American Lung Association of California • Bay Area Healthy 880 Communities- San Leandro • California Pan-Ethnic Health Network • Center for Energy Efficiency and Renewable Technologies • Center on Race, Poverty & the Environment • Clean Water and Air Matter • Communities for a Better Environment • Community Environmental Council • EndOil • Natural Resources Defense Council • Sierra Club California • Tri-Valley CAREs • Union of Concerned Scientists

September 24, 2008

Kevin Kennedy
California Air Resources Board
1001 "I" Street
P.O. Box 2815
Sacramento, CA 95812

RE: Support for Regulatory Measures on Petroleum Refineries and the Industrial Sector in the AB 32 Scoping Plan

Dear Mr. Kennedy:

On behalf of the undersigned environmental, environmental justice, and health groups, we are writing to urge you to strengthen the Draft Scoping Plan by recommending the adoption in the Proposed Scoping Plan of those measures currently under evaluation for the industrial sector, particularly refineries. These measures would reduce both global warming pollution and criteria and toxic pollutants from petroleum refineries, one of the largest industrial sources of those pollutants in the state. In addition, CARB should strengthen the proposed audit measure included in the Draft Scoping Plan.

Achievable Emission Reductions That Provide Large Benefits to Communities, as Envisioned in AB 32

The industrial sector represents at least 20 percent of California's global warming emissions. Given the size of the sector and the size of the challenge we face, it is absolutely critical that we take advantage of all feasible emission reduction opportunities available, especially when, as here, they will have economic benefits and will ensure a minimum level of health protections for our most disadvantaged communities. CARB's analysis of measures under evaluation in the Draft Scoping Plan places the potential global warming pollution reductions from refineries alone at 2-5 MMT CO2e.[1] The projected emission reduction from the industrial sector as a whole could add up to almost 20 MMT CO2e.[2] The measures under evaluation are feasible, affordable global warming pollution reduction measures that would also ensure reductions in other criteria and toxic air pollutants at each facility and would thus meet AB 32's objective to ensure maximum societal benefits and direct private

[1] CARB Refinery Workshop, September 9, 2008, Presentation at 5.

[2] Appendices to Draft Scoping Plan C100-C122.

and public investment to the most disadvantaged communities in California to the extent feasible.[3]

Not only are these measures (like energy efficiency) entirely feasible, they are also affordable. Even before the health, air quality, and energy savings co-benefits are taken into account, many of these measures actually save industries money. CARB's own estimates show hundreds of millions of dollars in savings from these measures.[4]

CARB should include all of the various AB 32 objectives as explicit criteria with which to evaluate measures for the industrial (and other) sectors.[5] In doing so, CARB's estimates of emission reductions and costs for each of the measures should also take co-benefits, such as air pollution and health benefits, into account in addition to the fiscal costs of the measures. Furthermore, CARB's cost estimates for these measures currently do not count energy savings (*compare* p. C-106 text to Table 27 and p. C-110 text to Table 28), and we urge CARB to incorporate these savings into the final cost estimates.

Reducing emissions from refineries (and from other industries) offers significant opportunities to improve air quality and public health in addition to reducing global warming pollution. We believe that even greater reductions than projected by CARB in the measures under evaluation are possible. For instance, CARB's proposal only considers the reductions from eliminating the methane exemption for fugitive emissions at refineries. However, methane exemptions should be eliminated for all other aspects of refinery operations. In fact, CARB should also require air districts to remove methane exemptions across the board for all industries. As we have previously pointed out, recent science demonstrates that methane emissions contribute to the formation of background levels of smog;[6] in fact, reducing methane emissions may be as effective at reducing smog formation as controlling emissions of oxides of nitrogen.[7] In addition, we estimate these measures will also lead to significant reductions in criteria and toxic pollutants, potentially reducing more than 2,800 tons of smog-forming and particulate pollutants in 2020, which would save over 20 lives and avoid more than 500 cases of asthma and respiratory illness in that year

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[3] Health & Safety Code §§ 38501, 38562(b), 38565.

[4] Appendices to Draft Scoping Plan C100-C122.

[5] CARB's current analysis of refinery measures does not explicitly consider co-benefits and social benefits alongside other factors delineated in Health & Safety Code § 38562. CARB Presentation on Reducing Greenhouse Gas Emissions from California Refineries, Sept. 9, 2008, at 4 ("CARB Refinery Workshop September 9, 2008 Presentation").

[6] A recent study from researchers at Princeton University and the National Oceanic and Atmospheric Administration ("NOAA") demonstrates that controlling methane emissions would result in health benefits due to reductions in the formation of background levels of smog. J.Jason West et al., *Global Health Benefits of Mitigating Ozone Pollution with Methane Emission Controls*, 103 PNAS No. 11, at 3988-93 (March 14, 2006).

