



DEPARTMENT OF THE NAVY
COMMANDER NAVY REGION SOUTHWEST
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IN REPLY REFER TO:

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Ser N40/0001

September 3, 2008

Ms. Mary Nichols
Chair, California Air Resources Board
1001 I Street
Sacramento, CA 95814

Dear Ms. Nichols

RE: DEPARTMENT OF DEFENSE COMMENTS ON AB 32 DRAFT SCOPING PLAN

On behalf of Rear Admiral Hering, the Department of Defense ("DoD") Regional Environmental Coordinator for EPA Region IX, and the Military Services in California, I write to communicate DoD's comments on certain aspects¹ of the Draft Scoping Plan (Scoping Plan) for the implementation of AB 32, the Global Warming Solutions Act.

The military services in California recognize the California Air Resources Board (CARB) staff's dedication and commitment to seeking innovative methods to reduce Greenhouse Gases (GHG) emissions in California. I can assure you that we also remain dedicated to reducing air pollution and pursuing innovative techniques for air quality improvement. I am confident that we will continue to work constructively with CARB Staff—as we have in the recent past on a number of CARB regulatory initiatives—and together we will develop ways to address the unique challenges faced by the military services in California.

We appreciate CARB's continued recognition of DoD's national security mission and our need to deploy tactical vehicles and equipment worldwide, often into rugged and austere conditions. Such equipment must be flexible and resilient. Often operational requirements necessitate the ability to operate from a common fuel supply. Your special consideration of tactical vehicles and equipment in prior regulations allows our equipment to remain standardized, facilitating inter-operability of fuel

¹ DoD intends to make additional comments on the Draft Scoping Plan, as appropriate, as the Scoping Plan is developed and the strategies for achieving reductions in greenhouse gases (GHGs) achieve greater clarity.

and parts anywhere in the world that military tactical equipment based in California may need to go.

In the Mandatory Reporting Regulation (see scoping Plan-p.69), we appreciate your conceptual recognition that military installations, given their size complexity and function, are more analogous to small cities--containing industrial, residential and commercial uses--than single industrial facilities. Allowing DoD installations to group distinct discrete and related emission sources within an installation's fence line for the purpose of tabulating emissions fairly approximates the treatment of non-DoD facilities under the regulations. We would ask that as the Scoping Plan continues to evolve you continue to treat military installations and tactical equipment/vehicles in accordance with this concept.

Our comments on specific aspects of the Scoping Plan are as follows:

1. Credit for Early Compliance and Previous GHG reductions (Scoping Plan Section II.C.3) (Scoping Plan Sections II.B.12, II.C.1):

The DoD has been a leader in implementing proactive policies that reduce pollution to air, water and land for some time. As early as 1997, DoD installations in California began implementing the Defense Reform Initiative with the intention of becoming more energy efficient and reducing emissions of greenhouse gases. As a result, some of the "low hanging fruit" in GHG reductions was harvested by the DoD several years ago--long before other elements of regulated industry began considering ways to reduce their carbon footprint. Consequently, DoD already has more energy and water efficient buildings and ports than many of its private sector counterparts and already utilizes cleaner burning alternative fuel technology in its non-tactical vehicle applications. The result of these early actions by DoD (other than less GHGs in the ambient air today) is that additional reductions from regulated DoD applications will be even more technologically and financially difficult to obtain than they would otherwise be if the DoD had simply taken no prior action.

