

THE CITY OF SAN DIEGO

November 19, 2008

Mary Nichols Chair, California Air Resources Board 1001 I Street Post Office Box 2815 Sacramento, CA 95812

RE: City of San Diego Comments on Climate Change Draft Scoping Plan

Dear Chair Nichols:

The City of San Diego has taken an active role in the review of the Draft Scoping Plan, and this is our second set of comments to ARB. Table One is a summary of the comments previously submitted in July 2008. The statements in this letter are designed to add to, not replace, the previous response from the City of San Diego.

We are requesting that ARB seriously consider our perspective. We are disappointed that very few of the comments previously submitted were captured in the current revision. Similarly, the Local Government Operations Protocol referenced in the Scoping Plan was approved by ARB without many of the requested changes and clarification requested by local governments.

Achieving the reduction targets of AB 32 is a goal that we share. The City of San Diego has already completed GHG inventories for 1990, 2004 and 2007, and has created a climate protection action plan. We are keenly aware of the impact that population increases, building expansions, and vehicle miles traveled (VMT) have on increasing GHG emissions from City operations and from the community.

The following comments are listed by the headings used in the Scoping Plan, and are in order of priority.

1. PROGRAM FUNDING (page 112)

At this time with severe budget constraints, it will be very difficult to add new unfunded mandates. We are cognizant of the cost and work it will take to achieve the reductions specified in AB 32, which includes reductions to 1990 levels by 2020 and to 80% below 1990 levels by 2050. It will be necessary to identify funding sources to support such activities. The State has proposed a stable and consistent source of funding for ARB and State agencies, approximately \$55 million per year, but has neglected to offer any assistance to offset the additional costs at the local level.



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2. RECYCLING AND WASTE (page 62 and associated Appendices)
Reduction of landfill methane is one of the discrete early actions for GHG emission reduction. We recognize the importance of capturing as much of the methane gas as possible, but the millions of dollars that would be required to meet the current mandates may not be the best use of limited funds. GHG emissions from methane in the San Diego region constitute only 2% of our total regional emissions, and half of that is from landfills. Based on recent presentations from ARB, the Landfill Technical Working Group is considering modifications to the proposed surface monitoring requirements. This is not included in the Scoping Plan. We request that the modifications be included in the Scoping Plan because it will achieve some GHG reduction and significantly reduce the financial burden on landfill operations.

Extending producer responsibility is essential to reducing manufacturing waste, energy consumption, and GHG emissions. We request that the Scoping Plan include an analysis of potential GHG emission reductions associated with extended producer responsibility. Such an analysis would help inform decision makers contemplating implementation of extended producer responsibility programs. This has the potential to impact all aspects of our integrated solid waste management system.

The GHG reduction of conversion technologies may be three times greater than current estimates in the Scoping Plan. Conversion technologies have a simultaneous triple benefit to the environment: (1) reduction of transportation emissions caused by long-distance shipping of waste; (2) elimination of methane production from landfilling waste; and (3) displacement of fossil fuel use for energy production due to the energy produced by conversion technologies. These findings need to be recognized in the Scoping Plan and associated Appendices.

Currently, the CIWMB is conducting a life-cycle analysis to evaluate the economic and environmental affects of composting in comparison to other solid waste management options. We suggest that implementation of additional composting requirements be delayed pending the completion of the CIWMB's study.

- 3. RECOMMENDED GREENHOUSE GAS REDUCTION MEASURES (page 17)
 The estimated GHG reduction target for local government operations is now "TBD". In
 contrast, "Green Buildings" are listed as 26 MMTCO2E, regional transportation-related
 GHG targets equal 5, recycling and waste are about 10, and the water sector is 4.8. Local
 government often has authority over these functions. We request that this be
 acknowledged in the Scoping Plan and seriously considered in the implementation
 protocol.
- 4. CAP and TRADE (page 30)
 In theory, a cap and trade system could be a powerful tool to reduce GHG; however, there are currently no standards or protocols to evaluate emission offsets. Additionally, the development of a GHG inventory and the cost for a third-party audit is another large financial burden for communities. Clearer guidance is needed.

