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Get the Facts on the “Clearwater Port” Liquefied Natural Gas Project Proposed for the Santa Barbara Channel

A fact sheet prepared for Santa Barbara Channelkeeper (www.SBCK.org) by the Environmental Defense Center, Santa Barbara, CA (www.EDCnet.org)

WHAT IS LIQUEFIED NATURAL GAS (LNG)?

- LNG is natural gas that has been “supercooled” to approximately -260°F, to be condensed into its liquid form for trans-oceanic shipping. LNG is a fossil fuel produced from on- and offshore drilling, just like other oil and gas supplies.
- After transport, LNG must be re-warmed 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. Many gas fields slated for LNG production are located within ecologically sensitive, currently undeveloped environments.

WHAT IS THE “CLEARWATER PORT” LNG PROJECT?

- NorthernStar Natural Gas Inc. proposes to convert Platform Grace— a nearly 30-year-old oil production facility located offshore near the cities of Carpinteria, Ventura and Oxnard, and 3 miles from the Channel Islands National Marine Sanctuary— into an LNG receiving and reprocessing terminal. The proposed facility would be the first of its kind in the world.
- Aircraft carrier-sized supertankers would enter the Santa Barbara Channel 2-3 times per week to deliver LNG, docking one to two at a time at newly built berthing platforms moored to the seafloor.
- The supertankers are proposed to travel along, and regularly cross, the existing shipping lanes, navigate around other nearby oil platforms (Gail and Gilda), and pass directly through the Channel Islands National Marine Sanctuary.
- The supercooled LNG would be offloaded from the docked supertankers via a complex underwater system, into the platform-based terminal. There it would be regasified and transported to shore near Oxnard via a new, subsea gas pipeline.
- Once ashore, the natural gas would continue through more than 60 miles of new high-pressure gas pipelines, running between Oxnard and Santa Clarita, before connecting to existing natural gas infrastructure.
- NorthernStar proposes a 30-year lifespan for the LNG terminal. However, the deepwater port license would have **no expiration date**.



WHAT ARE THE PROBLEMS WITH LNG?

- LNG is misleadingly described as a “clean fuel.” LNG, like oil or coal, is a finite **fossil fuel**. Processing and burning the resulting natural gas emits CO₂ and harmful air pollutants, aggravating global warming and threatening human health.
- Importing LNG increases 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, at both the remote locations where the gas is extracted and liquefied, and in the coastal environments and communities where it is delivered, processed and distributed.
- According to Sandia National Laboratory, if LNG is released by accident or intentionally (e.g. through deliberate attack or sabotage), it may burn at extremely high temperatures, or evaporate and ignite in immense and catastrophic “cloud fires.” LNG accidents have caused serious loss of life and property around the world, including in the U.S.

SHOULD I BE CONCERNED ABOUT THE “CLEARWATER PORT” PROJECT?

- In application materials submitted by NorthernStar to the California State Lands Commission and the U.S. Coast Guard (the two lead agencies in charge of reviewing the proposal), the company specifies an array of industrial construction and operation activities that could cause **significant impacts to air and water quality, public safety, marine life, coast and ocean views, Channel and Island recreation, mainland watersheds, and agriculture**.
- The project’s immense scale and complex, energy-intensive supply chain suggest that it would be responsible for a significant portion of California’s total greenhouse gas emissions, as well as greater greenhouse gas emissions per unit of volume than domestic natural gas supplies, further exacerbating global warming.
- Despite being asked to bear the burden of these impacts, South Coast residents have no guarantee that the imported gas will reduce prices or provide any significant benefit to their communities.
- Experts have expressed serious concerns about the structural integrity of Platform Grace, an already aged facility, and questioned its suitability to be converted to a use for which it was never intended. NorthernStar admits that they will have to conduct extensive retrofitting of the platform’s legs and jacket to adequately strengthen the structure.

Water Pollution and Marine Wildlife

- NorthernStar’s LNG terminal 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 and conserve these extraordinary natural resources. The NorthernStar terminal would be sited just beyond their borders, and the LNG tankers would travel through the Sanctuary itself. The project’s industrial operations, tanker traffic and pollution could result in degradation of these national treasures.
- Construction and operation of the project could impair ocean water quality:
 - Installation of the terminal and floating LNG tanker docks could disturb debris mounds left over from oil production activities, resuspending toxic pollutants;