While we understand that credits cannot be awarded for every past project that inadvertently reduces greenhouse gases, we request CARB acknowledge and seek that in establishing the baseline and methodology for determining an individual regulated entity's compliance with the reduction targets mandated by AB 32, CARB authorize credit (in some form) for prior GHG

reductions that were undertaken for the purpose of reducing GHG emissions or promoting energy efficiency. While Section II.C.3 vaguely addresses credit for early actions and voluntary offsets, the language utilized appears to indicate that credit will only be awarded for prospective projects (and only after receiving approval from CARB). The model suggested in Section II.C.3 for early action implementation is likely to be cumbersome and time consuming and unlikely to facilitate significant efforts to achieve early reductions from regulated industry. We recommend that CARB revise the scoping plan in Section II.C.3 (and elsewhere) to clarify that past projects that were intended to, and indeed achieved, meaningful reductions in GHG production, may be eligible for credit under appropriate circumstances (notwithstanding failure to obtain prior approval from CARB). In this manner the past proactive steps of DoD and other environmentally responsible actors can be equitably included in the AB 32 regulatory scheme.

2. Encouragement and Credit for Smart-Growth Land Use Policies that Reduce Vehicle Miles Traveled (VMT) (Scoping Plan Section II.B.13):

Many military installations in California are located in the country's highest cost areas for housing. As a result, each decade our service members and civilian staff live further and further away from their work-places contributing to California's growing vehicles miles traveled (VMT) problem and frustrating state efforts to reduce GHG emissions from mobile sources. As a result, the DoD has an interest in land use decision-making that produce affordable housing proximate to our military facilities. Policies that reduce sprawl and increase affordable housing also serve our national security mission by allowing service members to live closer to their workplaces thereby facilitating quicker deployments and more rapid responses to contingencies locally and around the world.

Unfortunately, we also know first-hand the difficulties of building housing in urban locations. For example, at Naval Station San Diego we are topping out four 17-story buildings that will house almost 1,900 sailors. These structures are a short walk from a light rail station and from the ships where many of the service members work. These buildings are also a short walk from a wide array of shopping and recreational activities - thereby improving morale while at the same time reducing emissions from motor vehicle trips. As a substitute for long commutes we believe the greater density projects discussed herein will substantially reduce VMT and therefore

substantially reduce GHG emissions. Enclosure (1) provides further discussion of these issues.

Although "smart growth" is discussed briefly in Section II.B.13, we believe that the Scoping Plan should have a more robust discussion and proposal for recognizing the importance of urban infill. The Scoping Plan, and follow on regulations should provide strong incentives (such as offset credits) for construction of projects that reduce VMT and facilitate walkable communities. Such regulations should also provide a methodology for quantification of the GHG reductions from individual smart growth projects for possible use as future offsets or tradable GHG reduction credits. In this manner a developer of a military construction project could use green building concepts as a potential source of GHG credits to help these difficult projects pencil out.

3. Concerns With Scoping Plan Goods Movement Requirements for Ocean Going Vessels (Scoping Plan Section II.B.10):

The Scoping Plan in Section II.B.10 discusses the reduction of the speed of ocean going vessels in and out of California ports as a GHG reduction measure. We have a particular concern with this proposal as it relates to the Ports of Los Angeles/Long Beach. As we previously stated in a 7 June 2007 comment letter regarding the California Ozone SIP:

We have a specific concern with the proposals for increased regulation of the shipping industry that center on plans for additional regulation of ships within 24 nautical miles of the California coastline. At least one shipping company has approached the Navy to seek approval to minimize its travel in California coastal waters by leaving the established shipping lanes and traversing our training ranges in order to evade a substantial portion of ARB's regulation. We strongly oppose any such movement. Aside from an almost total disruption of our ability to train and conduct research, development, test and evaluation, the extra distance involved and the higher speeds that will be maintained will lead to greater emissions in the South Coast. I call your attention to ARB's "Air Quality Impacts from NOx Emissions of Two Marine Vessel Control Strategies in the South Coast Air Basin Final Report" (September 2000) which after much modeling and review documented the increase in pollution. We believe the 2007 SIP must be revised to incorporate measures that will ensure that the shipping industry does not abandon the current shipping lanes.

