

Monsanto

FROM (NAME & LOCATION): B. W. Eley - A2SA

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SUBJECT Vinyl Chloride Monitoring Equipment

REFERENCE Monsanto Plants

TO FILE

The following equipment and sampling techniques are being used or will be used at Monsanto locations.

1) Springfield, Mass.

- A. Fixed Continuous Analysis: Two (2) existing Bendix GC units have been shipped back to Bendix Co. for instrument modifications. Basically the units will represent fixed multipoint (8 sample parts) monitoring systems incorporating a GC analyzer with FID. (Delivery will be 3-4 months.) Sensitivity of 1 ppm.
- B. Area Survey Monitoring: Two (2) Century Portable OUA units w/GC capabilities (specific for VCM) have been ordered. Delivery on one unit will be next week. Analyzer sensitive to 1 ppm VCM. Response time w/o GC attachment is 2 seconds. With GC column, response time approximately 3-5 minutes.
- C. Area Grab Samples: Plant has been using a bottle evaluation technique consisting of 16 oz. bottles and MSA pump. Sensitivity of GC analysis is $\approx$ 1 ppm.
- D. Personnel Monitoring: A modified Dow charcoal column technique consisting of collection on 20 ml of carbon followed by extraction w/carbon disulfide. Method reportedly sensitive down to 1-5 ppm.

Plant has ordered four (4) Sipin miniature sampler pumps and NIOSH approved carbon tubes. Two have been delivered and are being used.

Both carbon methods specific for VCM.

2) Texas City Plant

- A. Plant has available a Miran Portable I.R. Gas Analyzer

RSV 0005686

which is specific for VCM in the ppm range. Unit made by Wilks Scientific Co.

- B. Personnel sampling consists of modified Dow carbon column method. (Same as Springfield Technique.) They have ordered six (6) Sipin Sampling Pumps.

3) MICC - Research Center

- A. Group has ordered a Bullard Vinyl Chloride Monitor with sensitivity of 2 ppm. Specific for VCM. Expected delivery last week but still has not arrived. Instrument costs \$875.00 w/o recorder. Instrument can be run continuously.
- B. They have a Bendix C-115 sampling pump and have ordered gas collection tubes for grab sampling.

4) Montreal Plant

- A. The PVC facility has a Miran Portable Gas Analyzer available for area survey monitoring. This unit is similar to the one at Texas City.
- B. A Bendix C-115 Personnel Sampling Unit has been ordered and will be used along with gas collection tubes and analyze peak concentration exposures. Information on the Sipin Moisture Sampling System for charcoal tube monitoring has been relayed to the Safety Department.


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