

O. KNIGHT



## Interoffice Communication

To SEE DISTRIBUTION  
From R. W. Seymour  
Date March 31, 1976  
Subject VCM RESPIRATOR PROGRAM

Attached is the Procedure for Respiratory Protection to be used beginning at 0001 hours on April 1, 1976. More information on respiratory protection, cleaning, repair of masks, etc. will be issued in other documents. This letter is to be a general review of the program.

All continuous flow fresh air masks (half face, full face and parts) were to have been turned in to the Safety Department (except for those needed at all times for operations and laboratory) on 3/29 and 3/30/76. The Building Attendant Group is to service and clean masks and put clean masks in plastic bags for reissue. This will be done on a Monday through Friday schedule and the clean masks will then be returned to three issue points.

1. Vinyl Supervisor's office.
2. Compound Supervisor's office.
3. Maintenance Tool Room.

When a mask has been removed from the plastic bag and used, it is to be considered a dirty mask at the end of the work period for the person using the mask. Collection points for dirty masks will be:

1. Outside Vinyl Dryer Control Room
2. Vinyl Maintenance Shop
3. Outside Compound Supervisor's Office
4. Maintenance Tool Room

Areas where people will be using masks for the greatest percentage of time will be Vinyl Reactors, Vinyl Maintenance and the Yard group. For this reason (with limited availability of half face masks) it is requested that persons in other areas who require less time in masks use full face masks and check these out from the Maintenance Tool Room for their use (except compound). Masks must not be kept for private use but must remain in service to make sure we have adequate masks available and that masks are kept clean properly.

Regulated areas in the plant will now be only the Large Reactor Area and the VCM Tank Farm and these are the only areas where employees must sign in on regulated area log sheets. Sign-in for the Large Reactor Area is at the outside south door to the control room. Please do not congregate in the Large Reactor Control Room - entry should be made only as required so that traffic and discussions can be kept to a minimum and Panel Operators can hear radio communications and properly operate the panel. The VCM Tank Farm sign-in log will be in the yard building next to the sidewalk running east and west and extending from the roadway to the Tank Farm.

Required respiratory protection and practices for high levels of VCM are in the attached procedure.

R. W. Seymour  
R. W. Seymour

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Attachment

DISTRIBUTION: LHB (9), DFJ (9), RGG (6), JEB, RGH, LDH (6), JVH (9),  
DEM (2), JVu (4), KWC (7), RAD, GGD, DML, DEN, GDB, RFH

## PROCEDURE FOR RESPIRATORY PROTECTION UNDER THE OSHA VCM STANDARD

Compliance with the OSHA regulations for VCM exposure requires that respiratory protection be worn if exposure to VCM exceeds 1.0 ppm average over a eight (8) hour period or 5.0 ppm for fifteen (15) minutes. Plant continuous monitoring units in the Large Reactor Area (20 points covering reactors and the VCM tank farm), Dryer Area (10 points) and the Laboratory (10 points covering dryer bagging, compound, dry blend and laboratory) are located so that areas of most likely VCM exposure are monitored for VCM level.

The following procedures are to be used when the VCM level in a work area exceeds 1.0 ppm VCM.

### I. LARGE REACTOR AREA

The monitoring unit in the Large Reactor Area includes sixteen sample points in the reactor area and four sample points in the VCM tank farm area. When a sample point exceeds 1.0 ppm VCM, an alarm light and buzzer will come on at the annunciator panel in the control room. The Panel Operator is to check to see which point has alarmed and what that level is. If the level is above 5.0 ppm, he is to communicate this immediately to personnel in the area so that they can take appropriate action to prevent VCM exposure. If the level is greater than 1.0 ppm, but less than 5.0 ppm, he is to wait for the next sample on that point. If it is still above 1.0 ppm, he is then to communicate that to personnel in the area. Communications are to be as follows:

1. By radio to men in his area who in turn notify any others in the alarm area.

OR

2. By dialing 81 and announcing over the plant P.A. system the area alarmed and the VCM level (if none of his men are in the alarm area or if the alarm area is in the tank farm).

### ACTION

Persons notified in a high (greater than 1.0 ppm) VCM level area are to:

1. Leave that area if not required to remain.
2. Put on proper respiratory equipment if required to remain in the area to complete an operation or correct a problem.

