



Air Products and Chemicals
INC.

ESCAMBIA PLANT
INTEROFFICE MEMORANDUM

To: Mr. R. E. Davis

Date: August 2, 1971

From: A. K. McMillan

Copies: G. B. H. Speed
R. W. Beech

Re:

In the past George Speed has represented Escambia at the Vinyl Chloride Safety Association meetings. When possible, Ron Beech or I have also attended these meetings. In the future Ron Beech will represent the Escambia plant. Will you get with George Speed and do whatever is necessary to accomplish this.

A. K. McMillan

AKM:fls

AP00036038

For you info

cc: ARMC
Brown
Rush
Chambers

Firestone Plastics Company

DIVISION OF THE FIRESTONE TIRE & RUBBER COMPANY

HARVEY S. FIRESTONE - FOUNDER

GENERAL OFFICE
P. O. BOX 898
POTTSTOWN, PENNSYLVANIA 18464

POTTSTOWN, PENNSYLVANIA

June 28, 1971

Vinyl Chloride Safety Ass

Mr. George B. H. Speed
Sr. Project Engineer
Escambia Chemical Co.
Box 467
Pensacola, Florida

Dear George:

Just talked with Glenn of General who says
meeting is set at Rochester, N. Y. Nov. 10-11-12,
1971. Lucidol will demonstrate for us - not sure
what but having to do with catalysis, VC and fire
or explosion.

Sincerely,

Bill

W. W. Madden, Coordinator
Special Projects

WWM/rc

AP00036039



ESCAMBIA PLANT
INTEROFFICE MEMORANDUM

To: Mr. T. L. Carey Date: August 2, 1971
From: A. K. McMillan Copies: H. L. Watson
Re: Mr. H. L. Watson's Memo to
Mr. T. L. Carey July 12, 1971
on Vinyl Chloride Safety Association

I am in agreement that someone from both the Calvert City and Escambia plants should attend the Vinyl Chloride Safety Association meetings. Both plants I believe can contribute to the purpose of the meetings and a representative from each location is needed to obtain a full understanding of the safety information available and to apply it to their plant location. Mr. Beech will represent the Escambia plant.



A. K. McMillan

AKM:fls



AP00036040

Date July 12, 1971

To T. L. Carey Subject Vinyl Chloride Safety Association

From H. L. Watson

() Take Action () For Your Approval () For Your Info () Discuss With Me
() For Your Comments () As Requested () File () Note & Return

As you know and as we have discussed previously, we are maintaining two memberships in the Vinyl Chloride Safety Association, one under Air Products (John Barr) and the other under Escambia.

The notice is out for the third meeting. I have discussed this with John and we both feel he should attend. We also feel that conditions permitting we should continue to have a representative from the Calvert location and the Pensacola location.

When the original Association was being set up, everyone felt that the only limit should be on the total number of people attending which was set at 50, and, therefore, no limit on numbers from individual companies was set. They felt this would suffice so long as companies did not start sending five or six each. While we both feel it is advantageous both for the purpose of the Association and the good of Air Products to have a representative from both our locations, we do feel obligated to advise the Committee of the fact that we are now one Company and should not have two voting memberships. Any suggestions or advise to the Association I trust would emanate from your office. I am merely listing here our feelings.

Howard L. Watson
HOWARD L. WATSON

HLW:al

HLW
Make Barr + Beach
should both attend
HLW

RECEIVED
AUG 11 1971
AIR PRODUCTS

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ESCAMBIA CHEMICAL CORPORATION
INTEROFFICE MEMORANDUM

To: Mr. R. W. Beech

Date: February 25, 1971

From: D. V. Lowe

Copies:

Mr. J. D. Kramer

Mr. W. J. Kerler

Re: External Condensation of
VCL Vapors from Reactor

Mr. A. K. McMillan

Mr. G. B. H. Speed

A single tube one-pass heat exchanger was constructed from a 2" pipe of 304 S. S. and a 3" pipe of carbon steel for refrigerated cooling water. The vapor condenser thus constructed was placed in a reflux position over # 4 reactor. VCL vapors were allowed to rise through a 3" vessel nozzle and isolation valve and up through a 3" - 304 S. S. riser to the inlet of the vapor condenser by natural convection. The vapors were condensed, liquid VCL flowed from the lower end of the condenser and returned to the vessel over a liquid seal leg and through a 3" vessel nozzle. Dial thermometers were placed in the refrigerated cooling water inlet and outlet lines as well as a water flow meter in the inlet line.

