

LNG terminal poses adverse impacts

New federal study takes a second look at terrorist and accident chances. Analysts predict that a fireball would reach out seven miles from Cabrillo Port in a worst-case catastrophe.

By Hans Laetz / Special to The Malibu Times

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A government re-examination of the liquefied natural gas terminal proposed for 13.8 miles off Malibu's western coast predicts BHP Billiton's Cabrillo Port "would result in both short- and long-term adverse impacts" to the coast and its residents that cannot possibly be mitigated.

Increased smog levels, the intrusion of a 14-story-high factory ship on Malibu's coastal horizon, and the extremely remote possibility of a 14-mile-wide flash fire reaching to within seven miles of the city limits are among negative impacts that cannot be corrected or avoided, identified in the report.

The revised environmental impact report was prepared by independent engineers and analysts working for the state and federal governments.

As envisioned, the terminal would receive shipments of liquefied gas from Australia and Asia and reprocess it to its natural state. The resulting natural gas would flow through 22 miles of undersea pipelines to Oxnard, and then into the nation's gas distribution network.

The new report acknowledges for the first time that the LNG terminal and its attending fleet of ships would be visible at elevations all along the coast from Bluffs Park in Malibu west to Port Hueneme, including the last section of coastal Southern California that is free of residential, industrial or military use. State law disallows industrial intrusion on highly scenic areas.

The public will have 45 days to analyze the massive technical study and comment on it, after which officials at the Coast Guard, U.S. Department of Transportation and California State Lands Commission will begin the permitting process anew, with the target date of early next year for an approval that Billiton officials say it has earned.

Company officials in Houston, and coastal advocates in California, were scrambling to digest the massive document after its release midday Monday.

"The previous study was rife with mistakes and omissions, and we're going to take a very close look at this document," said Susan Jordan, a Santa Barbara coastal advocate who is leading the fight against LNG terminals proposed for Long Beach, Oxnard and Malibu. "What people in Malibu have to decide is if they want this visible, potentially-audible and potentially explosive industrial presence on their front yard."

Environmental Defense Center attorney Linda Krop said the new assessment shows that the air pollution increase that would be caused by the LNG ship's boilers to be

highly significant, and that Billiton cannot offset them, as the company had promised in earlier statements.

A Billiton spokesman in Texas defended the plant's engineering and location.

"Cabrillo Port's location of more than 14 miles from the closest point to shore and more than 21 miles from the nearest high density population center provides a safety assurance that no other proposed LNG facility can match," spokesman Patrick Cassidy said. "Because of its carefully selected site, the risk of danger to anyone on land simply does not exist."

Cassidy said in an e-mail to The Malibu Times that detailed analysis of the new assessment will have to come after the company can further analyze the thick study.

Much of the new analysis is based on comments from Malibu and Oxnard residents during public hearings in 2004. Some questions raised at those hearings, like the possibility of terrorists firing shoulder-mounted missiles at the gas ships, were raised for the first time by members of the public and evaluated in the second report.

The report avoids discussion of precise security measures based on national security grounds, but hints that armed patrol boats could be stationed next to Cabrillo Port: "The safety zone would be patrolled and would deter intruders in accordance with the security plan," the report states. It says successful delivery of a missile "would be unlikely."

Terrorism experts quoted in the report discounted the attraction to terrorists of a huge explosion near the beaches of Los Angeles. While such a blast "would cause a temporary disruption in the delivery of natural gas in Southern California," the report predicts this "would not be expected to cause serious injury or death to large numbers of the public."

The report also states that the likelihood of the takeover of a LNG carrier or a deliberate collision of a carrier into the terminal are "not considered credible due to recent changes in security in the marine industry and the fact that LNG carriers would be in frequent communication using secure channels, making early detection of an attempted takeover very likely."

As part of this new study, Sandia National Laboratories, a government-owned/contractor-operated facility, analyzed ship-to-ship LNG transfers, an unloading process of a volatile subzero liquid that has never before been attempted on the high seas. The Sandia report contradicts earlier Billiton claims that an LNG leak could not explode, and predicts that a fireball would reach out seven miles from Cabrillo Port in a worst-case catastrophe.

The Sandia study dramatically increased the predicted impact of a possible worst case failure over scenarios released in 2004. Using an average wind speed of 9 mph, Sandia estimates that a catastrophic failure of two storage tanks onboard the vessel would spread LNG and methane out in a circular pattern 7 miles from the permanently anchored ship before it would mix with enough oxygen to ignite in a fireball (providing there is a source of ignition).

Coastal activists criticized this scenario, noting that five LNG tanks, each with a 55 million gallon capacity, will be at the LNG terminal during unloading operations. And

the 9 mph wind is below the average wind speed of about 15 mph measured at a buoy near the site, where afternoon winds frequently top 20 mph.

The LNG terminal would require a 1.2-mile diameter prohibited zone in the ocean, with ships subject to an "Area To Be Avoided" zone possibly stretching an additional 2.3 miles out in all directions. That would place the restricted zone well into the southbound shipping channel used by more than 10,000 container ships and oil tankers annually.

Geologic worries have been addressed, the report states, by routing the ocean-bottom natural gas pipelines between the terminal and its Oxnard connection away from the several active earthquake faults. The pipeline will not be buried, making it more flexible in a quake but raising the possibility of it getting snagged by the numerous fishing trawlers in the area.

The floating LNG terminal would be tended by two tugboats on a permanent basis, and anchored to the sea floor by nine tensioned cables. Although several hundred similar floating rigs broke loose in the Gulf of Mexico last year, the study says the maximum winds of 55 mph in the channel, and highest recorded wave height of 28 feet, will not threaten the anchorage.

And although Billiton and its backers have stressed a safe, accident-free LNG ship record (Billiton's Cassidy said no major accidents had occurred in 40 years of shipments covering 60 million tanker miles), the report documents 20 LNG ship accidents, including one collision between an empty LNG carrier and a U.S. Navy submarine in 2002 near Gibraltar. But the report notes that no leaks or injuries have occurred on the high seas because of LNG.

The terminal's gas-fired boilers, used to bring the liquefied gas temperature up from -260 degrees, will be loud enough to make conversation difficult outside the closed zone, the report said. But the study does not address if the 24-hour operation will be heard ashore on calm nights, where the engines of passing cargo ships can be heard on quiet, windless nights.

The report also echoes local concerns that the foul-smelling and highly flammable odorizing chemical to be used on board the ship could be spilled, dousing the coast with a concentrated dose of odorant that could travel miles on the wind. It recommends that the odorant be added to the LNG before it makes the transpacific trip, if such a process can be invented.

Malibu residents will get to speak at a public hearing on the matter on April 18, 6:30 p.m., at Malibu High School, 30215 Morning View Dr., on April 17 in Santa Clarita or April 19 in Oxnard. Comments can be e-mailed to the California State Lands Commission at BHPRevisedDEIR@slc.ca.gov. The entire LNG report can be downloaded in sections from www.slc.ca.gov, and has been sent to the Malibu Public Library, 23519 Civic Center Way, for public review.