We request that the Scoping Plan explicitly acknowledge our concerns about this issue and seek to ensure that consideration of vessel speed reduction fully account for all GHG emissions in the vicinity of the California Coastline--not just those emissions within the currently defined zone. We also request that follow on regulations fully consider the environmental and national defense impacts of the measures suggested in Section II.B.10 - to include identification of mitigation measures that will be implemented in the event the shipping industry moves ship routing to evade the application of AB 32 regulation.

4. Encouragement of Solar Power and Additional Renewable Energy Alternatives (Scoping Plan Sections II.B.12, II.C.1):

The discussion of solar power in Section II.B.12 of the Scoping Plan only mentions residential and commercial buildings and not industrial buildings. Industrial buildings, especially on large military installations, are ideal candidates for solar power generation given their strong access to the sun and minimal shade issues. We question whether or not existing industrial buildings should be subject to requirements to exceed California's Title 24 standards as many industrial buildings, particularly on military installations, are warehouses, hangers, etc. It is inconsistent with the goals and robust emission reductions required under AB 32 to expect a building which is open to the environment much of the time to have to upgrade to and beyond Title 24 standards just to capture the significant solar potential present in these buildings. We also have issues with California regulations that limit the extent of California Solar Initiative (CSI) funding which can be used beyond 1MW thereby limiting the use of military installations for solar development in some instances (see enclosure 2.) We believe that the Scoping Plan should include measures that recognize the potential value of industrial sites as a major source of solar power and encourage creative ways to utilize the solar resource. The scoping plan should seek to remove barriers to green energy development such as those discussed in enclosure (2).

5. Definition of Industrial (Scoping Plan Sections I.B and II.C.1 [and others]) :

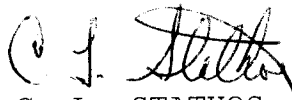
The Scoping plan references future measures tied to the "industrial sector" and industrial sites, e.g. cap and trade and audits. There is no definition, however, of what constitutes an industrial site. As discussed at the beginning of this letter, we ask that ARB continue to recognize the uniqueness of military installations and continue use of the definition of industrial

site currently utilized within the GHG Mandatory Reporting regulation.

6. Low Carbon Fuel Standard (Scoping Plan Section II.B.5):

The Scoping plan indicates CARB's intention to fast-track development of a Low Carbon Fuel Standard (LCFS)—which is to be approved by the Board by the end of 2008. While DoD is supportive of efforts to develop cleaner fuel blends, we ask CARB to carefully consider the needs of fleets (such as many of DoD's fleets) which have already transitioned to cleaner fuel blends such as B-20 biodiesel and E-85. LCFS specifications developed for CARB diesel and gasoline blends should either include low carbon specifications for B-20 and E-85 or otherwise clarify that fleets utilizing these clean alternative fuel blends will not be penalized (or lose otherwise applicable reduction credits) for using B-20 or E-85 in lieu of standard CARB diesel or gasoline.

Thank you for the opportunity to provide comments on the Draft Scoping Plan. We look forward to working with CARB staff to address our concerns. If you have any questions regarding these comments, my point of contact is Randal Friedman. He can be reached at (619) 572-5037.


C. L. STATHOS
By direction

Enclosures: 1. Greenhouse Gas Credit for Housing Initiatives
2. Executive Summary: Renewable Energy Brief to Congresswoman Susan Davis

GREENHOUSE GAS CREDIT FOR HOUSING INITIATIVES

NAVY INITIATIVES TO CONSTRUCT HOUSING PROXIMATE TO EMPLOYMENT/SUPPORT FACILITIES RESULTS IN SUBSTANTIAL AND QUANTIFIABLE REDUCTIONS IN GREENHOUSE GAS EMISSIONS

BACKGROUND: As California continues to implement Assembly Bill (AB) 32, the Global Warming Solutions Act, one of the newest areas of efforts involves the relationship between land use development/planning and GHG. Consider that in 2004 passenger cars and light duty trucks accounted for 136 million metric tons (MMT) of California's 479 MMT total emission, or 28.4% . Then consider that vehicle miles traveled in California continues to grow faster than the population due to continued land use trends further away from central employment areas and it is easy to understand the problem. Hence renewed interest in what is termed "smart growth" which is more dense development located close to transit and employment/support areas.

