

INDUSTRIAL CHEMICALS DIVISION

MEMORANDUM

E. W. GALLAHAN
MAY 2 1974

May 2, 1974

To: Mr. W. S. Ferguson

Subject: VCM - Hygiene

The status of VCM monitoring and emission abatement programs is outlined herein as per your request of 2/25/74.

1. Monitoring

Daily spot check monitoring for total hydrocarbons in process areas, control room, and loading areas continues using the Model A Century organic vapor analyzer. Four specific areas are monitored for VCM; namely, loading, caustic scrubbers, VCM storages and bullets. Twelve other various points are monitored daily for total hydrocarbons. VCM was detected on four out of seventeen monitoring days. Concentrations in specific VCM areas ranged from 25 to 200 ppm dependent upon sample locations. Background on the other thirteen days was 10 ppm without loading or cleaning of tank cars. Background ranges from 2 to 10 ppm (as hydrocarbons) due to the proximity of the VCM operation to the surrounding offsite chemical complexes.

<u>Date</u>	<u>VCM</u>	<u>Remarks</u>
3/1/74	<10 ppm	No loading
3/4/74	<10 ppm	No loading
3/5/74	<10 ppm	No loading
3/6/74	<10 ppm	No loading
3/7/74	100-200 ppm	Loading VCM tank cars, VCM detected downwind of loading area and increased to 200 ppm at loading area.
3/8/74 thru 3/13/74		No samples were taken with OVA analyzer due to questions from hourly employees concerning the safety of the sampling apparatus. Supervision explained the safety features of the instrument and the testing continued.

ASI 00004408

<u>Date</u>	<u>VCM</u>	<u>Remarks</u>
3/14/74	<10 ppm	No loading
3/15/74	<10 ppm	No loading
3/18/74	<10 ppm	No loading
3/19/74	25 ppm	Just started loading, venting slightly.
3/20/74	<10 ppm	No loading
3/21/74	<10 ppm	No loading
3/22/74	<10 ppm	No loading
3/25/74	<10 ppm	No loading
3/26/74	<10 ppm	No loading
3/27-28	150 ppm	Leaking valve on VCM transfer line from loading rack back to off spec bullets.
3/29/74	<10 ppm	No loading

2. Short Term Program - Status

- a. Delivery of portable Century Organic Vapor Analyzer (Model B) specific to VCM is projected by vendor during week of 5/20/74.
- b. Personal monitoring program for loaders, maintenance and operating personnel will commence following promised mid May delivery of MSA units (3) on order.
- c. Issuance of an 81-R (capital request) by Works is projected by 5/3/74 for purchase of a stationary gas chromatograph. Quotes are being solicited presently from four (4) vendors. Total cost for this multi-point (~12) recorder will approximate \$25-30 M.
- d. Loading of two (2) VCM cars purged of inerts by Robin-Tech was highly successful requiring no venting by BRN personnel. Marketing has requested Robin-Tech to initiate venting of inerts from all cars prior to return to BRN effective immediately.
- e. A single loading station was equipped with a nitrogen purge system in recent weeks to displace retained liquid in flexible loading hoses prior to disconnecting. Existing check valves in the loading manifold preclude installation as originally conceived. Current plans are to displace residual liquid via N₂ pressurization through an existing return header connected with a vinyl "bullet." Completion is projected by 6/1.

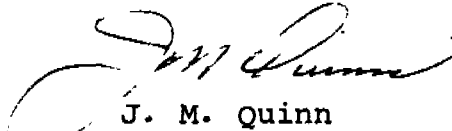
May 2, 1974

3. Long Term Program - Status

A "58" capital request for the previously outlined vent recovery system has been completed and is now circulating (MTO) for necessary Corporate and Divisional approvals.

4. Work Practices

Air supplied respirators (MSA) for loading station use have been ordered. Installation of an air cylinder storage pad and associated $\frac{1}{2}$ " piping to each loading station will be complete and operational by 6/1/74.



J. M. Quinn
Director Environmental Services

JMQ/sm

cc: Messrs. E. E. James
P. B. Cornell
R. J. Curtis
R. Teets
J. M. DeVoe
W. C. Koch
R. J. Nelepovitz
R. E. Gribben
A. J. von Frank