

SAN GORGONIO CHAPTER

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Clerk’s Office September 4, 2020

California Air Resources Board

1001 I Street

Sacramento, California 95814

**Subject: Comments on Community Emissions Reduction Program Staff Report,**

**San Bernardino, Muscoy**

Dear Members of the Board,

The Sierra Club San Gorgonio Chapter is pleased to offer this letter of comments on the Comments on Community Emissions Reduction Program Staff Report.

There are many ways to reduce pollution in environmental justice communities, but they require agencies to stand strong and actually require methods to reduce pollution. The current proposal lacks teeth to truly significantly reduce these very harmful pollutions. San Bernardino/Muscoy (SBM) Community Emission Reduction Program (CERP) appears to rely too much on incentive funding and not on the responsibility of polluters – we do acknowledge both are important. It is also unacceptable that health impacts are not seriously acknowledged. We strongly believe health impacts were a driving force behind the passage of AB 617.

The three main ways that AB 617 should improve air quality in environmental justice communities is by having AQMDs: (1) adopt an expedited schedule for implementation of best available retrofit control technology (BARCT) requirements; (2) deploy community air monitoring systems in certain identified communities; and (3) implement plans to reduce emissions in those identified communities.

Air monitoring needs to be deployed throughout the Inland Empire and especially those communities that have been officially designated Disadvantaged. It would have been excellent to have base line data on San Bernardino/Muscoy (SBM) prior to all the current pollution, but it is not too late to provide such in many other communities. The document lacks demanding responsibilities and relies too much on incentives. Having only 40 permanent monitoring station in the Basin and only one in SBM is inadequate — especially since many do not provide sufficient information on air toxics. Relying on mobile platforms is not good enough, but using mobile platforms #1, #2 and #3 will significantly help. SBM and the Inland Empire must have equivalent permanent platforms starting with state designated Disadvantage Communities. Community-driven sensor network must include everything mobile platforms #1, #2, and #3 have as well as other sensors.

The SBM community may eventually have a decent permanent monitoring system, but the CERP lacks teeth to reduce/eliminate emissions from the BNSF rail yard, bus yard, trucking companies, power plants, off roading, concrete batch, asphalt and aggregate plants, truck parking in neighborhoods, truck idling, and to reduce truck traffic on streets.

We are pleased to see that (pg. 8) ”CARB’s rulemaking efforts for trucks, transport refrigeration units, and other freight sources are placing a focus on accelerating the transitions to zero emission technologies in light of the needs to reduce exposure in AB 617 communities”. However, complying with only the minimum criteria/standards of AB 617 will not lead to protecting the health of the many SBM and Inland Empire residents as well as those in other Disadvantaged Communities throughout California. The Board approved Community Air Protection Blueprint fails to address many of the pollution sources mentioned above with serious restrictions and regulations, while relying too much on incentives.

Where are the specific emission reduction targets which should be connected to community health outcomes? The CERP must be in line with the state strategy and include emission reduction targets and specific reduction measures. There must be a schedule for the implementation of measures and a consistent/regular enforcement plan – much more often than quarterly. The plan also lacks enough on BARCT requirements for the area’s industrial plants. Only Tier IV or better construction equipment must be permitted.

**Warehouses:**

After years of advocating for a strong and equitable warehouse rule that will achieve necessary emissions reductions, our communities can no longer afford a business model that places industry over our health. We need our South Coast Air District to use its considerable legal and regulatory authority to develop a strong warehouse rule that tackles the region’s freight pollution crisis. Indeed, the warehouse industry must be held accountable for business decisions that contribute to consistent and toxic pollution in our neighborhoods. As we have repeatedly emphasized to Air District staff, our community members expect zero-emissions technology as part of any warehouse rule, in order to truly address the air quality and health crises caused by the warehouse industry. Any investment in “near-zero” equipment and infrastructure at this point is counterproductive and should not be included in the Community Emissions Reductions Plans.

