

MANUFACTURING SPECIFICATION

Page 1 of 6

121 & 111

B. F. GOODRICH CHEMICAL COMPANY

Plant Louisville Bldg. 1 & 15

Commodity No. Equipment Size

Commercial Designation Action Procedures for Equipment Breakdown Code

Vinyl Chloride Releases Sales Breakdown Code

Issue No. 1 Reference No. Original Date April, 1975

The permanent standard regulating exposure to vinyl chloride issued by the Department of Labor, Section 1910.93q paragraph (i) Emergency situations states:

"A written operational plan for emergency situations, shall be developed for each facility storing, handling, or otherwise using vinyl chloride as a liquid or compressed gas. Appropriate portions of the plan shall be implemented in the event of an emergency".

The following procedure is intended as a guide to action to be taken in the event of a large gaseous or liquid release. Although exact actions cannot be precisely detailed for every possible circumstance, the following outline will minimize operating personnel exposure and possible hazard to buildings and equipment.

I. Protective Equipment and Limits of Use

- A. Entry into unknown concentrations or concentrations greater than 36,000 ppm (lower explosive limit) MAY BE MADE ONLY FOR PURPOSES OF LIFE RESCUE. Scott Air Pak with full face-piece is the ONLY ALLOWABLE RESPIRATORY PROTECTION.
- B. Entry into concentrations between 3600-36,000 ppm may be only for:
1. Purposes of life rescue
 2. Fire fighting
 3. Securing equipment so as to prevent a greater hazard from additional release of vinyl chloride.

Scott Air Pak with face full face piece is the ONLY ALLOWABLE RESPIRATORY PROTECTION.

- C. Entry into known concentrations between 1000 and 3600 ppm may be made for any purpose relating to identification and control of the emergency.

Scott Air Pak is the ONLY ALLOWABLE RESPIRATORY PROTECTION.

L.D. Pringle and R.S. Kinnamon

Louisville Plant

APPROVALS:

	Plant	Cleveland Office & Development
Plant Manager	<i>[Signature]</i>	Mfg. Processes
Production Manager	<i>[Signature]</i>	Production
Technical Manager	<i>[Signature]</i>	Development

BFG-15127

NGC36181

MANUFACTURING SPECIFICATION

Page 2 of 6

121, 111

B. F. GOODRICH CHEMICAL COMPANY

Plant Louisville

Bldg 1 & 15

Commodity No.

Equipment Size

Commercial Designation Action Procedures for

Equipment Breakdown Code

Vinyl Chloride Releases

Sales Breakdown Code

Issue No.

1

Reference No.

Original

Date

April, 1975

- D. Entry into known concentrations between 25 and 1000 ppm may be made to perform routine tasks or identify and control an emergency. A Scott Air Pak may be used or for routine tasks an air-line respirator may be used. However, whenever an air-line respirator is used, the employee must be equipped with an approved canister should an emergency escape from the area be required.

II. Types of Emergency Situations

- A. Massive visible release - Defined as a rapid release of large quantities of vinyl chloride such as would occur if a polymerizer was inadvertently opened while under pressure, or if liquid vinyl chloride was pumped onto the floor through an open valve, or a broken line or pipe fitting.
- B. Large release not readily visible - defined as a rapid release of large quantities of vinyl chloride such as would occur if a polymerizer containing vinyl chloride was drained to the sewer, or an unstripped polymerizer charge was drained from a blowdown tank into an inside, open blend tank.
- C. Moderate leak detected by Bendix but not visible at all. Defined as any vinyl chloride release producing concentrations in the atmosphere greater than 25 ppm, but not visible under most conditions. Such conditions might be produced by leaking manheads, and valves, and by large volume low pressure releases.

III. Emergency Action Plan

- A. Visible Massive Release - a massive release of vinyl chloride in the gaseous state will likely produce concentrations above the lower explosive limit of 36,000 ppm (3.6%), and a massive release in liquid form will definitely produce concentrations of this magnitude. The following procedure is intended to prevent entry into such concentrations by anyone, for any reason other than life rescue.

