

Chemical Sheltering at the Kansas City Plant

Clyde Hicks
May 2, 2006

South Carolina Train Crash

- **Crash with parked train**
- **90 ton chlorine railcar leaks**
- **9 fatalities (234 treated, 53 hospitalized)**
- **Area evacuated for 2 weeks**



Kansas City Plant Location

- **Union Pacific line to the East with spur**
- **Trains park on the spur**
- **Chlorine shipments (306 railcars in a six month period)**

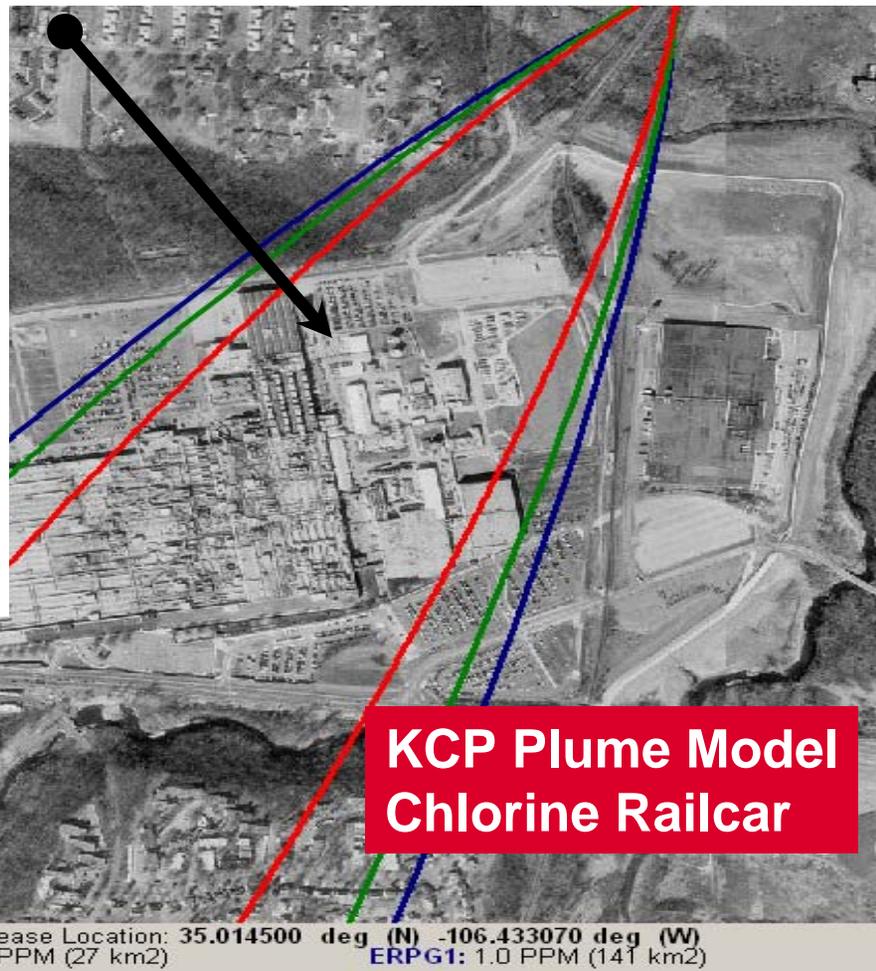


05/02/2006

CH

3

- **Wind Direction & Speed**
- **At Main Bldg. 140 ppm**
- **Lethal at 430 ppm for 30min**
- **3 ppm for 15 Miles**



Kansas City Plant Actions

- **Revise sheltering in place protective action**
- **Evaluate capabilities of ventilation systems to control intake air**
- **Revise training for employees and Emergency Response Organization**
- **Track changes in electronic corrective action tracking system**

Kansas City Plant Actions

- **Determine suitable chemical sheltering areas in a very large facility**
- **Establish new locations for the alternate Emergency Operations Center (EOC) and the Incident Command (IC) Post**

Kansas City Plant Actions

- **Approximately 2800 employees completed online training**
- **Revised and validated installation of 140 maps**
- **Revision of departmental emergency plans was required of over 200 managers**
- **Planned exercise to test changes in September**

September Exercise

- **All employees sheltered in new chemical sheltering areas**
- **EOC and IC functioned in alternate location**
- **Kansas City, Missouri Hazmat participated**
- **Union Pacific representative was informed**
- **All exercise objectives were met**

Incident Response

- **Kansas City Plant Fire Department responds to scene and provides guidance**
- **Kansas City, Missouri Fire Department hazardous material response**
- **Kansas City Plant Fire Department and physical security coordination with KCMO Hazmat**

Exercise Lessons Learned

- **Alternate EOC worked well**
- **Revise sheltering assembly locations to relieve congestion observed**
- **Telephone and radio improvements were made**

Summary

- **Value in reviewing external events**
- **Stretched the KCP to a greater degree**
- **Strengthened the KCP emergency management program**
- **Management has great confidence in the system**

Questions?

Clyde Hicks
Kansas City Plant
816-997-2262
chicks1@kcp.com