

COMPLIANT

4/1/75

B.F. GOODRICH CHEMICAL COMPANY
AVON LAKE TECHNICAL CENTER

Operations Plan for Technical Center VCL Emergency Situations

An emergency, as stated in the OSHA standard for exposure to vinyl chloride (No. 1910.93 q), is any occurrence which is likely to, or does, result in a massive release of VCL. Small leaks, even though the releases may expose people in excess of the permissible limit, are not to be considered as such. Even so, the latter should be corrected as soon as detected.

If a massive release has occurred, anyone in the area should turn in the alarm and evacuate the building. If there is any question as to whether the release is a massive one, the Shift Foreman, General Foreman of Production, Safety Engineer, Plant Engineer or Plant Manager, in the order listed, will determine if an emergency exists and what course of action to take. In any case, don't hesitate to evacuate the building.

The shift foreman or one of the people listed above will be in charge and will determine the action to be taken. An emergency plan is outlined below:

A. Evacuating the Building

1. Sound the gas and fire alarm to evacuate the building.
2. The Foreman will decide whether or not to pull the electric breakers in the process building electrical cubicles (Geon on roof; Hydrin - 2nd floor 417; Computer - 2nd floor 414) shutting electric power off of everything in the building, except the exhaust fans and the blowers. The breakers for the exhaust fans and blowers are clearly marked so you will not make a mistake.

This should be done quickly before the cubicle is filled with an explosive mixture, for a hot spark is produced when the breaker is opened. Both men entering the cubicle should wear Scott Air Paks. If you suspect the atmosphere is explosive, do not enter the cubicles. Instead throw the breaker at the substation North of Bldg. 413. If this is done, the building exhaust fans are also turned off.

3. If the situation is determined to be bad enough, the plant evacuation plan will be put into effect. The process foreman will make this decision.
4. On the day shift (B) the BFG Fire Brigade will respond with proper clothing, air masks, rubber footwear and gloves. They will stand by until the shift foreman instructs them what to do.
5. On the other two shifts (A & C) the guard will activate the monitor system calling in extra help. He will not call in the Avon Lake Fire Department unless notified to do so by the Shift Foreman or his representative.

B. Detecting & Isolating the Problem

1. The foreman and a Geon operator will put on rubber footwear, rubber gloves, an impervious suit, headcovers and Scott Air Paks before entering the building.
2. They will enter the building and proceed as follows:
 - a. First, they will search for anyone trapped in the building.
 - b. Secondly, they will search for the problem (leak, relief valve that let go, etc.).
 - c. Thirdly, they will eliminate or minimize the problem by closing the proper valves.
 - d. If this can't be done, they will leave the building, check the area around the building with a portable OVA instrument and if readings are above 25 they will have all men fall back to an area where the readings are ≤ 25 ppm and wait until VCI stops escaping and the building has been cleared of VCI.

C. Checking the Building Prior to Entry

When the foreman decides the building is likely free of VCI, the OVA operator plus another person will check the building as follows:

- a. Wearing Scott Air Paks, they will crack the outside stairwell door (1st floor), insert the explosion meter hose through the crack, and check the stairwell for an explosive atmosphere. If the atmosphere is safe, they will enter the stairwell and check the atmosphere with the OVA meter which is not explosion proof.
- b. If less than 25 ppm of VCM is found, they can continue to the third floor and using the same procedure first, check the third floor of the building from the stairwell for air explosive mixture and then for the level of VCM. If the level is less than 25 ppm, they can enter the main building and check the entire third floor (buildings 414 & 417). If, as they proceed, the OVA readings suddenly go up, they should find and eliminate the cause. Then they should leave the area to return when they think the VCM level is again less than 25 ppm, repeating the checking process.
- c. Repeat part b on the 2nd and first floors of building 414 & 417.

D. Restoring Power

- a. The Geon cubicle on the roof is to be checked as in C.a.. If less than 25 ppm of VCM is found, the foreman can enter and restore power. When an explosive atmosphere is found, open the cubicle door and allow the VCI to disperse. Arcing occurs when the switches are closed, so a fire would be started if there was an explosive atmosphere in the cubicle when the switches were closed.
- b. Next, power should be restored in the Hydrin and computer cubicles in the same manner as in a. above. These are on the second floors of buildings 417 & 414 respectively. Turning power on will not damage the computer, but someone must put it back on stream.

E. Correcting the Problem

1. When the building checks out at < 25 ppm, process and maintenance personnel needed to correct the problem can enter the building. Protective equipment, as described in B.I. above, should be worn or available in case of need.
 - a. If the problem is a leak, it should be corrected immediately. After repairing, test the line or reactor to make sure the problem has been eliminated before putting the system back in use.
 - b. If the excursion was the result of an activated relief device, determine the probable cause (i.e. error in recipe, operational error, equipment failures, mischarges, etc.). Have the problem corrected and the relief device replaced or repaired.
2. If solution to problem isn't known, the people mentioned in paragraph 2 should meet and determine a course of action designed to define the problem and come up with a solution.

F. Final Check of Building

1. Before allowing other operators and maintenance personnel to enter the building (414) check all floors with a portable OVA meter. If readings are < 25 ppm, make sure building monitor is on and then let all authorized persons enter. Hydrin area must be less than 0.5 ppm VCM before employees are allowed to enter it.

G. Reporting

The Technical Center OSHA VCM administrator or the Safety Engineer shall report emergencies and the facts obtainable at that time within 24 hours to the OSHA Area Director. Upon request of the Area Director, the administrator shall submit additional information in writing relevant to the nature and extent of employee exposures and measures taken to prevent future emergencies of similar nature.

Before contacting the OSHA area Director, the VCM administrator or Safety Engineer shall consult with the Divisional Safety Director. All written reports should also be reviewed by the Divisional Safety Director before submitting to the OSHA area Director.