The CERP stated a goal of outreach to warehouses to encourage zero-emissions electric vehicles and equipment and to enhance land use policies to reduce residents’ exposure to truck emissions. This next year needs to be spent strengthening the plan so there is a significant required reduction in the pollution that impacts the quality of life/health of residents/employees in the area. Cities throughout the Inland Empire are building warehousing across the street from homes and many are within 1000 feet of families. Truck traffic passes many more homes and the paths students walk to and from school.

The environmental impacts of warehouses, and the trucks which serve them, must be a serious consideration for County/City planning. Local governments must incorporate strong environmental justice policies so that communities already severely affected by pollution do shoulder even more of an environmental burden in the future. For example, limited truck routes through residential neighborhood hoods, citing of designated truck stops away from residential and school facilities, and citing of new warehouses should be at least 2,500 feet from the nearest home.

CARB and SCAQMD, in working with City and County governments, need to aggressively encourage zero-emissions equipment adoption and plan for sufficient electrical support infrastructure at warehouses. At least one DC Quick Charge/Fast Charge EVSE charging unit and two Level 2 EVSE charging units shall be installed per 100 required parking spaces — maintained for at least 15 years. These should also be made available to the public. The roof of any building over 50,000 sq ft must be covered to the maximum with solar arrays and maintained for at least 25 years.

Employers of 40 or more must establish a Transportation Management Association and coordinate with others. Developers shall require tenants to develop a trip reduction plan to achieve 1.5 average vehicle ridership if the project employs fewer than 250 stationary employees.

All landscaping must use only the most recent CARB certified equipment. Palm trees should not be allowed and only evergreen trees should be permitted which will help with filtering pollution and cooling hardscape.

The San Bernardino International Airport and surrounding lands are just outside of the designated CERP zone, but existing and planning warehouse developments there have serious pollution and truck congestion impacts within the AB617-designated San Bernardino, Muscoy community. Therefore, the CERP zone should be expanded eastward to include the airport area or it will be inadequate.

**Trucks:**

Transportation is our number one emissions challenge in California: it directly causes 80 percent of ozone-forming nitrogen oxide (NOx) pollution and approximately 50 percent of greenhouse gases. Heavy-duty vehicles make up nearly half of the criteria air pollutant emissions in the greater Los Angeles region.[[1]](#footnote-1) And the fuel to power these vehicles – the process of extraction, processing, and transporting diesel and natural gas – also emits toxic emissions every step of the way.

Even low levels of ground level ozone can cause irreparable harm, including permanent lung damage, asthma, heart attacks, strokes, heart disease, and developmental harm during pregnancy.[[2]](#footnote-2) Particulate pollution triggers heart attacks, strokes, and asthma, causes cancer, exacerbates obesity and diabetes, and contributes to cognitive challenges, including Alzheimer’s, dementia, and mental health disorders.[[3]](#footnote-3) Communities of color and low-income communities are exposed to substantially more cars, trucks, and buses than other demographic groups in California.

Our transportation system has been entirely dependent on polluting fossil fuels since the advent of the internal combustion engine. But today, for the first time in history, we have the ability to drive our modern world forward with zero-emission trucks, and with the newly adopted Advanced Clean Trucks regulation, California is now a key enabler in developing the supply of trucks to support widespread adoption of clean technology. Zero-emissions electric trucks must be encouraged as part of an economic and public health strategy for all AB617 affected communities. The Indirect Source Rules, the Drayage Truck Rule, the Advanced Clean Truck Rule should all be used to accelerate adoption of all-electric, zero-emissions Class 7 and Class 8 trucks.

*Neighborhood truck traffic and truck routes-*

Truck routes and parking areas should avoid being near homes, idling-free zones need to be established, and land use planning for warehouse (mentioned above), must take this into consideration. At the very minimum there needs to be a system for Automated License Plate Readers (ALPR) to make sure trucks are honoring designated trucks routes and staying away from sensitive sources like schools including walking paths to/from the schools, parks, and homes. Truck routes must be constantly enforceable with significant monetary penalties. Warehouse owners must include such information in contracts with truckers.

