The state board is required to adopt a statewide greenhouse gas emissions limit equivalent to the statewide greenhouse gas emissions level in 1990 to be achieved by 2020 and ***to adopt rules and regulations in an open public process to achieve the maximum, technologically feasible, and cost-effective greenhouse gas emissions reductions.***

Putting methane emitting waste to beneficial use

ARB includes "putting waste to beneficial use" as one of its chief strategies for methane emission reduction. This seems like a very efficient and cost-effective approach to methane emission management and we look forward to the forthcoming research and specific strategies that will support this concept. The draft strategy describes an enormous amount of infrastructure needed to support this shift to putting waste to beneficial use (page 11):

> "Effectively implementing the measures described in this Draft Strategy will not only reduce methane emissions but provide many other benefits as well, including cutting emissions of CO2 and boosting economic growth in agricultural and rural communities.

> Building infrastructure to better manage organic waste streams could lead to billions of dollars of investment and thousands of jobs in the State."

We are confident that ARB will take precautions while contemplating additional infrastructure to support the beneficial use strategy for all possible impacts on surrounding communities. ARB also can strengthen co-benefits by taking additional steps to ensure the "economic growth in agricultural and rural communities" actually benefits residents in these communities.

ARB can achieve this through: requiring the majority of jobs created to be filled by residents in surrounding low-income communities (or, give residents primary consideration in hiring); offering training programs to ensure that unemployed farmworkers and other unemployed residents have an opportunity to gather the skill set to become competitive for these projects; requiring heightened environmental review over new infrastructure to monitor diverting waste streams to avoid fugitive emissions or other injurious impacts from the new infrastructure; requiring a disaster management plan in the event of catastrophic failure of the waste management infrastructure and clearly identifying who will bear responsibility for clean-up, remediation, and providing emergency services to impacted residents (such as relocation costs, interim bottled water, groundwater or well remediation).

ARB cites many "barriers" to building the necessary infrastructure to divert waste streams on page 12. We would point out that environmental review is very important for any new project and that we view this process as a "safeguard" and not a "barrier." ARB should ensure that, when removing obstacles for new development, they do not omit rigorous and necessary environmental review for any planned development or investment in vulnerable communities.

Landfills

Many disadvantaged rural communities in California have industrial or agricultural activity situated directly inside or closely adjacent to residential activity, including landfills. ARB has described how fugitive emissions from anaerobic break down of organic materials in landfills contribute to methane emissions and how waste streams can be diverted to beneficial use and have positive environmental effects. The statement on page 48 however raises concerns:

> "[Eliminating] the disposal of organics in landfills as part of a broad effort to put California's organic waste streams to beneficial use can generate thousands of jobs and provide billions of dollars in value, much of it concentrated in the Central Valley and other rural areas."

The ARB will need to require enforcement mechanisms and take actions to ensure that these jobs will go to people living in disadvantaged areas or that the investment will translate into an economic benefit for people living in these areas. Specific, concrete steps should ensure quantifiable benefit to disadvantaged rural communities and result in a demonstrable improvement to the factors listed in §39730 as well as job training and priority hiring practices.

Oil and Gas

The draft strategy describes an emerging three part framework for addressing methane emissions in California: 1) new regulations on oil and gas production, processing and storage, which will extend regulatory authority to local air districts over infrastructure components, leak detection, and vapor collection; 2) implement SB 1371, requiring CPUC, in consultation with ARB, "to adopt rules and procedures to minimize natural gas leaks from CPUC-regulated intrastate transmission and distribution gas pipelines and facilities" (page 53); and, 3) improve leak detection, a collaborative effort between CEC and ARB.

CRLA will reserve comments on these developing strategies until they are finalized and opened for public comment. We do, however, again point to the requirement for ARB to prioritize projects with co-benefits to disadvantaged communities and suggest that ARB clearly delineate responsibility for responding to significant leaks, an internal process for immediately notifying residents who live close enough to be exposed, and a program providing assistance to residents who are temporarily displaced while the leaks are resolved.

Wastewater treatment, industrial and other sources

The draft strategy proposes, very broadly speaking, shifting wastewater treatment from an anaerobic to aerobic process or using a methane capture system if treatment of wastewater will involve an anaerobic process and converting the methane into usable energy. ARB suggests that wastewater treatment facilities with adequate capacity could take in organic waste diverted from landfills, break it down using an anaerobic process and methane capture system, and further reduce the methane emissions from landfills. This would require some regulatory action and oversight from several California agencies: ARB, CalRecycle, the State Water Resources Control Board, and Regional Water Quality Control Boards and will require stringent and transparent permitting procedure with thorough environmental review processes. Diverting organic solids from landfills for anaerobic digestion in a wastewater treatment facility, though innovative, also involves the transport of decaying organic solids through surrounding communities, which could pose a health risk. A robust permitting process with sufficient oversight and response to community complaints could be an important protective measure against actually worsening environmental conditions in disadvantaged communities. Odor management plans will be required for both the shipping and receiving facility as well as the vehicles transporting the waste.

Several programs are currently being implemented to redirect organics from landfill disposal. These initiatives include AB 1826 (Chesbro), which calls for mandatory commercial recycling of organics and the finalization of the State Water Resources Control Board (SWCRB) compost order as well as Greenhouse Gas Reductions programs funded through Cal Recycle are a key element of the AB 32 (California Global Warming Solutions Act of 2006) Scoping Plan. These will need to be coordinated in order to attain our statewide SLCP and waste diversion goals.

VI. Opportunity to reduce black carbon and methane SLCPs: promoting small scale ligneous composting the Central Valley

Composting is an essential industry for the Central Valley given the region's agricultural capacity. The ARB, coordinating with the California Department of Food and Agriculture, can expand research on how to feasibly conduct composting of ligneous biomass that otherwise is burned in agricultural burn contributing to black carbon, or in biomass facilities that are subject to poor regulation and cause harm to respiratory health of local communities.

Agricultural biomass has the opportunity to be turned into rich soil amendment that serves to support cleaner more sustainable agriculture and displaces fossil-fuel based synthetic fertilizers. Compost application and the improvement of soil organic matter has been shown to reduce runoff from fire scorched land and should be applied as a salve after wildfires. Compost improves nutrient and water holding capacity which is critical in the Central Valley's severe top-soil erosion due to increased drought conditions. All of the ecosystem services supplied by well-managed robust composting programs have immediate effects on rural communities by diverting burn waste, increasing soil fertility, displacing harmful chemical inputs, and sequestering soil carbon and water.

VII. Come up with specific guidance in the environmental justice section

Climate change is inextricably linked to environmental justice and we are encouraged to see that ARB has included a separate section on environmental justice in the draft strategy. We are concerned that the language is mostly vague and that ARB is highlighting speculative investments that may or may not trickle down to individuals in disadvantaged communities in this section. The draft strategy should contain specific measures to ensure investments directly benefit disadvantaged communities in order to adhere to Cal. Health and Safety Code § 39730. The draft strategy also discusses public engagement as an important part of developing the regulatory framework supporting SLCP reduction. The ARB should identify strategies in the SLCP Reduction Strategy to guide the public comment and review process.

I. Conclusion

We again thank ARB for the opportunity to provide public comment on the 2015-2016 Draft SLCP Reduction Strategy.

Sincerely,

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//Janaki Jagannath
Community Worker

cc: Ilene J. Jacobs, Director of Litigation and Training, CRLA