



November 9, 2006

Hon. Judy Mikels, Chair
Air Pollution Control Board
Ventura County Air Pollution Control District
669 County Square Dr.
Second Floor
Ventura, CA 93003
VIA U.S. Mail and Email

RE: Cabrillo Port Liquefied Natural Gas Deepwater Port – Air Quality Concerns

Dear Chairwoman Mikels and Members of the Board:

The purpose of this correspondence is to correct the misleading and inaccurate assertions made by BHP Billiton (“BHPB”) in its November 2, 2006 letter regarding the Cabrillo Port Liquefied Natural Gas Deepwater Port (“Cabrillo Port”). This information is being submitted to you on behalf of our client, the California Coastal Protection Network (“CCPN”). CCPN is a California public benefit corporation, dedicated to the protection of the California coast through education, research, and empowerment of public citizens. CCPN is headquartered in Santa Barbara, California and represents members throughout the State, including Santa Barbara, Ventura, and Los Angeles Counties. EDC is a non-profit public interest law firm that represents community organizations in environmental matters affecting California’s southern coast.

BHPB’s stated purpose is to clear up several so-called “myths” about the Cabrillo Port, but the true purpose of its letter is to deflect attention from the fundamental truth of the Cabrillo Port project – that it fails to comply with Ventura County’s requirements for new sources of air pollution. This special treatment for Cabrillo Port has no legal or air quality basis. It puts Ventura County residents at continued risk from the health effects of smog, and it interferes with the County’s ability to attain and maintain state and federal ozone standards. It also sets a terrible precedent for future new sources of air pollution in

the area, which may seek similar special treatment so that they may also avoid complying with Ventura County's stringent air quality requirements.

BHPB Misstates The Amount Of Emissions Associated With Cabrillo Port

BHPB's November 2, 2006 letter purports to clarify "the emissions associated with the project," but omits a significant source of such emissions from its "inventory." BHPB fails to identify marine vessel emissions that will occur outside "Ventura County waters" (i.e., the State waters boundary of three miles offshore), including tug emissions, crew boat emissions, and, most significantly, LNG carrier emissions. Emissions from these vessels while within "federal waters" (up to 29 miles from shore) add approximately 96 tons per year of NOx and 21 tons per year of ROC to the Cabrillo Port emission inventory.¹ Emissions from these vessels beyond 29 miles from shore, but within "California Coastal Waters" would add an additional 114 tons per year of NOx (assuming LNG carriers are fueled by natural gas).²

All marine vessel emissions connected to or associated with the use or operation of the Cabrillo Port must be accounted for by EPA in the Cabrillo Port air permit regardless of whether they occur in state or federal waters. The Deepwater Port Act, one of the federal laws governing the licensing of Cabrillo Port, mandates that offshore jurisdictional distinctions cannot be used to avoid application of state or federal requirements to Cabrillo Port. 33 U.S.C. § 1518. However, even if this were not the case, identification and consideration of these marine vessel emissions is still necessary for the Ventura County Air Pollution Control District ("APCD") and Air Pollution Control Board ("APCB") to fully understand the air quality impacts of the Cabrillo Port – The emissions generated by marine vessels associated with the Cabrillo Port will be transported to the mainland ozone nonattainment area and will significantly increase the ozone burden in the area.

The consideration of marine vessel emissions that occur beyond the three-mile district/state boundary is also entirely consistent with federal, State, and Ventura County APCD evaluation of onshore impacts from other offshore air quality sources. For example, Outer Continental Shelf Source ("OCS") permit rules consider emissions from marine vessels servicing or associated with an OCS source "while in route to or from the source *when within 25 miles of the source.*" 40 C.F.R. § 55.2 (emphasis added). In addition, the California Air Resources Board has concluded, based on extensive data (including island, shipboard, and coastal meteorological observations), that emissions within "California Coastal Waters" (defined ranging coast-wide from 24 nautical miles to

¹ SOURCE: U.S. Environmental Protection Agency (May 2006). Statement of Basis for the Proposed Clean Air Act Permit to Construct Cabrillo Port.

² SOURCE: Sears, Camille (July 2006). Cabrillo Port Liquefied Natural Gas Deepwater Port Project Proposed Clean Air Act Permit to Construct Comments.

