

Subject: Amerigas Propane L. 2110 North Gaffey Street San Pedro, CA 90731

Report:	Quantitative Risk Analysis for Amerigas Butane Storage
Author:	Cornerstone Technologies, Inc.
Date:	September 2010
Reviewer:	Charles Lamoureux, Environmental Compliance
	Management Group, Garden Grove, CA 92840

Review:

The Amerigas Propane Storage Facility Risk Analysis presented several scenarios of probable off-site consequences that would result in any release through leaking or tank failure of either one or both of the 12.5 million pounds of butane that is stored on the property. In all cases the surrounding community would be grievously damaged by not only property loss but life as well.

The risk analysis left out the additional impact of the refinery that shares the north east boundary with the Amerigas Facility. In all cases the refinery would be impacted and add to the resultant conflagration. It is with certainty that the volatile material within the refinery would ignite and add to the intensity of radiant heat and the possibility of additional explosions that would send a greater amount of hot shrapnel through-out the community. The additional heat and shrapnel would pose a life threatening to a greater area than those described in the analysis report. It is well documented in every past accident that involved butane and other volatile material that a radius of three miles of destruction would occur.

As an example, a small 300 gallon tank of propane exploded in San Diego that caused a one mile evacuation order and closed the 15 freeway. The largest threat came from two 3,000 gallon tanks that were located in the same facility, but was saved due to the fire department's quick response and poured cooling water on those tanks to prevent additional releases and explosions.

In the Amerigas case, there is no known containment structures or other means to prevent further damage and explosions from occurring should a small, less than lethal, fire or release occur.

In my opinion, the location of this facility is a grave danger to the residents that are located in the immediate area surrounding this facility. In addition to the possible loss of life and private property damage, there is a above average chance of devastating damage to the ports facilities on the south east side of the plant.