

## Comment Letter #89

October 17, 2022

Dear Air Quality Management Plan Team,

On behalf of the Redford Conservancy at Pitzer College and Radical Research LLC, we appreciate your comments on our letter. We thank you for the opportunity to comment on the Revised Draft 2022 Air Quality Management Plan (AQMP). We are extremely concerned with lack of air quality attainment now and into the future, and we are particularly concerned with the goods movement in contributing to this lack of attainment and to significant environmental injustices, especially in the Inland region. Below, we outline several important issues that point to the critical role that the AQMP can play in helping our region reach air quality attainment.

Goods movement is the single most impactful industry that is undermining the region's ability to reach air quality attainment.

In the Inland Empire, the rise of e-commerce since the Covid-19 pandemic has brought warehouse growth, air quality, and health inequities into sharp focus. The distinctive bowl shape of Inland geographies, combined with the Inland Empire's role as a global logistics hub, has led to increased rates of cardiac, respiratory, and reproductive health impacts, and (as your MATES tool demonstrates) cancers related to truck emissions.

- The American Lung Association in 2022 has ranked the Inland Empire as being the worst region in the nation for Ozone pollution and is ranked in the 99th percentile for particulate matter (PM) pollutants in the state of California. San Bernardino County is the worst in the nation, followed by Riverside County as second worst.
- Diesel exhaust is responsible for about 70 percent of the total cancer risk from air pollution in MATES V; cancer risk is in the 95th percentile near the Ontario warehouse gigacluster—equaling 624 people per million, which is 95% higher than the rest of the basin. The two Inland Empire measurement sites had the highest DPM concentrations in MATES V.
- UCLA data collected in 2020 indicate that roughly 70% of children under the age of 10 in San Bernardino County have asthma. The asthma-related hospitalization rates in San Bernardino County for children between the ages of 0 – 14 years is 16.7 percent or about 76,000 children.

Despite the widespread knowledge of these issues, warehouse projects continue to be approved at a rate over five times the rate of population growth, inducing more goods movement emission activity in the form of trucks, ocean-going vessels, locomotives, and cargo plane flights. Ultimately these all degrade air quality and increase greenhouse gas emissions.

Due to the severity of the problems our region is facing, we request that the AQMP be revised to highlight the role of local agencies and their impacts on emissions demand management, and their role in helping to meet the AQMP.

The Air Quality Management District (AQMD) is the Lead Agency responsible for developing the AQMP, which is the most significant guidance for air quality attainment into the future. As noted in its AQMP, multiple regulatory agencies are partners in efforts to improve air quality. Emissions controls on individual

source types are split amongst the U.S. Environmental Protection Agency (EPA), the California Air Resources Board (CARB), and the AQMD. This is well documented throughout the report. However, there is no attribution of responsibility for emissions activity rates.

As noted in our previous letter, there are two pieces to every emissions inventory.

1. Emissions rates – where cleaner technology emits lower rates of pollution per unit
2. Emissions activity – the number of units of a thing emitting pollution, e.g., truck vehicle miles traveled or ocean-going vessels. More emissions activity emits more pollution, less activity emits less.

The AQMP emissions control measures almost exclusively focus on the technology options to reduce the emissions rate portion of the emission inventory and is negligent in its discussion of the demand management options for reducing emissions activity. **We argue that the most cost-effective method to address future emissions is to reduce emissions activity growth rates.** We also argue that the AQMP has an important role to play in the reduction of emissions activity through its leadership role.

First, we suggest that the AQMP create a graphic that identifies key agencies that are required regulatorily to coordinate as part of the AQMP and highlight their role in in emissions control authority or emissions demand management authority. A potential graphic might look something like Figure 1:



Figure 1. Illustration of complicated network of local, state, and federal agencies regulatorily required to coordinate on the AQMP and their authority over emissions control technology and/or emissions demand management.

AQMD coordinates with the U.S. EPA and CARB to control emissions sources. Similarly, the AQMD must also coordinate with the Southern California Association of Governments (SCAG) and local land-use authorities such as cities and counties for regional and local transportation planning activities. As quoted to us, “SCAG is responsible for transportation planning and, under state law, for preparing the portion of

the SIP that addresses transportation control measures, land use, and growth projections.” We agree that the SCAG has regulatory authority over transportation planning, land use, and growth projections.