Quarterly idling sweeps needs to become at least monthly and ideally every other week throughout all areas which include monetary penalties. Electric infrastructure for all forms of trucks as well support equipment must be implemented on all buildings over 80,000 sq feet. This support equipment must include, but not limited to electric forklifts, hostlers/yard goats, sweepers, auxiliary power units (APU), and refrigerated trucks. All building must be constructed to LEED standards. All building should have a fully stocked trucker’s lounge so they will leave their trucks and not use their Diesel APU’s.

*Mode-shift from truck to rail-*

A regional planning consideration, short-haul freight rail within the region (particularly between San Pedro Bay and the Inland Empire), has long been discussed as a strategy to shift freight transport from truck to rail to reduce truck congestion and pollution in Southern California. This option needs further study, as moving a ton-mile of freight by rail uses 1/3rd to 1/5th the energy (using 1/3rd to 1/5th the fuel and producing 1/3rd to 1/5th the emissions), compared to truck. This is true whether the comparison is between diesel truck and diesel train, or electric truck and electric train.

California’s goals to reduce greenhouse gas emissions are dependent on cleaner freight transport, and more rail must be part of the solution. The San Pedro Bay Ports 2017 Clean Air Action Plan has a goal of increasing the amount of cargo leaving the port complex by rail to 50% by 2030, up from less than 30% today. To help achieve this goal, the plan stated that “the Ports will explore the potential of short-haul rail in inland sorting facilities about 60 to 80 miles away from the Port area”. While local traffic congestion still must be considered and mitigated, warehouses planned in proximity to existing and future intermodal rail terminals would reduce truck vehicle miles traveled (VMT).

**Railyard Emissions:**

There is a great need for near-zero and zero-emissions locomotives in California, and especially in the San Bernardino/Muscoy community. Even though the new Tier 4 diesel locomotives are significantly cleaner than older ones, they still emit enormous pollution compared to an electric locomotive, because they rely on carbon-intensive fossil fuels. While new Tier 4 diesels significantly reduce emissions compared to legacy diesel locomotives, Tier 4 locomotives still emit 6.5 times the NOx and 30 times the PM emissions of 2010 and newer on-road trucks and are not a viable long-term solution to improve air quality. Recent studies have shown the health impacts of diesel locomotives to passengers and crew to be significant, and the health impacts of ultrafine particulate emissions (even from a ‘clean’ diesel) are only beginning to be understood. CARB’s 2019 petition to the U.S.EPAto update emission standards for new and remanufactured locomotives, establishing a cleaner Tier 5 standard for new engines still only concerns diesel locomotives. While greatly reducing criteria emissions such as particulates and NOx, Tier 5 diesel engines do not significantly reduce greenhouse gas emissions.

It is time for the United States to catch up with the push for electric, zero-emissions locomotives to enable zero-emissions ‘track miles’. Electric railroads (using overhead catenary wire) are a well established, proven technology. While not as common in North America, all-electric intercity passenger and freight trains are commonplace in much of Europe and Asia. Fully zero-emission electric locomotives need to be introduced in California where the technology is appropriate today. The AB617 Community Emissions Reduction Plans omit discussion of zero-emissions electric locomotive technology, aside from brief mention of SCAQMD and the ports funding a technology demonstration project of zero-emissions locomotives, as well as BNSF Railway’s technology demonstration projects of zero emission or hybrid technologies. However, there is no demonstration project of zero-emission locomotives currently underway at the Ports of LA & Long Beach, and the planned demonstration project did not move forward.

Although the Community Emissions Reduction Program Staff Reports suggest that railyards should “work with local utilities to encourage zero-emission infrastructure” and “consider new requirements on locomotives” it is time for a more robust effort in this area. The Community Emissions Reduction Plans also fail to discuss the emerging technologies of battery-electric locomotives and hybrid battery-diesel electric locomotive configurations. Applications such as railyard switchyard or ‘switcher’ locomotives are an ideal opportunity for deployment of battery-electric locomotives. Zero-emissions switcher locomotives would also directly replace existing diesel switchers, which are typically the oldest and dirtiest locomotives in a railroad fleet. These legacy locomotives in urban railyard service have a disproportionate impact on neighboring communities, and should be taken out of service as soon as they can be replaced with electric switchers with significant public health benefits.