The small condenser easily condensed all the vapors traveling up the 3" riser and the cooling water exiting the condenser jacket remained 64 F° under the vapor condensation temperature. Heat removed under these condition amounted to 3,486 BTU's per hour, or a temperature rise of 21 F° for 166 lbs. per hour of cooling water. This equates to roughly 23 lbs. per hour of liquid VCL condensed and returned to the reaction vessel by the vapor condenser. The calculated overall U was 12.15 BTU/hour - ft² - °F. We had predicted an overall U of 10 BTU/hour - ft² - °F from empirical equations.

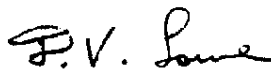
It is apparent from this that a S. S. vapor condenser in the range of at least 300 square feet would be required over each reactor before plant capacity would be very significantly affected. However, the following disadvantages come to mind:

- (a) All heat exchange equipment and repiping would necessarily be 304 S. S. construction. Equipment also would be of special design and fabrication. Costs might be prohibitive.

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February 25, 1971

- (b) There are no nozzles on our existing reactors large enough to carry enough vapors whereby removal of heat of vaporization would be of any significance.
- (c) Our limited experience has shown that non-condensables continuously buildup at the vapor condenser high point, regardless of how well we pulled vacuum. This dramatically reduces the free flow of condensable VCL vapors and reduces heat removal. A continuous vent system and low-temperature vent condensing system would be necessary to alleviate this problem, once again adding to the cost.
- (d) Tube fouling via polymer buildup could be deleterious to heat removal after perhaps only 2 or 3 batches. Frequent chemical cleaning might be necessary, costing time and productive yield.
- (e) If any of the condenser tubes ever plugged solid, it would be very difficult to get them re-opened since chemical cleaning is effective only when the buildup is exposed to free-flowing hot solvent.
- (f) Even if the above disadvantages were not so serious, the fact that we might charge greater batches of VCL does not mean that we have any more available agitator power to drive bigger batches. We could only hope to charge more catalyst to batches of present sizes. This means shorter reaction cycle times, but in most cases we would be limited by drying and/or stripping times.



D. V. Lowe

/ms

AP00036043

ESCAMBLA CHEMICAL CORPORATION
INTEROFFICE MEMORANDUM

To: Mr. T. L. Carey

Date: November 23, 1970

From: G. B. H. Speed

Copies: J. D. Kramer
~~A. K. McMillan~~
E. M. Spurlock

Re: Membership in Vinyl Chloride
Safety Association

The By-laws of the Vinyl Chloride Safety Association require a request by an officer of the company for membership. In the request the company agrees to abide by the By-laws and names a permanent representative. A draft of a request is attached.

Mr. J. F. Healy sees no objections from a legal standpoint to Escambia becoming a member. My correspondence with Mr. Healy is also attached for your information. Please return the correspondence.

GBH
G. B. H. Speed

GBHS/as
Attach.

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ESCAMBIA CHEMICAL CORPORATION



P.O. Box 467, Pensacola, Florida 32502

November 23, 1970

Mr. W. W. Madden, Secretary
Vinyl Chloride Safety Association
c/o Firestone Plastics Company
P. O. Box 699
Pottstown, Pa. 19464

Dear Mr. Madden:

Escambia Chemical, a wholly owned subsidiary of Air Products and Chemicals, Inc. wishes to become a member of the Vinyl Chloride Safety Association and agrees to abide by the By-laws of the Association.

The permanent representative will be:

Name:

Title:

Escambia Chemical Corporation

P. O. Box 467

Pensacola, Florida 32502

Very truly yours,

T. L. Carey
President

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