Considering this complicated regulatory landscape, we ask the AQMD to explicitly state how regulatory authority will be coordinated between SCAG, local municipalities, and the AQMD to coordinate the underlying growth in emissions activity. As a local authority, SCAG could play a much more significant role in the AQMP through more sustainable emissions activity growth scenarios. Local governments under SCAG, such as the Cities of Los Angeles and City of Long Beach which control the ports of LA and Long Beach; the City of Ontario, which is more than doubling the rate of cargo planes flying in and out of Ontario airport; and the collective actions of dozens of other local land use municipalities are contributing to emissions activity growth in all sectors of the goods movement industry. We ask that these local land-use authorities inducing emissions activity growth be identified and asked to meaningfully contribute/coordinate to the success of air quality planning in the region.

The AQMP needs to strengthen the accountability of local land-use and transportation planning authorities that are directly undermining the air quality planning process through unsustainable emissions activity growth scenarios. Their collective actions need to be identified in this report, so that the 2024 Regional Transportation Plan can be modified to reduce the current growth rates in all aspects of the goods movement industry.

Figure 2 shows the relative annualized activity growth rates for goods movement sectors from 2018-2037 relative to car VMT, population, and GDP projections. The emissions activity growth rate for goods movement sectors are 3x to 5x times the rate of population growth; this is unsustainable and undermines attainment of the ozone standard, AB32 GHG goals, and addressing environment justice issues.

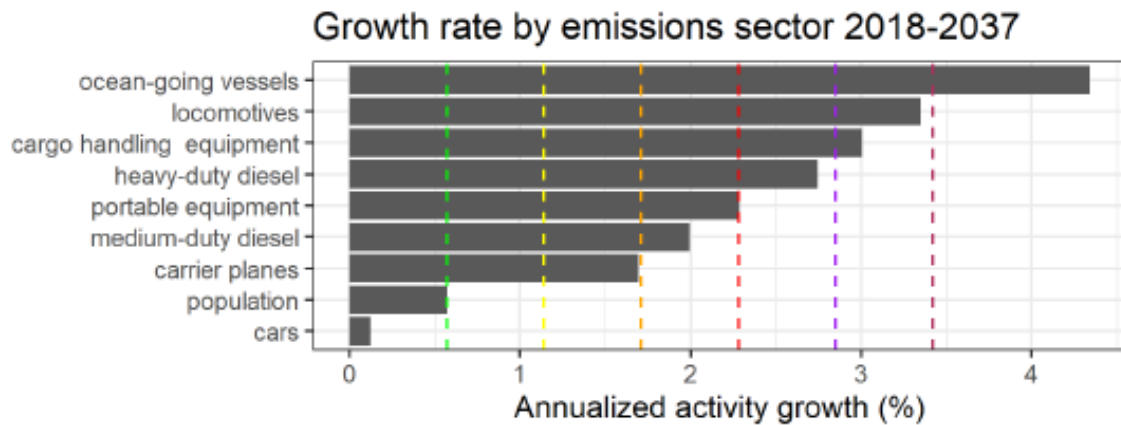


Figure 2. Growth in emissions activity rate by selected emissions sectors based on AQMP footnotes in Chapter 3 of the AQMP. Annualized values are calculated by dividing cumulative growth from 2018-2037 by 20.

Emissions growth projections in all goods movement categories vastly outstrip population growth. Figure 2 shows emissions growth rates in heavy-duty and medium duty- diesel trucks, locomotive activity, commercial planes, ocean-going vessels, non-road sources, and population. This is all based on data from 2018-2037 from the AQMP sources listed in Chapter 3 footnotes of the AQMP. The colored horizontal

lines, intentionally associated with the AQI color scheme, indicate multiples of the population growth rate, yellow = 2x, orange =3x, red = 4x, purple = 5x, and maroon = 6x. We believe these emissions activity growth rates are **unhealthy for sensitive groups**, **unhealthy**, **very unhealthy**, and **hazardous** and think the AQMP should explicitly label them as harmful given the known health effects of these emissions.

