LESSON #2 SAFETY UNIT: Real-life reading selection

Reading Selection: “Ammonia leaks from Plant”
(Bloom’s Taxonomy)

Names__________________________________________________________________________

Date__________________

1. On your own, Read the entire reading selection, underline statements that make you say WOW, then write a few words to explain your WOW!

2. Answer the following questions with your group. Put your answers on chart paper in an easy to read format.
   a. What is anhydrous ammonia? What was it being used for in this case?
   b. The leak was rated a level 3 risk. Is this good or bad? How could you find out?
   c. Predict the effect if residents did not “stay in their houses with the windows closed and the air conditioners off.”
   d. List two facts and two opinions based on the article.
   e. If you lived in this area, what would you have done? Explain your answer in detail.
   f. Based on the article, what do you expect the long terms affects to be of this spill of anhydrous ammonia? Explain your answer.

3. Groups will report out to the whole class as part of a whole class discussion.

4. All work will be collected with all group members’ names on it.
   a. The individual reading selections
   b. The chart paper

Wednesday, July 20, 2005

Ammonia leaks from plant
No homes evacuated; industrial sites cleared

By Paul Wilson and Charlie White
The Courier-Journal, Louisville, Kentucky
A leak of anhydrous ammonia at a plant on Westport Road caused the evacuation of the nearby Westport Distribution Center last night, but no homes were ordered evacuated and no injuries were reported.

Bakery Chef, which supplies products to fast-food restaurants, reported the leak about 8:45 p.m., said Doug Hamilton, the Louisville Metro Emergency Management director.

He said a valve on a tank released a cloud of up to 1,000 pounds of anhydrous ammonia. It dissipated within an hour, Hamilton said, but crews remained at the scene past midnight.

Anhydrous ammonia is used as a refrigerant.

The leak was rated a Level 3 risk, the most serious, and the Metro Health Department set up air-monitoring stations, Hamilton said.

About 70 people were working at the time and were evacuated before a crew from the company went in to stop the leak, said David Jerome, the plant's director of manufacturing.

Jerome said he doesn't know what caused the leak, which he said was not as large as 1,000 pounds.

People living in nearby Forest Springs North -- a neighborhood of 200 to 250 homes -- were advised to stay in their houses with the windows closed and air conditioners off.

Meredith Kostyk, who lives about a half-mile away in the 13000 block of Willow Forest Drive, took that advice.

"I turned the air conditioner off and let the dog in," she said.

Kostyk said she learned of the ammonia leak from a neighbor who called her about 9:30 p.m. A car also drove through the neighborhood, announcing the leak through a loudspeaker, she said.

Jeffrey King, who lives in the 4400 block of Sycamore Forest Place in Forest Springs North, said he and his family were packing up and leaving for the night. They also live about a half-mile from the plant.

"We found out (about the leak) from a neighbor who is a police officer," King said. "We've got to play it safe."

Ammonia is an irritant that can damage the lungs in high concentrations. Some people working at Ford's Kentucky Truck Plant nearby reported lung irritation, Hamilton said.
Bakery Chef held an emergency drill in late 2003 with the Worthington Fire Department, and Jerome said that experience helped personnel stop the leak quickly.

He said he hoped the plant would be up and running "first thing in the morning."

Fire departments on the scene included Anchorage, Pewee Valley, Worthington, Middletown and Jeffersontown. The Jefferson County hazardous-materials unit also responded.

Portions of Westport Road were closed much of the evening.

A database maintained by the National Response Center, which coordinates spill responses for all federal agencies, showed that Bakery Chef reported an ammonia leak of 2,000 pounds from a relief valve because of possible power loss during severe weather on May 31, 2004.

A minor chemical leak at the plant in September 2002 caused widespread concern because a message declaring a "civil emergency" appeared on cable television. It turned out to be a small ammonia leak but the message gave no details as to the type of trouble or its location.

A Courier-Journal story in June 2004 said the plant filed a risk-management plan with the U.S. Environmental Protection Agency, reporting precautions that include new ammonia-monitoring equipment.

A worst-case accident involving ammonia could affect as many as 250 neighbors, according to the plant's report.

Bakery Chef started as Liqui-Dri Foods in Louisville in 1981 and was bought by Quaker Oats in 1984. Ralcorp Holdings Inc. of Westmont, Ill., bought it in November 2003.

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Staff writer James Bruggers also gathered information for this story.