L.D. Pringle and R.S. Kinnamon Louisville Plant

APPROVALS:

Plant Manager	<i>PL</i>	Cleveland Office & Development
Production Manager	<i>R. S. Kinnamon</i>	Mfg. Processes
Technical Manager	<i>L. D. Pringle</i>	Production
		Development

DFG-15127

NGC36182

MANUFACTURING SPECIFICATION

Page 3 of 6

B. F. GOODRICH CHEMICAL COMPANY

Plant Louisville Bldg. 121, 111
1 & 15Action Procedures for Vinyl Chloride Releases
Commercial Designation Vinyl Chloride ReleasesEquipment Size --Equipment Breakdown Code --Sales Breakdown Code --Issue No. 1 Reference No. Original Date April, 1975

1. The first man to observe the release will start the emergency ventilation fans on his way to the nearest Scott Air Pak located in an uncontaminated area.
2. This man will put on the Air Pak and proceed to notify all personnel in the affected area to evacuate to the appropriate head count area. In Plant 1, the head count area is the roadway directly west of the building. In Plant 2 the head count area is 100 feet south of the Bldg. 1/15 courtyard. If, at the time the notification to evacuate is given, a poly is being charged, the operator should stop the VCL charging pump, close the valve after the meter, and put cooling water on the poly jacket before leaving the building.
3. The first man contacted by the man with the Scott Air Pak should sound the fire or gas alarm, as appropriate, and proceed to the production office. He should contact the Shift Foreman and OVA monitor and notify them of the emergency. The Shift Foreman will immediately take a head count to insure that all personnel are out of the affected area.
4. In Plant 2, those previously assigned men on each shift should close the fire doors between the Millroom and Bldg. 1 and Bldg. 15, notify the Millroom Supervisor of the emergency and then proceed back to the head count area via the roadway west of Bldg. 1 if possible.
5. The Shift Foreman will attempt to determine source of vinyl chloride release from people involved and take appropriate action along following guide lines:
 - a. Consider plant evacuation and assign someone to notify Boiler House if such action is required. If this action is required, assign necessary knowledgeable operators to remain in area to aid in stopping release.
 - b. If source of release is known and can be shut off without dangerous exposure, proceed to do so.

L.D. Pringle and R.S. Kinnamon Louisville Plant

APPROVALS:

Plant Manager P. PringleProduction Manager R. S. KinnamonTechnical Manager H. S. Blum

Cleveland Office & Development

Mfg. Processes --Production --Development --

BFG-15127

NGC36183

MANUFACTURING SPECIFICATION

Page 4 of 6

B. F. GOODRICH CHEMICAL COMPANY

Plant Louisville

121, 111

Bldg 1 & 15

Action Procedures for

Equipment Size

Commercial Designation Vinyl Chloride Releases

Equipment Breakdown Code

Internal Name

Sales Breakdown Code

Issue No. 1

Reference No.

Original

Date April, 1975

c. If source or release is known but cannot be shut off without dangerous exposure, proceed as follows.

1. If release is limited to fixed amount of vinyl chloride which will soon be spent, such as a poly venting into building, remain outside building until venting has stopped, then enter with OVA man and proceed as permitted by concentration determination by OVA instrument.
2. If release is from one of the vinyl chloride charging tanks, shut off the valve in the vinyl chloride line to the tanks, either on the second level of Bldg. 115 or at the tank farm. When valve is closed, evacuate area and wait for vinyl chloride to clear out.

d. If source of release is unknown and cannot be determined without dangerous exposure, proceed as in C-2 above.

B. Large Release Not Readily Visible - a large vinyl chloride release which is not readily visible will likely be detected by its strong odor in a localized area, and through analysis on the Bendix Analyzer. In the event this occurs, one or more points on the Bendix analyzer will drive the recorder to full scale, indicating concentrations in excess of 100 ppm.

1. Anyone detecting the odor of VCL or observing Bendix at full scale should turn on the emergency ventilation system on the way to the nearest Scott Air Pak located in an uncontaminated area.
2. This person will put on the air pak and proceed to notify all personnel in the affected area to evacuate to the head count area.
3. The first man contacted will sound the fire or gas alarm and proceed to the office. He should immediately contact the Shift Foreman and OVA monitor and notify them of the emergency.

