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Port Lavaca
THE WAVE

Study evaluates Point Comfo

Gulf Coast Plant Engineering CPE) has presented to Calhoun County Independent chool District a report of an valuation of Point Comfort lementary School testing its itability as a shelter-in-place aven for protection from hemical vapors.

Criteria used were the 10 orst-case scenarios which ight cause chemical vapors to e released by the Formosa lastics Corporation (FPC).

The study, commissioned by ormosa Plastics Corporation s part of an agreement reached with the Sierra Club and a ormer Point Comfort resident, ndicates that the new school uilding (with inlet air dampers closed) should protect students from dangerous levels of hemical vapors in all but one f the worst possible catastrophic scenarios.

The worst scenarios assume a failure of all safety, environmental and process control systems, a complete vessel failure, failures of major supply pipelines or valves and no actions by operations, maintenance, safety or environmental to control the event or initiate remediation efforts such as spraying the escaping material with water or foam to knock down vapors.

In order to get a more realistic appraisal of the risk potential from Formosa's original plant, GCPE suggested that an additional Process Hazards Analysis (PHA) be conducted on the HCL Unit with emphasis on catastrophic risk analysis. This evaluation would take into consideration the operations, maintenance, safety and environmental equipment and programs which would reduce the likelihood of a release or minimize the seriousness of a release.

Formosa has completed a catastrophic risk analysis on the chlorine unloading facility and a Process Hazards Analysis on the HCL system meeting OSHA requirements. These analyses will be discussed with the Calhoun County Independent School District.

In evaluating worst-case scenarios, the study noted that students attending Point Comfort Elementary School have a slightly higher risk than students attending an average elementary school. In an attempt to provide perspective on this risk, the study reviewed the fatality rates per 100-million hours of exposure for various activities.

An average elementary school was given a fatal accident rate of 1.5 people per 100 million hours of exposure (100 million hours equals 11,415 years for one student). GCPE estimated the school might have a fatal accident rate of two per 100 million hours of exposure. A review of other fatality rates shown in the study indicate that an hour spent riding in a car is 50 million-to-one times more dangerous than spending an hour in the Point Comfort Elementary School.

The GCPE study considered 10 worst case scenarios that would pose the greatest threats to Point Comfort Elementary School. These worst case scenarios considered Chlorine, Hydrogen Chloride (HCL), Vinyl Chloride (HCM) and Ethylene Dichloride (EDC) in extremely unlikely situations such as having the Point Comfort Elementary School in a chemical vapor cloud for four hours.

The study considered wind speeds of one mph and 10 mph from the northeast which would have the wind blowing directly across Formosa's operating plant towards the Point Comfort Elementary School. Meteorological data indicates that the wind blows from the northeast around 9 percent of the time or about 33 days per year.

The time from initial release when the evacuation could be complete is of prime importance. There would be a four-minute time window available for evaluating the situation, sounding the alarm and moving the students to the new building in the case of the VCM scenario with 10 mph winds blowing from the northeast.

Data for the possible releases was developed on the Complex Hazardous Air Release Model (CHARM) software modeling program designed to predict the dispersion of vapors based on proven mathematical formulas. There are assumptions made in the operation of this software that are generally accepted as conservative, i.e., that lead to conclusions which predict an outcome that is more serious than would actually result.

rt school as shelter haven

job program

narket information and other basics of the world of work.

Sixteen hours will be spent researching, designing and building a model for the "World Bridges" project. From this project they will learn the math involved in scaling, how to work effectively in teams, how to calculate quantities and types of materials, and through library research, to identify types of bridges, and the application of various types of construction. They will be paid $4.25 per hour for the time spent in this phase. Also, PEST participants will spend about 20 hours per week in basic education classes.

At the end of the summer program, GCPIC will sponsor a contest with prizes awarded for the best and most creative model bridge. All participants will be invited to the contest and award ceremony, and refreshments will be served.

Those between the ages of 14 and 21 interested in a great opportunity to learn and earn, contact your school counselor now.