- Construction accidents or large vessel anchoring could damage the active oil pipelines near Platform Grace, risking oil spills that could devastate nearby marine life and habitats. Accidental diesel or bunker fuel spills from the numerous tankers, tugs and construction vessels could result in similar impacts;
- “Horizontal boring” proposed to install the gas pipeline under Mandalay Beach could result in significant discharges of drilling fluids and sediments.
- Intake of millions of gallons of seawater annually for LNG tanker ballast would kill larval fish and other planktonic marine life throughout the life of the project.
- Endangered blue, fin and humpback whales, federally protected gray whales, and numerous other marine mammal species commonly inhabit the proposed project area. Underwater noise from construction and operation of the terminal will exceed current ambient noise levels and could disrupt migrations and other important behaviors and cause habitat abandonment or even physical harm.
- NOAA Fisheries, the federal agency in charge of protecting endangered marine life, has stated that LNG tanker traffic poses a significant threat of collisions, or “shipstrikes,” to whales and sea turtles. Greater ship traffic in Channel waters increases the likelihood of collisions like those that killed three blue whales (an endangered species) in the Santa Barbara Channel in September 2007.
- According to regulators, in the event of a serious LNG spill, exposed marine wildlife could suffer harmful or fatal freezing, asphyxiation from the evaporating methane, or burns from high-intensity fires even at a significant distance.

Air Pollution

- Operation of the project terminal, LNG tankers, and tugs would emit significant levels of harmful air pollutants, including ozone pollutants.
- Ozone is a major component of smog and impairs human health, agriculture, and vegetation.
- Project air pollutants would transport to, and impact the onshore air quality in Ventura county and Santa Barbara County.
- Both Counties are still struggling to meet government clean air standards, including ozone levels.

Safety

- The LNG terminal would be located near the Santa Barbara Channel’s heavily traveled shipping lanes, affecting the navigation of commercial, recreational, and U.S. Navy vessels in Southern California. Associated tankers would regularly carry full loads of LNG directly across the shipping lanes.
- An accident at the proposed terminal or on an LNG tanker could endanger commercial and private vessels, and threaten mariners with asphyxiation or burns from a natural gas fire.
- A recent U.S. General Accounting Office (GAO) report states that existing LNG risk assessment models are not sufficiently conservative to protect public safety, and further analysis is necessary to adequately predict the risks to the public from LNG facilities.

- According to the U.S. Geological Survey, the likelihood of a “damaging” earthquake (magnitude 6.5 or larger) occurring in the vicinity of the proposed project in the next 30 years is greater than 35%.
- The construction and operation of more than 60 miles of onshore high pressure gas pipeline also represents potentially serious threats to human safety, and could disproportionately impact low income communities.

Global Warming

- Use of LNG produces significantly more greenhouse gas emissions than use of domestic gas, because of the tremendous energy required for liquefaction, trans-oceanic shipment, and regasification of the fuel prior to consumption. Researchers at Carnegie Mellon University concluded that LNG can actually rival coal in lifecycle greenhouse gas output.
- Research on a similar-sized proposal (the defunct Cabrillo Port LNG project) revealed that importing LNG from overseas to California may generate up to 25 million tons per year of greenhouse gas emissions, from extraction to consumption. This quantity of greenhouse gases equates to that emitted by approximately 3.5 million cars per year, or around 5% of the total, statewide emissions in 1990. Such emissions could impair California’s ability to comply with AB32, which requires that the state return to its 1990 greenhouse gas emission levels by 2020.
- Many California energy specialists believe that locking the state into long-term LNG contracts will result in the “crowding out” of emerging renewable energy technologies like wind, solar, and biomass, and would slow California’s needed transition to these climate-safe energy alternatives.

DOES CALIFORNIA NEED LNG?

- Experts say energy conservation, improved efficiency, and expanded use of renewable energy technology can satisfy California’s energy needs.
- Importing LNG may prevent California from meeting its renewable energy mandates.
- According to California Lt. Governor John Garamendi of the State Lands Commission, numerous factors indicate that LNG imports are not needed, including significant unused capacity in domestic natural gas pipelines, a decline in US demand for natural gas, and forthcoming regulations stemming from AB32, California’s new law mandating statewide greenhouse gas reductions.

Take Action

Help ensure that LNG development does not result in harm to our local environment!

Learn More: Visit Channelkeeper (www.SBCK.org) and EDC (www.EDCnet.org) on the web, or call EDC at 805/963-1622, or Channelkeeper at 805/563-3377 to learn more about the NorthernStar LNG proposal, and stay up-to-date on upcoming hearings and events. To read all documents related to the permitting of the “Clearwater” LNG terminal, visit the US Maritime Administration’s official docket on the web at: <http://www.regulations.gov/fdmspublic/component/main?main=DocketDetail&d=USCG-2007-28676>

Support Us: Your tax-deductible donations to Santa Barbara Channelkeeper and EDC will help ensure that the proposed project is thoroughly reviewed, and complies with all applicable environmental laws in place to protect our land, air and ocean.