90 nautical miles, or 27 to 102 miles from the California coast) are likely to be transported ashore and affect the air quality in California's coastal air basins.³

Cabrillo Port Will Be A Significant Source Of Ozone Pollutants in Ventura County

The most important comparison point regarding the significance of Cabrillo Port emissions is the Ventura County APCD rule for new sources of air pollution. Under this rule, a new source emitting *any* amount of ROC, NO_x, PM₁₀, or SO_x must be equipped with current Best Available Control Technology ("BACT") for those pollutants. VC APCD Rule 26.2.A. In addition, a new source emitting *5 to 15 tons per year* (depending on the particular pollutant) of ROC, NO_x, PM₁₀, or SO_x must obtain offsets. These low thresholds triggering compliance with BACT and offsets are in place because Ventura County violates both State and Federal air quality standards and must act aggressively to achieve them. BHPB's own emission inventory (including 75.7 tons per year of NO_x) demonstrates that Cabrillo Port emissions are certainly significant under these rules.

Comparing the amount of Cabrillo Port emissions relative to other emission sources in Ventura County has no bearing on whether BHPB must equip Cabrillo Port with BACT and obtain offsets. However, EDC has used such comparisons to demonstrate the potential contribution of Cabrillo Port relative to other sources in the area. For example, BHPB's November 2, 2006 emission inventory reveals that the Cabrillo Port's estimated NO_x emissions are comparable to the top "permitted" sources of NO_x emissions in Ventura County (5th highest permitted NO_x source (Platform Gail) is 85.07 tons per year).⁴

Similarly, the ozone precursor emissions (NO_x and ROC) identified in the November 2, 2006 inventory are high enough to place Cabrillo Port within the top five Ventura County smog producing polluters of 2004. In this regard, it is not unreasonable to measure Cabrillo Port's "permitted" emissions against the actual emissions of other facilities in Ventura County, particularly since Cabrillo Port's "permitted" emissions are based on what would be "normal operations" for the facility.⁵ For example, although Cabrillo Port would have a total of eight Submerged Combustion Vaporizers ("SCVs"), the proposed air permit assumes that the system will only operate at 50% capacity at any one time – and thus permits Cabrillo Port to only emit half as much as if it were operating at maximum capacity. In contrast, the Ormond Beach Generating Station and Mandalay Generating Station "permitted" emissions are not based on normal facility operations, but assume operation at maximum capacity around the clock.

³ SOURCE: California Air Resources Board (CARB). June 1984. Report to the California Legislature on Air Pollutant Emissions From Marine Vessels. Vol. 1.

⁴ As discussed above, this inventory does not take into account the full scope of emissions associated with the Cabrillo Port.

⁵ SOURCE: U.S. Environmental Protection Agency (May 2006). Statement of Basis for the Proposed Clean Air Act Permit to Construct Cabrillo Port. Page 8.

BHPB's criticism of the use of actual facility emissions as a point of comparison for the Cabrillo Port estimated emissions is ironic given its own deceptive declaration that the Cabrillo Port NOx emissions would be "less than 0.5% of the NOx emissions from the top 25 source categories in the County." The comparison of a *single* source of emissions (Cabrillo Port) to the sum of multiple source *categories* (e.g., all ships and commercial boats) of emissions is inappropriate. Given this criterion, virtually no new emission source would be deemed significant because no single project is likely to be on the scale of the sum of source categories of air emissions from a region. BHPB's statement that the Cabrillo Port NOx emissions "would equal only 6% of the total permitted NOx emissions from the top five stationary sources in the County" suffers from the same defect.

VC APCD Rules Require BHPB To Equip Cabrillo Port With BACT

Although BHPB contests the applicability of Ventura County's BACT requirements for Cabrillo Port, it has nevertheless stated that it is committed to equip Cabrillo Port with BACT. However, BHPB's control technologies (as incorporated into the May 2006 proposed air quality permit) are not BACT.

For example, for NOx BACT for the SCVs, BHPB has proposed 20 ppm using low NOx burners, proposing to work with the burner manufacturer to "advance low NOx burner technology" to go from the current level of 40 ppm to ultimately achieve a NOx limit of 20 ppm. However, an operational U.S. regasification terminal, the onshore Distrigas near Boston, is achieving a NOx level of 5 ppm using selective catalytic reduction in addition to low NOx burners. BACT is selective catalytic reduction in addition to low NOx burners, not the promise that BHPB may ultimately achieve a NOx level four times higher than BACT using low NOx burners alone. The proposed Northwest Gateway and Neptune Suez floating LNG terminal projects will use selective catalytic reduction to control NOx emissions from the LNG vaporization heat source, which are the vessel propulsion boilers that double as the heat source for LNG vaporization. In all three cases, Distrigas, Northwest Gateway, and Neptune Suez, the technology being used to control NOx emissions is selective catalytic reduction. The NOx lowest limit achieved is 5 ppm. There is no question that use of selective catalytic reduction to achieve a limit of 5 ppm NOx is BACT for the SCVs on Cabrillo Port.