43% of young sailors are priced out of the San Diego apartment market. Less than 3% of all sailors are paid a wage economists deem sufficient to enter into the home ownership market in San Diego. There is evidence to suggest these facts will precipitate an ever-expanding commuting arc as sailors seek affordable housing when the Navy housing inventory cannot meet the demand. Coupled with the absence of sophisticated mass transit options, it is reasonable to conclude the Navy will witness a marked increase in commute times and a corresponding increase in community impact owing to these greater commutes.

Discussion: The Naval Base San Diego Pacific Beacon project is an excellent example of how a "smart growth" project can reduce GHG in California through reduction of VMT. This project creates housing for almost 1900 sailors who, absent the project and resulting from the limitations on the SD housing market would, for large part, have long commutes and contribute to the growing problem of VMT in California.



Figure 1 summarizes the current trend in commuting distances. While 82% of sailors commute less than 30 miles one-way, the average commuting distance one-way is a fraction over 20 miles. For 1,900 sailors this is 76,000 VMT per day! 18% travel more than 30 miles. And a full 9% of the Active Duty Military population drives in excess of 60 miles one-way. Navy Region Southwest is home to 74,335 sailors as of 30 Nov 2007. 55,489 report to Metro San Diego Bases and home ported ships each day. San Diego County does not have the mature mass transit system as other large metropolitan areas have. Absent Pacific Beacon and the continued growth in San Diego's population we would expect, over time, the commute distances for these sailors to increase.