As is clear from this figure, all goods movement sector related emissions activity rates grow faster than population growth by a factor of 3-6X. In contrast, gasoline powered vehicle VMT is growing at a rate slower than population, attributable to the widespread adoption in EVs.

We acknowledge and recognize from AQMD comments to our previous letter that AQMD does not have regulatory authority to control these emissions rates or emissions activity. We acknowledge and recognize that AQMD does not have regulatory authority over the Regional Transportation Plan (RTP) or over local land-use decisions. However, the AQMD is able to characterize and attribute the fraction of emissions that CARB and EPA have authority to regulate, and the AQMP exhorts these non-local partner agencies to do more to reduce emissions rates through their regulatory authority. By analogy, we believe that the AQMD can and should use the AQMP to identify SCAG and local municipality collective actions through their RTP and local land-use planning processes that are inducing unsustainable growth rates in the goods movement sector. While AQMD has no authority to enforce these actions, it can certainly ask these agencies to collectively be accountable to improve the air of their own residents.

We request that the AQMD perform a cost-benefit analysis to assess whether the economic costs of goods movement outweigh the benefits.

The underlying assumption is that unsustainable growth scenarios are good for the economy. While warehouses do create jobs, these jobs have been shown to be of very low quality, exploitative, and rife with health and safety issues. The number of jobs doesn't necessarily mean that, on a per job basis, the benefits outweigh the significant negative externalities for workers as well as communities.

We ask that the AQMD calculate

- the cost *per job* of all added emissions
- the cost of *regulation and mitigation* of all these specific pollutants, including fleet electrification and other mitigation measures
- the cost of added *carbon dioxide*
- the cost of added *NOx*
- the cost of *human health* to days lost in work or school to asthma, as well as direct healthcare costs
- the cost to the *environment* in loss of biodiversity, increased heat, lack of water filtration, loss of ability to create carbon sinks through land use.

We view the AQMP as an extremely important opportunity for the AQMD to provide leadership in collective decision making among local municipalities and other regulatory agencies. Collective decision-making in the regional transportation and land-use areas is undermining progress in attaining ozone or in

limiting carbon emissions<sup>1</sup>. We want to know how the AQMP will expand the discourse about attainment and whether AQMD will consider stating explicitly in the document that the easiest and cheapest way to limit emissions is through emissions demand management. We urge AQMD to consider that it is well within the scope of the AQMP to carve out a pathway between multiple agencies to consider resetting goods movement growth to sustainable levels more in line with population growth.

The goods movement sector emissions activity growth in the AQMP is an abdication of local municipality accountability for emissions-demand management. The AQMD does not regulate or have authority to control this. However, it is accountable to *describe and display* the decisions of local politicians and decision-makers in contributing to failed ozone management policies.

As such, we ask:

- In what ways will you adequately describe in the AQMP the role of collective local decision making in undermining the current air quality in the LA Basin?
- Will the AQMD advocate for collective-action from local decision-makers with regards to land-use and transportation planning?
- Will the AQMD stand-by while the collective decision-making local land-use agencies delay ozone improvements for decades at the cost of human health and suffering?

The same logic applies to carbon emissions, which continue to increase at a critical time in human history—and which also contribute to worsening local pollution. CO<sub>2</sub> continues to grow, as is clear from NOAA data, as demonstrated in Figure 3. This rise in CO<sub>2</sub> is linked with the logistics sector growth, which completely undermines our regional decline in gasoline VMT. Thus, the same premises apply to the potential role of the AQMP in address logistics demand with partner agencies in order to meet air quality standards. Increased carbon is a form of increased pollution, meaning that carbon emissions need to be considered as a co-benefit by the AQMP, especially during this time of climate crisis.

---

<sup>1</sup> We have read and appreciate your agency's comment letters on several goods movement projects, including warehouses.