L.D. Pringle and R.S. Kinnamon

Louisville, Kentucky

APPROVALS:

Plant Manager

Plant

Production Manager

Technical Manager

Cleveland Office & Development

Mfg. Processes

Production

Development

BFG-15127

NGC36184

121 and 111

B. F. GOODRICH CHEMICAL COMPANY

Plant LouisvilleBldg. 1 & 15

Commodity No. _____

Equipment Size ---Commercial Designation Action Proceduresfor Equipment Breakdown Code ---Internal Name Vinyl Chloride ReleasesSales Breakdown Code ---Issue No. 1

Reference No. _____

Original _____

Date April, 1975

4. The Shift Foreman will make a head count.

5. If no massive release of VCL was observed by anyone in the building the Shift Foreman, OVA monitor, and selected persons should enter the building using Scott Air Paks and, using the OVA instrument as a guide, attempt to determine the source of the leak and take appropriate action to stop the release. If levels above 36,000 ppm are encountered before the source is found, the group should evacuate the building and proceed as in Section A - Item 5 C.

C. Moderate leak - not visible and not detectable by odor - First detection of a leak such as this will likely result from sounding of the Bendix alarm on the third floor of the building. Any person on the third floor hearing the alarm should proceed immediately to the Bendix analyzer and determine the location of the high concentration.

Note: In Bldg. 111 the three people with primary responsibility for responding to a Bendix alarm are: 1. the east HRC operator; 2. west HRC operator; 3. the PA operator.

In Bldg. 121, the primary responsibility for responding to a Bendix is with: 1. the HRC operator; 2. the Plastics operator; 3. the Paste charging operator.

In Bldg. 1 the HRC operator and the PVC charging operator have the primary responsibility for responding to the alarm.

In all buildings it is absolutely essential that one of the designated men be on the operating floor at all times.

1. Man responding to the alarm should clear personnel from affected area by activating the appropriate alarm switch for the first or second floor (or for B-115), or by personal contact if high concentration is on the third floor. All personnel so contacted should immediately leave affected area either by entering the Control Room or by exiting building. Emergency exhaust fans should be activated by first person reaching switch at exit on affected floor.

L.D. Pringle & R.S. Kinnaman Louisville Plant

APPROVALS:

Plant

Cleveland Office & Development

Plant Manager Pf

Mfg. Processes _____

Production Manager Paste-Charge

Production _____

Technical Manager L.D. Pringle

Development _____

DFG-15127

NGC36185

MANUFACTURING SPECIFICATION

Page 6 of 6

B. F. GOODRICH CHEMICAL COMPANY

Plant Louisville Bldg. 1 & 15

Commodity No. _____ Equipment Size _____

Commercial Designation Action Procedures for Equipment Breakdown Code _____Internal Name Vinyl Chloride Releases Sales Breakdown Code _____Issue No. 1 Reference No. Original Date April, 1975

2. Immediately after activating alarm for affected area, man who responded to alarm should contact Shift Foreman and OVA man through the personal page system, giving location and level of high concentration.
3. If high vinyl chloride concentration exists on third floor, all third floor personnel should remain in Control Room until OVA man has determined the extent of the affected area. If high concentration exists on either of the other two floors, man responding to alarm will proceed as follows:
 - a. If Bendix analyzer indicates concentration of more than 25 ppm but less than 100 ppm he may proceed with his operating duties after Shift Foreman and OVA man have been contacted.
 - b. If Bendix analyzer indicates concentration more than 100 ppm (full scale recording) he must remain with the Bendix analyzer to determine whether other floors of the building are affected, and if so, take appropriate action to clear all affected areas.
4. When Shift Foreman and OVA man arrive at location of high concentration, they will put on Scott Air Paks and determine extent of affected area and source of leak. Shift Foreman will take appropriate action to stop leak, using personnel he deems necessary.

Note: It is required by law, and by B.F. Goodrich Policy, that anyone entering an area of vinyl chloride concentration greater than 25 ppm must wear an air line fed respirator or a self contained air respirator such as the Scott Air Pak.

L.D. Pringle & R.S. Kinnamon Louisville Plant

APPROVALS:

	Plant	Cleveland Office & Development
Plant Manager	<u>[Signature]</u>	Mfg. Processes _____
Production Manager	<u>[Signature]</u>	Production _____
Technical Manager	<u>[Signature]</u>	Development _____

DFG-15127

NGC36186