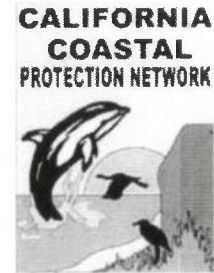


March 20, 2007

## THE CABRILLO PORT: Get the Facts on BHP Billiton's Liquefied Natural Gas (LNG) Proposal for the Oxnard/Malibu Coast

Prepared for the California Coastal Protection Network ([www.CoastalAdvocates.com](http://www.CoastalAdvocates.com)),  
by the Environmental Defense Center ([www.EDCnet.org](http://www.EDCnet.org))



### WHAT IS LIQUEFIED NATURAL GAS (LNG)?

- LNG is natural gas that has been "supercooled" to around -260°F and condensed into its liquid form, for trans-oceanic shipping.
- After transport, LNG must be warmed up and vaporized, or "regasified," before it can be distributed via pipeline for use by consumers.
- LNG exporting nations are many of the same that export oil. Russia, Qatar and Iran hold almost 60% of global gas reserves.

### WHAT IS THE CABRILLO PORT LNG TERMINAL?

- BHP Billiton, the world's largest mining company, proposes to moor a massive three football field-long, 14 story-high, floating LNG storage and processing terminal, the Cabrillo Port, approximately 14 miles offshore the Ventura and LA County line near Leo Carrillo State Beach and the Malibu City limit.
- This "Floating Storage and Regasification Unit" (FSRU) is designed to store up to 72 million gallons of LNG in three large spherical tanks rising more than 160 feet off the water and would be visible from Malibu to Oxnard.
- LNG supertankers would arrive at the terminal about 2 times per week to offload their cargo. Once transferred to Cabrillo Port, the LNG would be regasified before transport  
[continued on following page]

### ALERT: FINAL PUBLIC HEARINGS ON CABRILLO PORT LNG PROJECT ANNOUNCED: LAST CHANCE FOR PUBLIC COMMENT

The FINAL opportunities for the public to voice our concerns about BHP Billiton's proposed LNG terminal are rapidly approaching. Plan on attending these hearings to help stop this dangerous, polluting, precedent-setting project!

#### US Coast Guard: Wednesday, April 4, 2007

Location: Oxnard Performing Arts Center  
800 Hobson Way, Oxnard, CA 93030  
Time: 5:00 p.m. to 8:00 p.m.

#### California State Lands Commission: Monday April 9, 2007

Location: Oxnard Performing Arts Center  
800 Hobson Way, Oxnard, CA 93030  
Times: 10:00am and 5:00pm

#### California Coastal Commission: Thursday April 12, 2007

Location: Fess Parker's Double Tree Resort  
633 East Cabrillo Boulevard  
Santa Barbara, CA 93103 (ph: 805-564-4333)  
Time: 9:00am

Visit [www.CoastalAdvocates.com](http://www.CoastalAdvocates.com) and [www.EDCnet.org](http://www.EDCnet.org) for more information and to learn more about how you can help stop Cabrillo Port.

to shore via new sub-sea gas pipelines also proposed by BHP Billiton.

- BHP Billiton would be the sole owner of the Cabrillo LNG factory terminal and no other suppliers of LNG would be able to make deliveries to CA at this facility.
- Cabrillo Port would be moored off Malibu and Oxnard for at least **40 years**. However, the license would have **no firm expiration date** and the floating factory terminal could remain moored offshore for decades longer.
- Once ashore, the natural gas would continue through nearly 15 miles of new high-pressure gas pipelines, running between Oxnard and Camarillo, before entering the existing natural gas infrastructure.

