

# PETROPORT: AN OFFSHORE OIL PORT AND STORAGE FACILITY FOR TEXAS

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## INTRODUCTION

U.S. crude oil production in 1993 fell to its lowest level in 35 years as declining world crude oil prices, increasing environmental regulations and increased emphasis on international exploration by major U.S. oil companies contributed to an ongoing decline in U.S. oil reserves. Crude oil imports filled a 5% drop in domestic production to average 6.8 million barrels (1.1 million m<sup>3</sup>) per day eclipsing the previous record of 6.6 million barrels (1.05 million m<sup>3</sup>) per day set in 1977.

While a small percentage of crude oil is imported from Canada, 87% of imported crude arrives by oceangoing tankers. Increasing near shore tanker traffic elevates the risks of oil spills and accompanying liability to shippers as reflected in increased tanker insurance rates.

In 1993, 63% of the crude oil imported into the U.S. arrived at Gulf Coast docks. Most of this oil is delivered to port via small tankers that can negotiate shallow Gulf ports transporting cargo that has been transferred at sea from the larger crude carriers or transshipped from Caribbean facilities. However, a growing percentage of imports is being handled by the Louisiana Offshore Oil Port (LOOP), the nation's only offshore deep water port serving southeast Louisiana refiners. The facility enables the large tankers to unload directly into onshore storage via offshore single point moorings and a pipeline to shore. Using the offshore port reduces near shore tanker traffic and eliminates the double handling involved with lightering and transshipment.

Petroport is being proposed to provide the same, safe method of crude oil handling to Texas Gulf Coast importers. However, unlike LOOP and other offshore ports that have been proposed in the past for Texas, Petroport will use offshore storage in salt dome caverns to reduce facility cost. The caverns will provide surge storage for tanker unloading permitting a smaller diameter pipeline to be constructed to shore. Without such storage, large, costly pipelines must be constructed to handle the high tanker off load rate of 100,000 barrels (15,900 m<sup>3</sup>) per hour. This results in a significant cost advantage over earlier proposed ports. In addition, the offshore caverns will be used for long term storage for shippers or producing countries.

The Petroport caverns will be constructed with sea water and the resulting brine will be stored in a sea floor brine pond and used for crude oil displacement.