

DATE: October 14, 1991
TO: Hasmukh C. Shah
FROM: Frank H. Sollman
SUBJECT: INCIDENT REPORT - ICG APRIL VINYL CHLORIDE TANK CAR
DERAILMENT

Saturday, April 12, 1991, at 18:30, the Illinois Central Railroad train derailed at least thirteen loaded hazardous material tank cars: five were vinyl chloride, six were hydrochloric and two were sodium hydroxide. One sodium hydroxide leaked about fourteen thousand gallons to the ground. Approximately four hundred citizens were evacuated and there were no injuries.

Initial reports from the scene said one vinyl chloride tank car had ruptured but was not on fire. Later reports said there were no leaks, no fire, and no injuries. Chemtrec notified BFGoodrich at 19:00 hours and asked for assistance. Due to my absence as the primary responder, personnel at our Cleveland, Ohio, and LaPorte, Texas, vinyl chloride monomer plants were called. About four hours later I was contacted and began preparations to depart to the scene. During the four hour period in my absence, BFGoodrich informed ICG of O. H. Materials as a response contractor for vinyl chloride.

At 03:30, April 14, I met with ICG and local agency personnel to begin the damage survey. It was this moment we recognized that most of the contents of one 16,000 gallon caustic soda tank car had leaked. Areas of spillage were marked to prevent personnel injuries. We decided that five vinyl chloride and two caustic soda tank cars had to be transferred.

Sunday, Hulizer Emergency Services began clearing wreckage and O. H. Materials response cleanup contractor began equipment layout to treat the spilled caustic soda and transfer vinyl chloride tank cars. Working with ICG dispatchers, we had five empty vinyl chloride and one caustic car routed to Edgewood.

Monday afternoon, equipment was in place to begin vinyl chloride and caustic soda transfers. Two caustic soda trucks were dispatched to receive the heel from the damaged caustic soda tank car. By noon Wednesday, all damaged tank cars were transferred and damaged cars were being loaded onto flat cars. I left the scene late Wednesday for Calvert City, Kentucky.

CMA 111632

With the formation of the VCNET vinyl chloride response team, and using this incident as an example and case to study and develop VCNET response team needs, I made the following list for review:

- A. VCNET response team member contact procedures and equipment for 24 hour days.
 - 1. Home base response team member pecking order list.
 - 2. Mobile communication for each to insure 24 hour contacts.
 - 3. Week by week team member schedules for personnel availability.
 - 4. Response equipment list in working condition and immediately available for 24 hour call out. This includes vehicle for carriage to the scene and security while at the scene.
- B. Team member training.
 - 1. For situation exercise to aid on-scene decisions.
 - 2. For VCl tank car anatomy and condition.
 - a. Tank size: to prevent overloads, etc.
 - b. Pre-tank car checks: on defects, tank oxygen content, heels.
 - c. Test dates, valve types
 - d. Hood shield, tank metal thicknesses.
 - 3. VCl physical characteristics: i.e., understand the Canadian TIPS booklet entirely for leak rates, cloud patterns, etc.
 - 4. On response contractor equipment to monitor their work.
 - 5. MSDS information interpretation for other chemicals that may be involved.
 - 6. Tank car wall damage assessment (can tank take added pressure, can it be moved, etc).
- C. VCNET membership 24 hour contact list for:
 - 1. Borrowing tank cars.
 - 2. Emergency response assistance requests from railroads.
- D. Develop guidelines on evacuation based on degree of VCl release. Key in OSHA exposure maximums of 5ppm over fifteen minutes and how this would affect evacuation decisions versus the immediate physical hazards of VCl.
- E. Detail on-scene acceptable practices.
 - 1. Should damaged cars be depressured, i.e., gas pumped to good cars? This takes five hours longer per car.
 - 2. Do you evacuate during transfers?
 - 3. Can transfer hoses be laid under line trackage?
 - 4. Should you be spokesman to news media? (Develop standard statements similar to Chloreps's).

5. Should you have 16 or 24 hour surveillance? This dictates the number of technician responders who should go.
6. Record or log information of on-scene activity, i.e., car numbers involved, flat car numbers matched to damaged car numbers, personnel, outages and temporary cars transferred to, seal numbers, oxygen content. Should a check sheet be developed of on-scene information?

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