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5. ROLE OF LOCAL AIR DISTRICT (page 111)

The Scoping Plan is vague about the specific role and responsibilities of local air pollution control districts in monitoring the regional GHG reduction with both stationary and mobile CO2 sources. ARB could identify "best in class programs" for local air districts. This may help facilitate a more consistent approach for air districts across the state, and could possibly guide collaborative efforts between local air districts and municipalities to reduce "non-point" sources of GHG. For example, the "report card" referenced on page 107 may be a tracking tool for each air basin, and associated with that would be an action plan developed by local stakeholders.

6. REGIONAL TARGETS (page 47)

The changes related to land use will be incremental because residences and jobs located within the existing built environment will have the same or similar traffic patterns well past 2020 regardless of the success of any new development. Therefore, meeting the regional 2020 target will be a challenge. Urban infill development requires additional infrastructure, such as sewer pipes, additional fire and police support, schools, and other public funds. Associated with this is enhanced public transit service. For our region, 46% of San Diego's GHG emissions come from on-road transportation. We ask that there be realistic expectations for this component of the emission target.

7. MEDIUM/HEAVY-DUTY VEHICLES (page 53)

The City would be interested in commenting on the regulations being developed by the state to address the fuel efficiency and hybridization of medium/heavy-duty trucks. We want to emphasize that the regulations need to be cost effective and are phased-in over time.

If you have follow-up questions or comments, you may contact Linda Giannelli Pratt at 858-492-5088, or me at 858-673-1212.

Sincerely,

Chris Gonaver

Environmental Services Department Director

Attachment: Table One-July 2008 Comments to ARB from the City of San Diego

Appendices to the Scoping Plan have not yet been released, and yet it e Appendices that will contain the substantive information. San Diego ngly recommends that the public comment period be extended to 30-from the time the Appendices are released. Scoping Plan should clarify whether there is any deadline for aligning a plans with regional plans. The bullet items on page 33 require ament of these plans, but they neither offer a timeframe, nor specify there a regional transportation plan or a local plan would take edence over the other. The is a potential for some of the measures (i.e., the carbon tax) to result creased construction costs which would definitely impact future ext budgets. However, it is currently impossible to quantify the getary impacts to Capital Improvement Projects.
creased construction costs which would definitely impact future ect budgets. However, it is currently impossible to quantify the getary impacts to Capital Improvement Projects.
ently, there is not a consistent approach or similar level of engagement the air districts within the State, and the Scoping Plan is silent on their role will be in the implantation process.
carching concern is the lack of available technology and the cost ed with the recommendations. of Medium/Heavy Duty Hybrid Vehicles: The bucket trucks currently and extra \$40-50K per unit. emission fuel / oils: Currently these are not readily available, nor does infrastructure support them. eral or State funding would be needed in order to help cities comply the equipment upgrades.
draft Scoping Plan is silent on increased state funding for local transit ects and operational costs. Increased availability of transit is critical to success of transit villages and transit oriented development. Revisions e city's Land Development Code to address reduced parking ratios, ing maximums, shared parking strategies, etc. are contingent upon the ision of an enhanced and efficient transit system. Recent state funding acks to transit has resulted in reduced transit services in the San Diego on. C review: p.3-12 rt Growth and Transit Villages- More emphasis should be placed upon tate providing additional funding for transit (both for infrastructure to increase service). This will allow jurisdictions to address regulatory acles such as parking ratios, prohibitions on tandem parking and exance to allow shared parking to fulfill parking requirements. It also we for increases in density and a mix of uses which, as the report notes, its in a reduction in vehicle miles traveled (VMT). — Regional Targets

The expected greenhouse gas emission reductions for land use and transportation planning are anticipated to be very low, according to the report. If land use strategies are believed to achieve only minimal results, then there will be little incentive for local governments to make the difficult decisions to support smart growth. It may be that the numbers appear low because smart growth and transit investments occur in limited areas, while the results of their projected benefits are spread over the entire built environment. In order to gain a better understanding of the role of, and potential emission reductions that can occur through land use and transportation strategies, focused areas should be studied and compared to conventional, auto-oriented development. In addition, current modeling practices do not likely capture the change in driving habits that is rapidly occurring due to the increasing cost of gasoline. Better transit and land use planning will provide people with opportunities for more affordable living, and is likely to be an important part of California's future. Not mentioned in the report is the crucial need for more transit funding to make smart growth work. San Diego's recently updated General Plan includes a "City of Villages" strategy for new growth to be focused in transit-served areas. However, the local reality is that the San Diego region has been forced to cut transit service due to lack of funding.