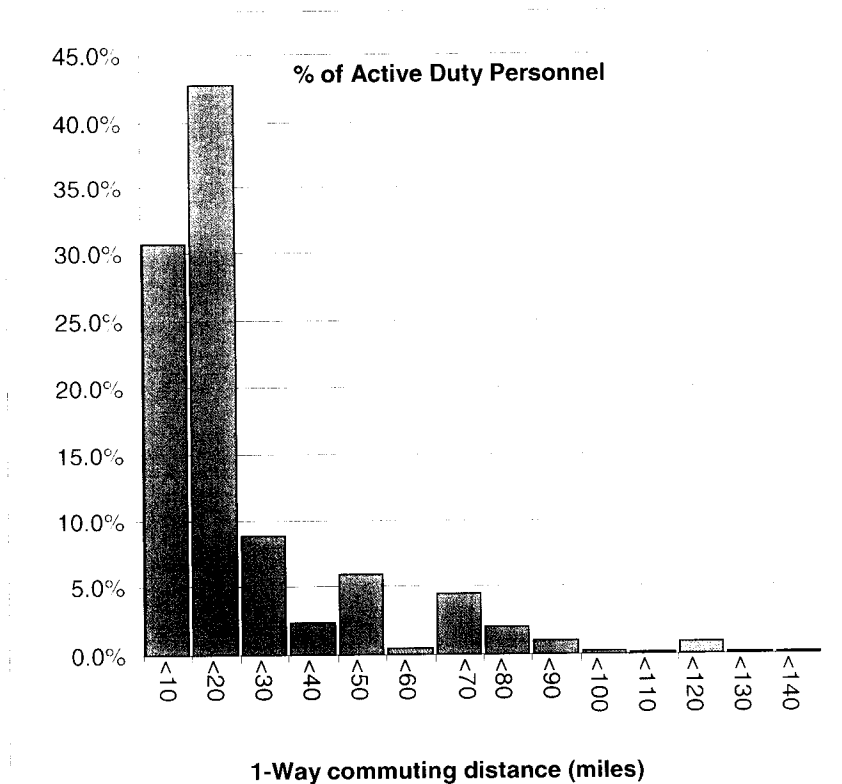


Figure 1 - Commuting distance (miles) for Active Duty Sailors

The Pacific Beacon project allows sailors to live within walking distance of their ships and is located a couple of hundred yards from a light rail station. Also within easy walking distance are basic support services such as shopping, recreation, and dining. It is therefore safe to say that Pacific Beacon's high density development will substantially reduce VMT and therefore substantially reduce GHG emissions. Thus, in addition to the potential 76,000 miles per day eliminated for commute, if each sailor eliminates just an additional 10 mile trip that is another 19,000 miles or a total of 95,000 miles per day. In addition to VMT considerations, given the project's high density, energy efficient design the buildings will also reduce GHG emissions. Finally, in addition to GHG emissions, all emissions of concern, e.g. NOx will also be reduced.

There is widespread interest in this subject, but at the same time a reluctance to engage because it is an admittedly difficult task. Pacific Beacon, however, appears to offer a case where quantification would be easier as we have data on commuting patterns and can make good assumptions about future transportation patterns after the project's completion.

Upon quantification, the GHG reductions could be considered a credit against future Navy emission increases. Quantification of these reductions would also serve to highlight beneficial aspects of "smart growth" housing projects as a counterpoint to opposition these projects often have from others. For example, the Coastal Commission staff opposed the Pacific Beacon project due to a minor view issue. Following this thought, this project on a macro level could highlight the general difficulties that "smart growth" infill projects have in California through a case study showing how a planning agency focus on a narrow localized issue did not consider the larger contextual issues surrounding smart growth, including VMT and corresponding GHG reductions.

The Pacific Beacon project could serve as a case study for groups like the Climate Registry, or ARB, or others to further discussion and development of methodologies for this important subject.

(UNCLASSIFIED)
Region 9
EXECUTIVE SUMMARY

6 Aug 2008

(U) Renewable Energy Brief to Congresswoman Susan Davis: DODREC 9 participated in a 1 Jul 08 Renewable Energy brief to Congresswoman Davis and her staff and then helped to provide follow-up info to her staff and California state Senator Christine Kehoe's staff. We identified 2 state law barriers to expanding DOD's photovoltaic construction on board our bases and 1 federal barrier:

1. California Solar Initiative (CSI) Limitations prevent DoD from receiving financial incentives for systems over 1,000 kW (1 MW) and requires that we aggregate systems on our bases, thus reducing financial viability of larger systems. This limitation obviously did not take into consideration the unique aspect of DoD (i.e., very large customer with city-sized installations). Contrast this with a potential scenario for a company like Qualcomm which occupies many buildings in Sorrento Valley and is allowed financial incentives for multiple sites less than 1 MW.

2. Public Utilities Commission (PUC) approved utilities tariffs are outright disincentives to larger systems. Utility companies are authorized to charge Systems above 5MW the Departing Load Charge and Standby Fee tariffs. We specifically identified this issue when we were trying to develop a very large system at China Lake (10-20 MW). These tariff charges would make this type of development uneconomical because of the penalty costs. The rationale for these penalties relate to the fact that the utility company must still maintain enough power capacity for the "departed load", since the solar system can become defective, trip offline, and then the base would need utility company power.

3. There is uncertainty as to whether the Federal Investment Tax Credit (ITC) will be extended, and without it, solar development becomes financially prohibitive. The ITC is currently scheduled to expire on 31 Dec 08. Our contacts all indicate that the ITC will be extended; however, large projects cannot proceed at the point, since the ITC requires on line completion by expiration date. This is a critical issue if we want private developers to build/ own/ operate systems on DoD land.

We are in dialogue with California State Senator Kehoe's staff to attempt a state legislative fix to the first 2 issues identified above. Our naval installations present a unique opportunity for the State of California renewable energy programs. DoD has a vast "sea" of roofs and as a single-entity we have the ability to closely monitor and maintain PV systems. In the next 10 years DoD could potentially develop 50+ MW of solar, if we could get relief on these issues.

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(UNCLASSIFIED)

ENCLOSURES (2)