### **WHAT ARE THE PROBLEMS WITH LNG?**

- LNG is misleadingly described as a “clean fuel.” LNG, like oil or coal, is a finite **fossil fuel**. Burning it emits CO<sub>2</sub> and harmful air pollutants, aggravating global warming and causing human health problems.
- LNG supertankers would arrive at the terminal about 3 times per week to offload their cargo. Once transferred to Cabrillo Port, the LNG would be regasified before transport to shore via new sub-sea gas pipelines also proposed by BHP Billiton.
- Importing LNG means increasing U.S. dependence on foreign countries for our electricity, heating and cooking fuels (like our dependence on foreign oil for transportation fuel).
- LNG causes air and water pollution, and harms wildlife and the environment, starting from the places where the gas is extracted and liquefied, to the coastal communities where it is delivered, processed and sold.
- If LNG is released by accident or deliberate terrorist attack, it may explode or burn at extremely high temperatures. LNG accidents have caused serious loss of life and property around the world, including in the U.S.

### **DOES CALIFORNIA NEED LNG?**

- No! Existing U.S. gas supplies can more than meet California’s needs; U.S. natural gas reserves recently hit a 20-year high. Investigation by the attorney generals from four Mid-Western states recently revealed that price spikes for natural gas resulted from Enron-style market manipulation and speculation by industry, and were **not** due to domestic shortages.
- Energy conservation and efficiency could provide California with more than twice the energy supplied by one LNG terminal, without increasing our dependence on another imported fossil fuel or aggravating global warming.
- Expanding our use of climate-safe renewable energy sources, such as wind, solar, bio-fuels to levels already mandated by California state law would provide more than enough energy to meet our State’s projected demand. This would also provide new jobs in energy research, development and manufacturing. Using renewables would increase our **energy independence**, keeping our energy dollars in California, instead of increasing our reliance on foreign suppliers.

### **SHOULD I BE CONCERNED ABOUT THE CABRILLO PORT?**

- The newly released Final Environmental Impact Statement (Final EIS/EIR) for Cabrillo Port acknowledges that the project will cause 20 “Class One” **significant impacts to air and water quality, public safety, marine wildlife, views, recreation, noise, and agriculture**, impacts that **cannot** be mitigated or avoided. Independent analysis reveals that the Final EIS/EIR fails to adequately assess many other environmental and safety impacts, including exacerbating global warming, casting further doubt on BHP Billiton claims that Cabrillo Port will be “safe” or “clean.”
- Extensive political lobbying by BHP resulted in a proposal by U.S. EPA to exempt the project from the strict

requirements of the Clean Air Act. Senator Boxer and Representatives Henry Waxman and Lois Capps have launched congressional investigations into this action, which would expose coastal residents to increased smog and health threats.

- Despite being asked to bear the burden of these impacts, Oxnard and Malibu residents have no guarantee that the imported gas will benefit their communities, or even the state of California.

### **SAFETY**

- The LNG terminal would be located near major shipping lanes, impacting navigation by commercial, recreational, and US Navy vessels. An accident at the terminal or on an LNG tanker could threaten other vessels, mariners and marine wildlife with asphyxiation and burns from a natural gas fire or explosion.
- The Final EIS/EIR admits that a “vapor cloud” flash fire from a release of LNG from **just two** of the three LNG storage tanks on Cabrillo Port could result in a fire extending more than 7 miles from the facility, potentially engulfing the shipping lanes and any humans or vessels caught in range.
- The Final EIS/EIR **fails** to calculate the potential impacts and destruction that a true **worst-case** event involving **all three** storage tanks would cause. Independent experts believe that the critical hazard zone for a 3-tank release would extend beyond the 7.3 mile fire zone predicted in the Final EIS/EIR.
- A recent US General Accounting Office (GAO) report confirms that many experts disagree with the safety analysis performed by Sandia National Laboratories that the Final EIS/EIR relies upon. The GAO report indicates that risk assessment models used for the Cabrillo Port EIS/EIR are **not sufficiently conservative to protect public safety**, and concludes that further analysis is

necessary to adequately predict the potential impacts to public safety.

- According to the US Geological Survey, the likelihood of a “damaging” earthquake (magnitude 6.5 or larger) occurring within 30 miles of Cabrillo Port in the next 30 years is **stronger than 35%**, a major concern given that the ground under the proposed high pressure gas pipeline could be “offset” by as much as 15 feet.
- The construction and operation of the onshore high pressure gas pipeline also represents potentially serious threats to human safety, which would disproportionately impact low income and culturally diverse communities.