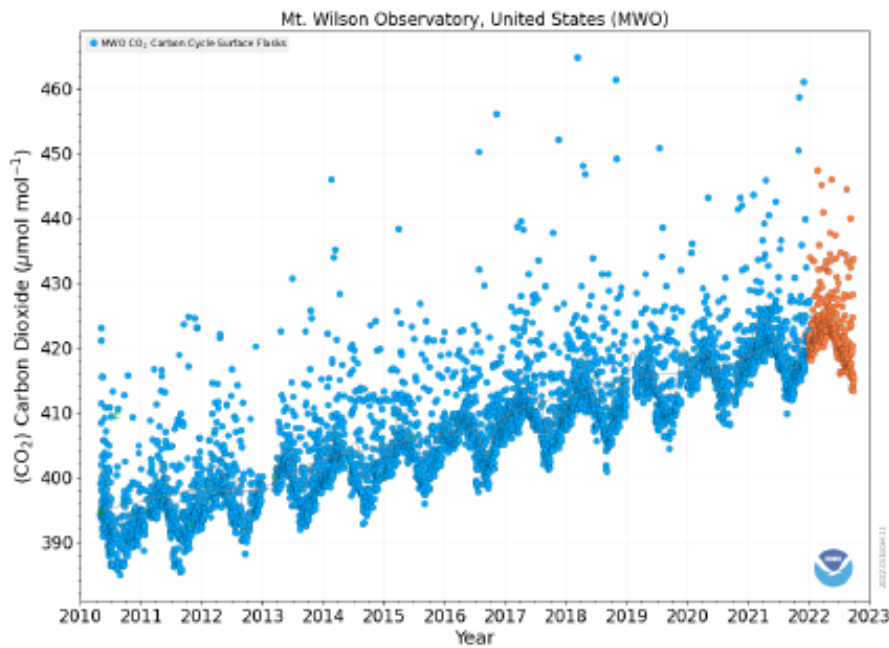


Figure 3. NOAA's global monitoring laboratory demonstrates a steady rise on CO<sub>2</sub> at a critical time in human history. <https://gml.noaa.gov/dv/iadv/graph.php?code=MWO&program=ccgg&type=ts>

In conclusion, the most cost-effective, technology-free way to reduce emissions is to reduce the growth of the logistics sector along with your local-partner agencies. This requires a focus on local actions that can be taken by SCAG and collectively by local municipalities, and that requires AQMD leadership. The AQMD must provide leadership and coordination that will allow the region to limit exponential demand-driven growth that predominantly harms communities alongside goods movement corridors, and that will compromise air quality attainment for the entire region.

Our communities are paying the price with their health.

Sincerely,

**Robert Redford**  
**CONSERVANCY**  
for Southern California Sustainability  
**PITZER COLLEGE**

**R<sup>2</sup> RADICAL**  
**RESEARCH LLC**

Errata –

- Figure 1-2 is incorrect in its description of the “% annual increase” in the population. The annualized % increase in population over the trend period is ~0.55% per year. It isn’t increasing over time. The value shown is merely the cumulative % increase since the baseline year of 2018.
- P. 1-23 – ‘Given the magnitude of emissions reductions required for attainment of the 2015 8-hour ozone standard, the attainment demonstration will have to rely on the deployment of future advanced technologies to achieve the needed emissions reductions.’ Again, this is due solely due to the omission of any consideration of potential future emissions demand management strategies that would also be able to yield at least 30 tpd NOx reductions through e.g., no-growth or low-growth emissions strategies for goods movement sectors AT ZERO COST.
- Figures 2-2, 2-4 – While this figure is important historically, showing ozone exceedance days since 2002 would be much more relevant and allow the reader to see the lack of progress in this metric over five straight generations of AQMP plans. In fact, specifically providing horizontal markers at AQMP plan years (2002, 2007, 2012, 2016) would be helpful to identify when progress stalled.
- Table 2-19 – The concentration values for San Bernardino County are higher than Los Angeles for NO2 in each category. Please correct. Also note the shift in max concentration Inland as a result of increase truck traffic induced by warehouse growth in the IE.
- Table 2-21 – should every near-road NO2 value be bold here? Seems like it should just be the CA-60 NR site and not every site to be consistent with other tables in this section.
- Atypical meteorology in 2020 – Is this assertion de-trending for changing average temperatures in the LA Basin as a result of climate change? This is the new climate change normal, and should not be considered atypical for the next 20 years of the AQMP, especially in the context of understanding future year ozone.
- Same point for Figure 2-19 – while 2020 was extreme with 4.4 M acres burned, 2021 had 2.6M acres burned, second-worst on record. More extreme fire years are predicted in a warmer climate. This should be planned for in the AQMP.