

# **Liquified Natural Gas Issues**

## **SHIPS, PIPELINES AND FACILITIES OFF THE COAST OF OXNARD**

The Saviers Road Design Team is concerned about the risk of terrorism, the risk of a fire or explosion, pipeline safety, the problems with deliberately increasing foreign dependence for energy, the questionable need for LNG importation on the West Coast, the costs for implementing security measures, the diversion of Coast Guard resources, and financial liability issues.

### **SAFETY ISSUES**

LNG tanker ships, import terminals and gas lines are vulnerable to terrorism and accidents.

**Shipping:** The Coast Guard would have little or no control over safeguards, employee/crew screening, or training until the tankers come into coastal waters. The proposals vary from several tankers per month to two per week at each facility off the coast of Oxnard. This high volume increases the odds of an accident or terrorist attack.

To date, there have not been tanker accidents affecting the LNG, but there have been accidents involving engine fires, collisions and tankers running aground. The California Energy Commission's July 2003 report refers to some cases of "loss of containment" and "temperature embrittlement from cargo spillage." The leaks and damage to ships apparently weren't severe enough to cause a major vapor cloud or ignition. Once a leak occurs, however, it could cause additional damage to the ship and the LNG would then likely vaporize. With an ignition source, it would burn.

A vapor cloud can form that will ignite when concentration is between five and 15 percent and there is an ignition source. The presence of the ocean as a heat source may speed vaporization and help sustain a fire fueled by a vaporizing "pool" of natural gas. Anything in the path of a burning vapor cloud would be incinerated. People could be killed by burning, freezing or asphyxiation. According to past environmental review documents, a vapor cloud could burn close to its ignition source or "float" up to 25 miles into populated areas.

**Transfer/Conversion:** Whenever the LNG is converted into natural gas, there is a heightened risk of spill, ignition of a vapor cloud, and/or explosion. The offshore proposals either place these facilities on an aging oil platform or a new docking, floating storage and re-gasification unit. These systems are unproven. The LNG would be converted to a gaseous, vaporized form as it is needed, with the tanker docked in a very obvious and vulnerable position, for the period of time the LNG is transferred or converted. Having earthquake faults would increase the likelihood of leaks and spills.

**Pipelines:** There have been several natural gas pipeline explosions in recent years, often with people being killed. For example, young boys playing near an undiscovered pipeline leak in Bellingham, WA were killed when the gas was accidentally ignited. The consequences of a natural gas explosion are worse for higher volume pipelines. The highly visible nature of LNG transport may make the natural gas pipelines associated with it more prone to a terrorist act.

**Terrorism:** A January 2003 report prepared for the City of Vallejo for a proposed LNG Facility on Mare Island concluded that LNG tankers and facilities were unlikely to be attacked, but they were definitely vulnerable if they were. The report assumed there would be ongoing Coast Guard security and did not specifically address the possible risks from importation from high-risk countries such as Indonesia or domestic terrorism. A ship loaded with LNG could be used as a weapon of mass destruction. The proposal for Vallejo was withdrawn in response to massive community opposition.

### **ECONOMIC AND FINANCIAL CONCERNS**

**Local Economy:** The encroachment of LNG facilities and pipelines near the Port Hueneme and Point Mugu bases would have a major impact on analysis about the future of these bases. With studies under way on the next round of base closures, this is a particularly sensitive time. Any incompatible uses would be viewed negatively by decision-makers. Even if the bases are protected, these types of uses could limit future activities at the bases. The Department of Defense would have serious concerns about increased national security and safety near these facilities.

There might also be negative impacts on the ability to continue to attract quality employers to the area. The number of LNG tankers traveling to the area may also negatively impact shipping through the Port of Hueneme because of the large exclusion zones required around the tankers and offshore terminals. The priority of the Coast Guard would have to be security for the LNG tankers and facilities. There would need to be restrictions on commercial fishing, recreational boating and flights of both commercial and private aircraft off the coast. Finally, there may be negative impacts on tourism and residential development.

**Financial Responsibility:** The latest proposals for Oxnard come from out-of-state and non-U.S. companies. These are highly speculative financial ventures that could easily fail and leave citizens and government responsible for any safety, liability or removal charges.

According to the January 2003 Energy Information Administration report, companies proposing offshore LNG facilities "are hoping offshore facilities will expedite permitting processes and prove economical." The permitting process may be cheaper and less rigorous for off-shore facilities, regardless of the risks.