Similarly, the NOx BACT committed to by BHPB for the main engines is 9 ppm using selective catalytic reduction, but the established BACT for such sources is 5 ppm. The 5 ppm NOx limit is a requirement on fourteen operational 8.4 MW Wartsila natural gas-fired engines at the Barrick Gold mine outside of Reno, Nevada. These engines are essentially the same size as the 8.25 MW Wartsila engines proposed by BHPB for the Cabrillo Port. An application was filed with the California Energy Commission in September 2006 to construct a power plant, named the Eastshore Energy Facility, consisting of fourteen 8.4 MW Wartsila natural gas-fired engines with a NOx emission limit of 5 ppm. There is no question that 5 ppm is the NOx BACT for large Wartsila natural gas-fired engines.

Moreover, BHPB overstates costs and inappropriately relies on cost as a basis to discard the use of certain control technologies. Under Ventura County rules, cost is not a factor in identifying BACT if a control technology has been achieved in practice for an emission unit category. Given that these and other problems seemed to have been overlooked by EPA, we are also concerned that the voluntary nature of BHPB's BACT compliance is affecting the level of scrutiny EPA has been and will continue to apply to BHPB's BACT commitment.

Even accepting BHPB's BACT commitment at face value, we believe allowing a new source to refuse to acknowledge the legal applicability of Ventura County requirements because it otherwise commits to comply with such requirements sets a dangerous precedent for other sources in Ventura County who will also want to avoid complying with VC APCD rules. It also raises questions about the enforceability of BHPB's BACT commitments, as well as the question of whether these commitments will be maintained for any future modifications to Cabrillo Port.

BHPB Is Avoiding Its Legal Obligation to Offset Cabrillo Port Emissions

BHPB similarly tries to justify its refusal to comply with Ventura County APCD rules regarding new source offsets by touting its "independent mitigation measures." However, BHPB's mitigation measures do not satisfy Ventura County's offset requirements, nor are they adequate to compensate for Cabrillo Port's air quality impacts.

An "offset" is "an emission reduction credit or community bank emission reduction credit which is used to mitigate an emission increase from any new, replacement, modified, or relocated emissions unit." VC APCD Rule 26.1.19. VC APCD rules establish offset eligibility standards to ensure offsets are "real, quantifiable, permanent, enforceable, and surplus." VC APCD Rule 26.4. Offsets that meet these requirements must be "banked" and certified for use. *Id.* A new source must purchase emission reduction credits from those that have been banked and certified in compliance with these rules in order to satisfy its offset obligation. VC APCD Rule 26.2.B. None of the "mitigation measures" identified by BHPB have been banked and certified in compliance with the Ventura County APCD rules. VC APCD 2005 (identifying available "ERC certificates"). Therefore, they cannot be used to satisfy BHPB's legal obligation to obtain offsets to compensate for the increase in area emissions that would be caused by the Cabrillo Port.

BHPB greatly misleads the APCB when it states that its mitigation measures will actually improve air quality in Ventura County. Most of the mitigation measures identified by BHPB (natural gas fueled vessels, low emitting tug engines, and limited carrier berthings) have already been incorporated into the emissions estimates for Cabrillo Port to reduce its potential emissions. While it is important to minimize source emissions, these mitigation measures, at best, simply reduce the significant increase in area emissions that would not occur at all but for the addition of Cabrillo Port. They do not "improve" our air quality. Furthermore, such measures do not meet the purpose of an

offset, which is to, after mitigation, *compensate for* the new emissions the Cabrillo Port would contribute to the airshed. Requiring new sources to obtain offsets ensures that Ventura County can continue to improve its air quality and make progress in attaining and maintaining state and federal air quality standards.

BHPB also significantly overstates the potential air quality benefits for Ventura County from the proposed tug retrofit projects. BHPB's claimed emission reductions for this item (as described in the May 2006 proposed air quality permit) are based on emissions that would occur over line haul routes that run from southern Los Angeles County through the San Francisco Bay. Contrary to BHPB's assertion, the emissions that are to be reduced in the San Francisco Bay area will have no ozone impact benefit in Ventura County. Notably, BHPB's tug retrofit project is estimated to result only in 21.31 tons per year of NO_x reductions within the Ventura County APCD. This amount is clearly insufficient to mitigate the 75.7 tons per year of NO_x BHPB identifies in its November 2, 2006 emission inventory, much less the additional Cabrillo Port emissions that would be generated within "federal waters" and "California Coastal Waters" off of Ventura County.

In addition, some of BHPB's proposed mitigation measures will be temporary in nature and will not exist over the life of the Cabrillo Port project.⁶ For example, BHPB has stated that one of the tugs that would be retrofitted is the Jovalon, which transports crude oil from Santa Barbara County to refineries in the Los Angeles, and San Francisco Bay areas. Any air quality benefit that would accrue to Ventura County from this mitigation measure would only be for, at most, one to two years because the Cabrillo Port would not commence operations until approximately 2012,⁷ and the marine terminal lease for the Jovalon barge will expire, at the latest, in 2013.