### **AIR POLLUTION**

- Ongoing Cabrillo Port operations would produce over 200 tons of smog-producing air pollutants per year into the Ventura and Los Angeles air basins, exacerbating existing air quality problems and aggravating human health problems such as asthma and lung disease.
- These emissions would give BHP Billiton the distinction of being the **largest smog-producing air polluter** in Ventura County.
- The Clean Air Act requires such large sources of pollutants to “offset” or cancel out their emissions so that areas like Ventura and Los Angeles can achieve federal air quality standards, which they currently do not meet. However, BHP Billiton persuaded the LNG-friendly Bush Administration that Cabrillo Port should not be held to the same rigorous standards that would apply to any other facility emitting similar levels of air pollution in these areas.
- Representative Henry Waxman, Representative Lois Capps, and Senator Barbara Boxer have launched congressional inquiries in response to the overwhelming evidence of political interference in the Clean Air Act permit process for Cabrillo Port.



- The March 2007 Final EIS/EIR concludes that the smog producing pollutants emitted from Cabrillo Port will cause significant adverse air quality impacts in Ventura County and Los Angeles County, ***even with the mitigation measures proposed by BHP Billiton.***
- The majority of BHP Billiton's proposed mitigation would occur outside Ventura and Los Angeles Counties, the areas most acutely affected by Cabrillo Port's adverse air quality impacts.

### **GLOBAL WARMING**

- The Final EIS/EIR fails to disclose the actual global warming impacts of the BHP project. According to EDC's and CCPN's carbon emissions expert Rick Heede, Cabrillo Port will be responsible for **up to 25 million tons per year** of greenhouse gases, from extraction to consumption.
- Use of LNG emits CO<sub>2</sub> and methane at a rate significantly higher than results from use of domestic gas production, because of the significant energy required for liquefaction, trans-oceanic shipment, and regasification of the fuel prior to consumption.
- Many California energy specialists believe that getting locked into long term LNG contracts with corporations like BHP Billiton will result in the "crowding out" of emerging renewable energy technologies like wind, solar, and biomass, which would slow California's transition to these climate-safe energy alternatives.

### **WATER POLLUTION AND OCEAN WILDLIFE**

- Cabrillo Port is to be sited in the midst of one of the world's richest and most diverse marine ecosystems. The nearby Channel Islands National Park and Marine Sanctuary were designated to protect these natural resources; unfortunately, the terminal would be sited just beyond their borders, meaning the project's industrial operations, ship

traffic and pollution will still impact these National treasures.

- Cabrillo Port will degrade ocean water quality. The terminal and its carrier ships will discharge sewage and heated wastewater, and intake millions of gallons per day of seawater for cooling and ballasting. Construction of the proposed gas pipelines could cause harmful spills of drilling fluids and disturbance of contaminated sediments.
- The project's incessant vessel and tanker traffic raises the threat of fuel oil spills, which could harm plankton, fish, turtles, birds and marine mammals. The Final EIS/EIR now states that **such oil spills from Cabrillo Port vessels could harm Channel Islands National Park and National Marine Sanctuary.**
- According to numerous independent marine mammal experts, endangered blue, fin and humpback whales and federally protected gray whales migrating north from the calving lagoons of Baja, commonly feed and pass through the proposed project area. The Final EIS/EIR now admits that Cabrillo Port will emit noise levels **loud enough to be harmful** to whales and dolphins **more than 11 miles from the terminal—more than 389 square miles of ocean.**
- The Federal agency in charge of protecting marine mammals has stated that noise and collisions from LNG tanker traffic associated with Cabrillo Port represent a significant threat to the region's whales and sea turtles, and that the Final EIS/EIR grossly underestimates these impacts.
- According to the Final EIS/EIR, in the event of a serious LNG spill, exposed marine wildlife could suffer from freezing to death, asphyxiation from evaporating methane, or burns from high-intensity surface fires for more than 7 miles from Cabrillo Port.

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*For more information and to learn how you can help, visit [www.CoastalAdvocates.com](http://www.CoastalAdvocates.com) and [www.EDCnet.org](http://www.EDCnet.org)*