- 4) ETAC <u>ETAAC Final Reportp.</u> 3-8 Consumer Education Education about the benefits of reduced driving will not be effective if people do not have access to alternative forms of transportation, or the ability to live in areas where they can walk to school, stores, and services.
- 5) p. 3-9 Environmental Justice Providing more affordable housing and employment in areas served by transit should be identified as a part of an environmental justice strategy. Transit-focused communities provide opportunities for households to lower their transportation expenses and maintain access to employment opportunities.

Energy retrofits for older buildings have the potential to serve as an additional environmental justice strategy. Low-income households could benefit from reduced energy expenditures through low cost improvements such as added insulation and shade tree plantings.

6) p. 3-12 Smart Growth and Transit Villages
Not adequately mentioned in the report is the crucial need for more transit
funding to provide Californians with an effective alternative to driving.
San Diego's recently updated General Plan calls for development to be
focused in transit corridor and station areas in order to increase transit use
and cut emissions. However, the local reality is that the San Diego region
has been forced to cut service due to lack of funding.

We suggest that the report further explore the potential role of public transit, and include strategies to increase transit operations funding. A potential source of information is a study prepared by the Transit Cooperative Research Program (TCRP) of the Transportation Research Board (TRB). The report, entitled *Public Transportation's Contribution to U.S. Greenhouse Gas Reduction*, shows that a solo commuter switching his or her commute to public transportation can reduce a household's carbon emissions up to 30 percent.

- p. 3-13 Concur that state CEQA Guidelines should be revised to better evaluate multi-modal transportation impacts and benefits. It is not productive for a CEQA document to call out a higher density, smart growth project as having significant impacts that can be mitigated by lowering density, if the alternative to providing that housing is to continue urban sprawl practices. It would be helpful to explore the potential to evaluate the impacts of urban infill development based on per capita impacts (VMT, water use, etc) compared to a regional or state-wide "norm."
- 8) p. 3-14 A key obstacle to implementing smart growth is inadequate funding for transit investments and operations.
 - p. 3-15 Concur that LOS Guidelines are an auto-centric measure of mobility, as a transportation corridor may have a poor street intersection LOS, yet excellent transit service and pedestrian mobility. However, any changes to the LOS measures would also need to address the air quality impacts that result from congestion hot spots.
- 10) p. 7-12 Please explore how mitigation requirements and perhaps in-lieu fees may be used to further support strategic tree planting.

ETAC P.3-15 We do have concerns regarding the recommendation that: "The use of Level of Services (LOS) as a measure of environmental impacts for transportation projects under CEQA should be replaced with broader measure of access to goods and services and quality of life." The LOS of transportation facilities is included within DSD's significance thresholds, and is a measure of the length of time people are waiting at intersections and other transportation facilities. However, the LOS is not just a measure of automobile convenience as stated on the third paragraph of that page. It also is used to determine air quality impacts since exhaust emissions can potentially cause direct localized "hotspot" impacts (CO) near or at new developments and air quality impacts are exacerbated by congestion (vehicles either idling or moving at a slow or stop and go pace). We are concerned about air quality (another CEOA issue) due to the potential health impacts on sensitive receptors. Therefore, I believe that DSD would have concerns about the replacement of currently defined LOS as a measure of environmental impacts for

TABLE ONE:

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transportation impacts under CEQA and would need to know more about the potential addition of broader measures including access to goods and services and quality of life. The terms should be carefully defined since we would need to know, for example, how quality of life would be defined in the CEQA context. How would the environmental impacts of each of any of the newly included measures be defined and quantified, and what suggested significance thresholds would be proposed?

12) ETAC p. 7-12 One of the tasks that DSD is undertaking as a component of the City of San Diego General Plan Action Plan is the incorporation of measures such as tree planting as formal mitigation. State assistance would be appreciated in quantifying such measures and developing such a program.

ETAC II . D.pp 4-6

- 1) The document is silent on distributed renewable generation, with the exception of solar PV.
- 2) A detailed discussion of the opportunities for landfill gas and wastewater treatment plant digester gas fueled electrical systems should be provided. The currently available biogas resources could provide California with approximately 950 MW of renewable electricity. The Plan should stress that the technology is fully developed. These technologies have been stymied for many the of same reasons discussed in the ETAAC Chapter 6 Agricultural Sector, Section II-A Manure to Energy Facilities staring on page 6-3. There should be a discussion of co-digestion system for garbage and/or green waste, along with wastewater treatment plant sludge.