[7] A Harvard study, carried out in conjunction with NOAA scientists, also concluded that a 50% reduction in anthropogenic methane is as effective as a 50% drop in anthropogenic NOx concentrations at lowering summer afternoon ozone levels over the United States. Fiore, et al., *Linking ozone pollution and climate change: The case for controlling methane*, Geophys. Res. Lett., 29(19), 1919 (2002), *abstract available at* http://www.agu.org/pubs/crossref/2002/2002GL015601.shtml; Environmental Science & Technology. December 2002, at http://pubs.acs.org/subscribe/journals/esthag-w/2002/oct/science/an_methanelink.html.

alone.[8] Because the same processes that produce global warming gases often also produce criteria air pollutants and air toxics, the measures under evaluation in the Draft Scoping Plan represent a perfect opportunity to capture the win-wins envisioned in AB 32.

Provide Health Protections for the Most Vulnerable Communities

The location of these benefits is just as important as the magnitude of the benefits. Industrial facilities are disproportionately located in low-income communities and communities of color, and many of California's communities of color and low income communities have been and continue to be disproportionately impacted by pollution from refineries in particular and the industrial sector in general. In addition, these same communities are most vulnerable to the most significant health impacts of global warming such as extreme heat and increased "bad air days". These local communities will see significant health benefits from reductions in the co-pollutants emitted along with greenhouse gases. Of the seventeen refineries in the Los Angeles area and Bay Area, fifteen are situated in low-income communities and most are also in communities of color.[9]

The direct regulations currently under evaluation would ensure minimum health protections for these most vulnerable communities and would help the Proposed Scoping Plan meet AB 32's call to design regulations in a manner that is equitable and to direct investments towards vulnerable communities. We are concerned that these protections will not materialize if the entire refining sector were to achieve global warming pollutant reductions exclusively through trading.

Build in a "Cushion" to Ensure That California Will Meet Its Targets

The Proposed Scoping Plan must ensure that the 2020 limit is met. However, there is inherent uncertainty in reductions from the proposed measures. As the Draft Scoping Plan notes, "it is possible some of these strategies will not materialize as originally thought." (p. 68). Therefore, it is essential to go beyond the mere minimum of the target by including more emission-reduction policies or by using policy tools that create absolute limits. It is not sufficient to develop new strategies only after finding a projected shortfall in emissions reductions, as the Draft Scoping Plan suggests; at that point, by definition, we will have failed to meet the target. Instead, from the very beginning of AB 32 implementation, we must build in a "cushion" of emission reductions to ensure that the 2020 cap is met. Moving the "Measures Under Evaluation," such as the refinery measures, into the "Recommended Measures" category will help ensure that adequate emission reductions are achieved so that California meets, or beats, the 2020 limit.

Ensure Transparency in Consideration of Measures in the Final Scoping Plan

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[8] These estimates assume proportional reductions between criteria pollutants and GHGs for the proposed refinery measures, for lack of more specific data. The estimates are based on methods discussed in *Boosting the Benefits: Improving Air Quality by Reducing Global Warming Pollution in California,* NRDC and Redefining Progress, June 2008.

[9] Maps with more information on where refineries are located in California and the populations that are impacted will follow shortly.

CARB Staff have indicated that the Proposed Scoping Plan will not include a description of measures under evaluation and that the measures currently under evaluation may or may not make the final list of recommended measures. However, CARB has not yet disclosed the criteria it is using to make the decision on which measures to recommend. CARB should articulate these criteria so that the public has the opportunity to consider and comment on these criteria.

Improvements to Recommended Audit Measure

The energy efficiency audit currently recommended for the industrial sector is a step in the right direction, but it needs to do more to ensure meaningful emission reductions. The audit as proposed covers less than half of the industrial sources in California. All refineries and cement plants in California are large sources of pollution which represent significant potential emission reductions, and there is no reason to exclude these facilities from the audit. Moreover, requiring all facilities to conduct the audit will ensure consistency in each industry. In addition, the results of any audit carried out under this proposed rule also should be made publicly available to assure accountability, establish the integrity of the audits, and sustain confidence in the program. Facilities also should be required to implement all feasible measures. The current proposal does not ensure that the public has access to the results of the audits and does not ensure that any emissions reductions will be achieved as a result of the audit. Finally, the audits should move forward much more quickly than the estimated 2012 implementation date, as the information provided by audits will be invaluable to inform the regulatory development process for the entire industrial sector.

Conclusion

It is critical that CARB include strong, health-protective measures on petroleum refineries and the industrial sector in the Proposed Scoping Plan to ensure that California meets it emission reduction targets and improves the health of vulnerable communities. Communities throughout California stand much to gain from the inclusion in the Proposed Scoping Plan of direct regulations in this important sector, which accounts for 20 percent of California's global warming pollution. Such measures would both reduce global warming pollution and provide tremendous short- and long-term health "co-benefits" by improving air quality. We urge CARB to include these measures in its list of recommended measures to capture the win-wins these measures represent.

Thank you for your time and consideration.

Sincerely,

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