In the near future, battery-electric locomotives can play an important role in short-haul freight rail service, and regional passenger service such as Metrolink. While it is recognized that federal law limits the ability of CARB and SCAQMD to regulate locomotive emissions and railroad operations, the Community Emissions Reduction Plans should advance freight rail electrification by supporting a pilot project of battery-electric switchers in freight rail yards. While it is true that the turnover is slow for railroad equipment (which typically lasts 30 years or more), demonstration projects can take place in the near term, and bring pollution reduction benefits sooner rather than later. It is also feasible for existing diesel locomotives to be rebuilt as all-electrics.

Co-utilization of electric rail power infrastructure (substations for traction power and charging stations), can support charging stations in railyards for electric trucks, yard tractors and other equipment. Co-location of these charging stations will simultaneously aide the electrification of all equipment within a railyard.

**Zero-emissions Technology Demonstration Projects:**

There should be more federal, state and locally-funded programs to support zero-emission transportation research, development and technology demonstration projects. There is a great need to fund demonstrations of a variety of all-electric, zero emissions equipment involved in freight movement- locomotives, trucks, yard tractors, cranes, forklifts, etc. While we recognize that South Coast AQMD and CARB have funded a variety of zero-emissions technology demonstration projects, the affected communities would benefit if the scope of such projects could be greatly increased. Demonstration projects are key to successful implementation when the equipment is commercialized. Testing and evaluation in real-world conditions during the demonstration phase is critical to improving the technology so that it is reliable enough to be commercially-ready. Both regulatory requirements and incentive funding for zero-emissions technology are most effective when the equipment purchased is proven to be safe, reliable and economical.

In the Staff Report, we are pleased to see recommendations that CARB “work with South Coast AQMD and the community steering committee to ….prioritize project types for incentive funding based on steering committee recommendations, including use of zero emission technologies, where feasible, and identify funding sources for incentive-based and other strategies, including AB 617 incentive funds.”

However, without significant advances in the development of zero-emission motive power, the United States will lag far behind Europe in the adoption of emission-free freight transportation. Incentive funding works only when a variety of emission-free alternatives become available.

Now more than ever, millions of Californians need the State and government agencies to remain on track with efforts to clean the air. Our communities are suffering and need zero-emissions today, and the important emission reduction targets set by the community reduction plans. This pandemic has served to underscore the critical public health imperative to immediately electrify our transportation system, which will support the communities suffering most from this pandemic and the complicating factors of air pollution. As we all continue to work towards a near-term public health and economic solutions to the novel coronavirus crisis, it is also important that our state remains committed to the long-term solutions to the public health dirty air crisis.

California has already demonstrated that it can create new, high-quality, family-sustaining jobs in the clean energy economy through regulations that require strong emission reductions and air quality improvements. Investing in an equitable zero-emission system is vital to the public health of communities most impacted by the fossil fuel industry and the risk factors of COVID-19. Moreover, by focusing on building up California’s zero-emissions transportation and increasing resources for more municipalities and transit agencies to prepare for vehicle electrification, we can train and employ disadvantaged workers for family-sustaining jobs and increase our capacity to move to fully electric fleets, while putting Californians back to work.

If you would like to discuss these recommendations further, please contact me at [kimffloyd@fastmail.com](mailto:kimffloyd@fastmail.com) or at 760-680-9479.

Sincerely,

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Conservation Chair

Sierra Club San Gorgonio Chapter

1. California Air Resources Board Mobile Source Strategy and SIP Measures, 2016 [↑](#footnote-ref-1)
2. U.S. Environmental Protection Agency, *Integrated Science Assessment for Ozone and Related Photochemical Oxidants*, 2013. EPA/600/R-10/076F. [↑](#footnote-ref-2)
3. <https://www.lung.org/our-initiatives/healthy-air/outdoor/air-pollution/particle-pollution.html> [↑](#footnote-ref-3)