Scoping Plan II B. 3 pg 21

Electricity and Natural Gas

- 1) This section refers to existing CEC and CPUC energy incentive programs. These programs do not provide adequate incentives for energy recovery systems that produce power or electricity. There are many examples of systems that do not fit the existing paradigm of energy conservation or self generation incentive programs, including: In-conduit hydroelectric energy recovery systems in water system piping; wastewater systems; and liquid and pressure reduction systems that produce power from utility and industrial gas piping systems. Additionally, there are not adequate incentives for creative energy conservation projects.
- 2) The disincentive for customers who use self-generated renewable electricity is that they can not receive the CPUC Public Goods supported energy efficiency incentives or grants. By allowing renewable energy users to participate in these programs would increase the availability and use of renewable energy.

Scoping Plan II B. 3 pg 25-45

1) Propane vehicle fuel systems did not receive the tax incentives from the air districts that the CNG and LNG received. This technology still exists and can service a large portion of the gasoline market that CNG has had trouble

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- addressing due to its limited range and the access to CNG refueling stations.
- 2) Solar hot water systems are generally twice to three times more efficient than solar-electric systems. They are not covered in this section. The technology and its service network have been in place since 1978.
- 3) The plan is silent on landfill gas and wastewater digester gas, as well as the developing co-digestion digester gas. Only the developing agricultural manure methane producing systems are discussed.
- 4) Suggest adding the following to this table:
 - a. Renewable Energy Self Generation: including biogas, wind, inconduit hydro and pressure reduction energy recovery stations for Self Generation applications
 - b. Renewable Energy for Sale: with the CPUC's providing the MPR for the energy sold, plus any associated costs to totally mitigate the carbon foot print for the fossil fuel avoided.
 - c. Combined Heat and Power: New system's total efficiency should exceed the delivered electrical efficiency of the State's electrical resources at the time of approval of interconnection.
 - d. Energy Recovery systems. See A: above. Additionally, there are many options for heat recovery from processes that could become cost effective once the full cost of mitigating the use a fossil fuel (nature gas) is associated with the use of the fuel though increased costs of the fuel or through incentives to conserve.
- 5) The Stationary Internal Combustion Engine Electrification section needs clarification. Many of these engines producing power have a specific purpose that can not be replaced by an electric motor. Many others, when transmission losses are taken into account, are producing power more efficiently than utility supplied electricity.
- 6) Carbon offsets should also be provided for certifiable temporary measures and installations. These could be traded to temporary uses of fossil fuels and electricity. That is, the credits generated by temporary shutting down a boiler for rehabilitation of a refinery process could be traded to the Circus who needs to heat, light and ventilate and their tents for the few months they are in town.

Scoping Plan and ETAC:

1) "Maximize economic benefits..." Combined Heat and Power (CHP), self generation; renewable energy (including all biogas systems) and power recovery systems can proliferate, as CHP did in the 1980s driven by the economic benefits provided by the CPUC, if the CPUC designs the rates and provides electricity buyback contracts that encourage their development. The MPR should either be substituted with a new system similar to the used in the 1980's Stand Offer Contracts, or the MPR needs to take into account the full cost of fossil fuel carbon mitigation. The investor owned utilities should not be allowed to negotiate prices lower than that set by the CPUC. Currently the utilities are encouraged to obtain a rate lower than the MPR from the renewable generator. Consequently,

they have turned away many renewable electricity contract offered at the MPR.

- 2) The CPUC should redesign the electric rate structures to encourage conservation and to account for electricity's carbon foot print.
- The document states on page 12 that the State of California is establishing a target of reducing its greenhouse gas emissions by a minimum of 30 % by 2020 below its estimated business-as-usual emissions – approximately a 15% reduction from current levels. At the top of page 13, it notes that water projects will be among the potential state areas targeted for GHG reductions. We assume that the Department of Water Resources (DWR) has been tasked with achieving GHG efficiencies with its operations of the State Water Project (SWP). If so, we request that the financial costs to SWP water associated with this effort be revealed sooner rather than later. As water agencies prepare their 2010 Urban Water Management Plans (UWMPs), it would be very helpful to be able to incorporate the associated cost increases of imported water into local decision-making. Therefore, the information should be released by early 2009 at the latest in order to factor into 2010 UWMPs. This request also applies to the concept of carbon fees or any other new energy fees that would be embedded in the cost of transporting water. Local water agencies need to understand the cost implications of CARB's proposals in order to make sound water supply source decisions.

