



Air Products and Chemicals
INC.

MAR 14 1979

CALVERT CITY PLANT
INTEROFFICE MEMORANDUM

To: J. R. Russell

Date: 13 March 1979

From: L. C. Toney

Copies: A. F. Cantor M. T. McHale
R. L. Hall E. A. Primeau
H. M. Konrad F. C. Rehberg
R. E. Luken M. H. Stermon

Re: VCM RECORDKEEPING
AND REPORTING

When the PVC Plant is started up, recordkeeping, reporting, and testing to demonstrate compliance will be required according to the vinyl chloride regulations. The requirements are as follows:

Reporting

Semiannual reports are required on 15 March and 15 September for EPA. The reports are to include the following:

1. Emissions - The report is to include a record of any emissions which, averaged over any one-hour period, commencing on the hour, were in excess of 10 ppm vinyl chloride. The Utilities Department will be keeping the records on the vent from the thermal oxidizer.
2. Residual VCM in stripped product - A calculated daily weighted average residual VCM for each grade of resin for each calendar day is to be included in the report. A representative sample of the slurry leaving the stripping column for each production line is to be taken for each 8-hour interval and analyzed for residual vinyl chloride. The quantity of product represented by each sample is to be recorded, along with the grade of resin, the date and time of sample, and moisture content. The analyses and product volumes on a dry solids basis will be used to calculate the daily weighted average residual VCM.
3. Emissions from reactor openings - The amount of vinyl chloride in each and every reactor opening is to be determined and reported. Keep a record for each reactor of the number of batches and the amount of product on a dry basis produced in each batch since the last time the reactor was opened. When the reactor is opened, determine the concentration of vinyl chloride in the reactor immediately after opening. Using the hydrocarbon analyzer, or if not satisfactory analyzed by the Laboratory using Method 106, measure the vinyl chloride concentration 6 inches from the bottom of the reactor, at the center of the reactor, and

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near the top of the reactor. These data will provide the necessary information to calculate the pounds of vinyl chloride lost per pound of product which is to be included in the report. The limit is 0.00002 lbs. VCM/lb. of product on a dry basis.

The semiannual reports will be prepared by the Environmental Department. Please submit the information requested above for the residual vinyl chloride to me at the end of each month. At least in the beginning, please submit a report to me following each reactor opening giving the information requested above.

Reports on emergency venting of vinyl chloride from relief valves, rupture discs, and manual vents must be submitted to EPA within 10 days after each emission as has been done in the past. Continue to send a report on each emission to R. E. Luken as soon as possible after the occurrence.

Recordkeeping

The following records are to be retained and made available for inspection by EPA for a minimum of two years:

1. All of the data specified above to be used in making the determinations for the semiannual reports are to be retained.
2. Records of the vinyl chloride leaks detected with the gas chromatograph monitoring system are to be retained. The records are to include the concentration of VCM, the location, the date, and the time for each measurement.
3. Records of the vinyl chloride leaks detected with the portable hydrocarbon analyzer are to be maintained. The records are to include the location of the leak, the cause, the date and time, and the action taken to eliminate the leak.
4. A daily operating record of each reactor, including the pressure and temperature, is to be maintained. Retaining the reactor temperature and pressure charts should be sufficient for this requirement.

Testing to Demonstrate Compliance

According to the National Emissions Standard for vinyl chloride, the PVC Plant must be tested to demonstrate compliance within 90 days of

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the initial startup. EPA must be notified at least 30 days prior to the emissions test to afford EPA the opportunity to observe the testing. The Federal regulations require the thermal oxidizer vent, the reactor opening, the product immediately following the stripping operation, and the stripped wastewater to be tested for vinyl chloride content.

According to the construction permit issued by the State, the plant must be tested within 60 days after achieving the maximum production rate, but not later than 120 days after the initial startup. The State must be notified at least ten days prior to the test. For the State requirement the thermal oxidizer vent must be tested for hydrochloric acid and chlorine in addition to vinyl chloride. The vents from each of the dryers must be tested for particulates. The vent from the DMF storage tanks must be tested for DMF.

Attached is a copy of the memo from R. E. Luken to M. H. Stermon dated 7 December 1978 which gives additional information regarding testing to demonstrate compliance.

L. C. Toney
L. C. Toney

LCT:pdd

Attachment

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