

SAN JUAN HILLS HIGH SCHOOL

Pipeline Risk Study

Project Type	Pipeline Safety Hazard Assessment
Project Location	San Juan Capistrano, California
Project Size	50 acres
Client	Capistrano Unified School District
Date Completed	2008
Services Provided	Third-Party Review, Independent Pipeline Safety Hazard Assessment, Board Presentation



The Planning Center was engaged to prepare an independent Pipeline Safety Hazard Assessment (PSHA) to determine the potential risk to students and staff from a high-pressure, 16-inch pipeline that transports gasoline, jet fuel, and diesel fuel. The pipeline is within 1,000 feet and uphill from San Juan Hills High School.

In Stage 1 we completed a risk screening analysis based on the distance of the pipeline from the school site and operating characteristics of the pipeline. The Stage 2 risk analysis considered pipeline accident rates, school dimensions, conditional probabilities for ignition, school attendance time, and fatality probabilities for different exposure scenarios (pool fire, flash fire, and explosion). These were used to estimate individual risk.

A Stage 3 analysis was also conducted because of the unique topography and other conditions at the site. The PSHA concluded that there was no significant safety hazard for the school site because the predicted risk was less than the California Department of Education's significance threshold of one in a million annual chance of a fatality.

"First of all, thank you for sticking through this to the very end. The facts of your analysis proved out; you did a great job of consistently re-centering the issue in your discussions. It was a testimony to... your hard work that the report was accepted 6-0. Congratulations! Great job!"

"Cathy, I have told everyone that your presentation was one of the top 3 I have seen in my lifetime. And I worked in the Pentagon for a period in my life! Know when I see first-rate effort... and that is what I will remember about you."

Woodrow Carter, Former Superintendent
Capistrano Unified School District

