



Air Products and Chemicals
INC.

CALVERT CITY PLANT
INTEROFFICE MEMORANDUM

To: B. D. Helms

Date: 5 May 1980

From: L. C. Toney

Copies: R. E. Luken
A. J. Diglio, Trexlertown

Re: March Monthly Report

Vinyl Chloride Regulations

Two vinyl chloride release reports were sent to EPA during the month. The relief valve on No. 4 PVC reactor released vinyl chloride on 27 March. The coupling for the reactor agitator failed during the heat-up step. The pressure increased due to localized heating and caused the relief valve to open momentarily. The loss of mixing was not signaled by the amp meter alarm because the motor was still running and drawing more current at the high speed than the set point for the low amp alarm.

The relief valve on the monomer recovery decanter released vinyl chloride on 20 April. The flow meter in the vent line from the monomer recovery system to the incinerator became restricted due to plugging which caused the system pressure to build to the point that the relief valve released. The pressure transmitter for the pressure control valve did not indicate the higher pressure because the pressure tap is downstream of the flow meter. A bypass around the flow meter is being installed to permit cleaning of the flow meter without shutting down the system.

A monthly summary of the emergency vinyl chloride releases for March was prepared for J. T. Barr for the SPI study on vinyl chloride releases.

Additional information about the vinyl chloride losses from relief valve discharges was requested by EPA for the six releases between 16 November 1979 and 15 March 1980. Unpreventable discharges are the only discharges allowed by the vinyl chloride regulations. EPA stated that the additional information was needed to determine if the discharges were preventable. Answers to their questions, which are required by 9 May, are being prepared.

AP00045040

A meeting was held in Frankfort with the Kentucky Division of Air Pollution Control to discuss the chlorides emission limit for the incinerator. Ed Zarytkiewicz had made dispersion calculations which indicated that the chlorides could be much higher than the 0.35 lbs/hr. limit and still meet the $167 \mu \text{ gm/m}^3$ at the property line. The computations by Jaan Su of the Division of Air Pollution Control show that the concentration at the property line would be less than the $167 \mu \text{ gm/m}^3$ with emissions of 5.26 lbs/hr. A request has been sent to the State asking for a limit of 5.26 lbs/hr.

Ditches Contamination

Four complete inspections of the ditches were made during the month as an aid to eliminating contamination in the ditches. Sources of contamination were discussed with the production superintendents or their assistants following each inspection. A report was issued following each inspection. In addition, the main ditch leaving the north side of the plant is being checked each shift by the security guard to provide quick response to contamination.

The oil spill prevention and countermeasure facilities were inspected. All of the facilities were found to be in compliance with the Oil Spill Prevention and Countermeasure Plan.

A copy of the Oil Spill Prevention and Countermeasure Plan and a copy of the plant drainage ditch map were sent to Peyton Adams of the Kentucky Division of Water Quality as requested when he was sampling the ditches in March.

A meeting was held in Frankfort on 15 April 1980 at the request of Clyde Baldwin, Chief of the Kentucky Division of Water Quality. The meeting was held to discuss resolution of violation of the regulations prohibiting pollution of the waters of Kentucky. It was agreed that Air Products would submit a plan within thirty days for removing the main sources of contamination of the storm water. In addition, a comprehensive plan for removing storm water contamination is to be submitted within 180 days. If these plans are acceptable, there will be no fine for contamination of the storm water. Process Engineering has been assigned the task of preparing the 30-day and 180-day plans for eliminating contamination.

Measures are being taken to eliminate potential sources of contamination of the storm water. Temporary revisions have been made whereby all the drainage from the PVOH plant, except during heavy rains, is being diverted to the Wastewater Treatment plant. A scope of work was written and a C.E. was prepared for revising the drainage in the Acetylenics plant such that all the areas with high potential for contaminating the storm water are to be drained to the Wastewater Treatment plant. A C.E. has been prepared for revising the level control system on No. 2 cooling tower to eliminate overflowing of the tower. A cost estimate for revisions for containment of caustic spills from the caustic pots has been prepared. In addition, a scope of work is being prepared for containment of spillage at the bulk acetic acid loading area. However, all the C.E.'s for elimination of storm water contamination are to be combined into one C.E. which is not to exceed \$250,000.

AP00045041

General

Attended seminar on polyvinyl chloride reactions conducted by J. T. Barr.

Gathered information on amount of air pollution abatement and water pollution abatement during 1979 and amount of solid wastes disposed in 1979 for a questionnaire being completed by the Accounting department.

Assisted Accounting and Distribution departments with identifying 139 drums of material at the Calvert City Warehouse. Some of the material can be used by the Acetylenics and Emulsions plants. Other drums may have to be disposed.

Reviewed Federal Register, Environmental Reporter and Chemical Regulation Reporter for developments important to Calvert City.

L. C. Toney
L. C. Toney

AP00045042

PLANS FOR NEXT MONTH

(L. C. Toney)

<u>Project</u>	<u>Status</u>	<u>Benefits</u>
Supply answers to EPA questions on vinyl chloride releases.	Complete for mailing by 9 May.	Requested by EPA under Section 114 of Clean Air Act.
Route drainage from Acetylenics storage and bulk loading areas to sewer.	C.E. has been submitted for approval.	Reduce potential for contamination of storm water.
Install pad and curbing at bulk acetic acid loading area.	Scope of work is to be written for cost estimate.	Eliminate potential for spills and leaks of acetic acid to ditch.
Identify and dispose of 139 drums at Calvert City Warehouse.	Leaking drums are being transferred and 36 drums have been moved inside until they can be used.	Eliminate hazards associated with unidentified materials and eliminate potential for drums leaking onto ground.
Ditch inspections	Weekly inspections planned--tour of plant daily.	Aid in elimination of storm water contamination.
Fuel oil facilities inspections	One inspection planned.	Assure compliance with oil spill prevention and counter-measure plan.

AP00045043

OFFICIAL CORRESPONDENCE

<u>Date</u>	<u>Agency</u>	<u>Nature of Correspondence</u>
2 April 1980	EPA	Letter reporting emergency vinyl chloride release - Baliker to Hanmer (L.C. Toney)
7 April 1980	Kentucky Division of Water Quality	Copies of oil spill plan and map of drainage ditches - Toney to Adams
21 April 1980	Kentucky Division of Air Pollution Control	Copies of 7 March, 24 March, and 2 April VCM release reports to EPA - Baliker to Murphy (L.C. Toney)
29 April 1980	EPA	Letter reporting emergency vinyl chloride release - Baliker to Hanmer (L.C. Toney)

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