Water

- 2) The Scoping Plan does not specifically address anticipated decreases in the renewable power source of hydropower. The DWR's Climate Change report identifies reduced hydropower as an anticipated result of climate change. Is (or should) the decreased future availability of an existing renewable energy source be calculated into the goals for additional renewable energy sources?
- 3) Pumped storage of water in reservoirs has been an effective tool in meeting peak energy demands. While considered a "green" energy source, the net GHG emissions produced is greater with pumped storage than without. It would be helpful for the CARB to provide early guidance as to viability of pumped water storage in the future.
- 4) We understand the attraction of a Public Goods Charge as suggested on page 28. However, we are concerned that such a charge is premature and request that CARB collaborate with water industry representatives such as they have done with the CWCCG in the wastewater sector. The City of San Diego recommends collaboration with the California Urban Water Agencies (CUWA) to more thoroughly scope out the design of such a charge if there is to be one. Of primary concern is that local funds will be collected to benefit the efforts of unrelated outside entities. We need assurances that local funds will not be inappropriately redirected.

Green Buildings

-) More information should be included regarding the proposed Green Building Standards Code that the draft Scoping Plan indicates will institute minimum environmental performance standards for all buildings in 2010. Will this new code apply to private development projects? How does it differ/compare with the different LEED standards?
- 2) p. 22 Green Buildings that comply with Title 24 updates are already greatly increasing the energy efficiency of new buildings. The Scoping Plan is silent on guidance/ mandates to retrofit older buildings that were not subject to Title 24, and which are typically the largest stock of buildings in communities.

p. 34-35 draft Scoping Plan

Although landfill methane control is an important measure to reduce fugitive greenhouse gas emissions, more emphasis should be placed on preventing the generation of these gases by reducing upstream emissions associated with extracting, transporting, and processing raw materials and diverting more materials from disposal at the end of their useful life. The plan should also include measures to quantify the GHG reductions associated with waste reduction and recycling activities. If emission credits can be earned for these activities, it must be determined who receives credit at which point in the process.

Recycling and Waste Management

The plan should include more specific measures for producer responsibility. The burden on local government to responsibly manage the disposal of non-recyclable and hazardous products is considerable and subsidizes the continued production of these products. Shifting this burden back to the manufacturers will create the incentives for producers to redesign their products and recycle more of them at the end of their lifecycle.

Organic material generates methane when buried in a landfill. There should be more incentives to compost this material and apply it to the land and more disincentives to disposing it in a landfill or using it as alternative daily cover. This would reduce the need for fertilizer and the emissions associated with its production and application, and increase carbon sequestration in the soil. In addition, compost amended soil has the added benefit of reducing the need for irrigation.

ETAAC Final Report comments – Waste Reduction, Recycling and Resource Management

p. 4-14 to 4-21. ESD generally supports the measures outlined for Waste Reduction, Recycling, and Resource Management. These measures would have the added benefit of preserving existing landfill capacity, avoiding the need to transport waste longer distances for disposal as local disposal facilities reach capacity.

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- p. 4-15. Local governments are not in the position to develop protocols for life-cycle assessments related to solid-waste decisions. This should be developed at the state level for utilization by local government and costs should be considered.
- p. 4-16. A flat, across the board increase in diversion rates would be costly for local governments. However, mandatory recycling requirements for commercial sectors and multi-family residences should be considered. A threshold of 4 cubic yards might be difficult to measure since standard dumpster sizes are in multiples of three (3 cy, 6 cy, 9 cy, etc.)
- p. 4-20 4-21. Conversion technologies should be examined for full life-cycle impacts when compared to source reduction, reuse, recycling, and composting.

There is insufficient information on landfill methane control measures. List all control measures being proposed, feasibility of implementation, potential GHG reduction for each measure, and economic modeling of each measure.

High Global Warming Potential (GWP)

Economic modeling of landfill methane control measures is insufficient. For example compare economic modeling of solar and wind utilization within the document to that of landfill methane.