### Proper respiratory equipment is:

- a. 1.0 to 10.0 ppm: Protection may be half mask with canister, full mask with canister, either type mask with continuous flow fresh air or a Scott Air Pak.
- b. 10.0 to 1,000.0 ppm: Protection may be half mask or full mask with continuous flow fresh air or a Scott Air Pak.
- c. Above 1,000.0 ppm: Protection must be a Scott Air Pak.

When the VCM level in the area again drops below 1.0 ppm, the Panel Operator is to communicate this using the same method he used to inform personnel of the high level.

### Hazardous Operations

Hazardous operations in the Large Reactor area and Tank Farm where it is possible to be exposed in excess of the permissible levels are:

- |                       |                                                                                        |
|-----------------------|----------------------------------------------------------------------------------------|
| <u>Large Reactors</u> | 1. Opening reactor manway.                                                             |
|                       | 2. Draining unstripped water from a receiver or blowdown tank to an open drain.        |
|                       | 3. Sampling the large reactor.                                                         |
|                       | 4. Entering the large reactors.                                                        |
|                       | 5. Opening and cleaning condensers.                                                    |
|                       | 6. Opening any recovery line or VCM line.                                              |
|                       | 7. Opening and changing VCM filters.                                                   |
|                       | 8. Entering any vessel (receiver, knock-out tank, BDT, etc.), which has contained VCM. |
|                       | 9. Maintenance of recovery vacuum pumps and compressors (seals, etc.)                  |
| <u>VCM Tank Farm</u>  | 10. Connecting VCM cars.                                                               |
|                       | 11. Disconnecting VCM cars.                                                            |
|                       | 12. Working in the VCM compressor shed.                                                |
|                       | 13. Maintenance on tank farm VCM compressors.                                          |

For each of these jobs, a continuous flow fresh air mask must be worn (half or full face mask).

## II. DRYER AREA

The monitoring unit for the Dryer Area is located in the Control Room and includes ten sample points in the V-11 dryer room and the V-10 bagging station. When a sample point exceeds 1.0 ppm VCM, an alarm light and buzzer will come on at the annunciator panel. The Dryer Lead Operator is to check to see which point has alarmed and what that level is. If the level is above 5.0 ppm, he is to communicate this immediately to personnel in that area so that they can take appropriate action to prevent VCM exposure. If the level is greater than 1.0 ppm, but less than 5.0 ppm, he is to wait for the next sample on that point. If it is still above 1.0 ppm, he is then to communicate that to personnel in the area. This is to be done by dialing 81 and announcing over the plant P.A. system the area alarmed and the VCM level.

### ACTION

Persons notified in a high (greater than 1.0 ppm) VCM level area are to:

1. Leave that area if not required to remain.
2. Put on proper respiratory equipment if required to remain in the area. See Large Reactor Area section for list of proper respiratory equipment.

When the VCM Level in the area again drops below 1.0 ppm, the Lead Operator is to communicate this to personnel using the plant P.A. system.

#### Hazardous Operation

The hazardous operation in the Dryer Area requiring a continuous flow fresh air mask is entry into dryer dust collectors.

### III. LABORATORY

The Honeywell unit in the Laboratory has sample points at the warehouse resin bagging area, compound, dry blend and the laboratory. When a sample point exceeds 1.0 ppm VCM, an alarm light and buzzer will come on at the annunciator panel. The Lead Technician is to check to see which point has alarmed and what the level is. If the level is above 5.0 ppm, he is to communicate this immediately to personnel in the area so that they can take appropriate action to prevent VCM exposure. If the level is greater than 1.0 ppm, but less than 5.0 ppm, he is to wait for the next sample on that point. If it is still above 1.0 ppm, he is then to communicate that to personnel in the area. This is to be done by dialing 81 and announcing over the plant P.A. system the area alarmed and the VCM level. Then if this alarm is in an area for which the Compound Shift Supervisor has responsibility, page him and notify him of the alarm.

#### ACTION

Persons notified in a high (greater than 1.0 ppm) VCM level area are to:

1. Leave that area if not required to remain.
2. Put on proper respiratory equipment if required to remain in the area.  
See Large Reactor Area section for proper respiratory equipment.

When the VCM level has again dropped below 1.0 ppm, notify employees again by using the plant P.A. system (Dial 81).

REVISED 4/9/76