As with BHPB's BACT commitment, we believe allowing a new source to refuse to acknowledge the legal applicability of Ventura County's offset requirements because it otherwise commits to mitigate its emissions sets a dangerous precedent for other sources in Ventura County and raises significant enforcement concerns. BHPB's tug retrofit projects also particularly highlight the problem with relying on applicant developed mitigation measures instead of emission reduction credits that have been verified as "real, quantifiable, permanent, enforceable, and surplus."

EPA's Permitting Approach Disregards the Plain Language And The Intent of Ventura Regulations

Under Ventura County APCD rules, *any* new emissions source which has the potential to emit ROC, NO_x, PM₁₀, or SO_x is required to comply with current BACT for such pollutants and to obtain offsets, unless the source falls within certain enumerated exemptions. VC APCD Rule 26.2 and 26.3. EPA and BHPB rely on one of these exemptions, VC APCD Rule 26.3.A.2, which exempts "any emissions unit located on

⁶ The Deepwater Port license has no expiration date.

⁷ SOURCE: October 27, 2006 statements of K. Hann at U.C. Santa Barbara.

San Nicolas Island or Anacapa Island,” to argue that BHPB is not required to comply with the BACT and offset requirements identified in Rule 26.2. However, the plain language of Rule 26.3 undercuts BHPB’s assertion. By its own terms the Rule 26.3 exemption only applies to sources “*on* San Nicolas Island or Anacapa Island. VC APCD Rule 26.3.A.2 (emphasis added). The Cabrillo Port would not be located “on” either Island. In fact, it would be located over 45 miles from San Nicolas Island and 21 miles from Anacapa Island.

Moreover, this exemption does not, as BHPB asserts, generally apply to offshore sources, nor was it intended to “remove offshore sources from the nonattainment New Source Review program.” In fact, Ventura County requires its OCS sources to comply with BACT and obtain offsets in accordance with Ventura County APCD Rule 26.2.

As to the intent behind the Rule 26.3 exemption, incorporation of this exemption into Ventura County’s rules was explicitly premised on the District’s intention that the only source of emissions subject to the exemption would be those operated by the U.S. Navy, and its expectation that any new emissions units or increases in emissions would be minor. The Final Environmental Impact Report (pp. 31-32) that evaluated the potential environmental impacts of the Rule 26.3 exemption states:

It is possible in the future that the Navy might need to add or make modifications to its existing equipment. Therefore the proposed rule revision could allow additional emissions. However, any modifications to existing equipment are expected to be minimal increases in emissions, because most of the equipment is used to provide electricity for the limited number of personnel on San Nicolas Island. Given the location of the islands and their limited infrastructure, it is unlikely that any new source would locate on the islands while under Navy ownership. It is anticipated that any associated emission increase would be small and that it would not have a project specific impact or cumulatively significant impact on air quality.

Cabrillo Port would not be owned or operated by the Navy, and, as discussed above, its emissions would not be minor. Thus, neither the plain language nor the intent of Rule 26.3.A.2 supports exempting Cabrillo Port from the Rule 26.2 requirements for new sources.

Exempting Cabrillo Port From New Source Requirements Will Impact Existing and Future Sources In Ventura County

BHPB makes the remarkable assertion that it is actually helping Ventura County’s air quality and its economic growth by not purchasing offsets as required by Rule 26.2. BHPB’s argument here flies in the face of the entire premise of the offset requirement, as well as state and federal air quality planning. The purpose of the offset requirement is to provide an objective, measurable, and enforceable mechanism to limit increases in area pollutants and ensure that air quality is maintained and improved as new sources of

emissions are added to the air shed. BHPB would prefer to simply sidestep this cornerstone of air quality management. If it is allowed to do so Cabrillo Port will increase area emissions, particularly ozone precursor emissions, and impact Ventura County's ability to achieve federal and state air quality standards. As Ventura County is forced to grapple with this problem, the burden will likely fall on existing sources and future new sources to compensate for the Cabrillo Port emissions.

Finally, BHPB's statements about the "need" for liquefied natural gas are irrelevant to the APCB's duty to protect and improve the air quality in Ventura County. Even if BHPB's assertion of need were correct, it has failed to explain why it cannot meet this need while operating within the requirements of the Ventura County APCD rules.

Thank you very much for the opportunity to address these issues. I hope that you will consider them as you evaluate the Cabrillo Port. Please feel free to contact me if you have any questions.

Sincerely,

/s/

Karen M. Kraus
Staff Attorney