

ETHYL CORPORATION

INTER-OFFICE

To	Project File	ADDRESS	One American Place
FROM	D. V. Melville	ADDRESS	One American Place
SUBJECT	Preliminary Scope for Part 5 PVC Items <u>Project 20281 - VCL Emissions Reduction - EPA</u>	DATE	May 11, 1978

A meeting, attended by representatives of PVC Operations, Tech Services, and Engineering was held on May 5, 1978, to review possible scope items for a future project request for Job 20281.

Present at the meeting were:

R. M. Carlson (Engineering)	N. J. Khilnani (Tech Services)
W. R. Cooke (PVC Operations)	C. L. Mehl (PVC Operations)
W. E. Egan (Engineering)	D. V. Melville (Engineering)
N. E. Garland (Tech Services)	P. L. Mihalik (PVC Operations)
J. L. Griffin (Tech Services)	J. K. Presswood (Tech Services)
G. W. Johnston (PVC Operations)	H. G. Smith (PVC Operations)

Part 3 of this project included a system which would utilize a flare in the hydrocarbon plant to dispose of vinyl chloride bearing vent gases in the event of a shutdown of the vinyl chloride vent gas incinerator in PVC. However, on April 4, 1978, EPA denied Ethyl's request to use a flare in this capacity.

Tech Services proposed an alternate program to eliminate atmospheric vents from the PVC plant's vinyl chloride recovery system (except for emergency releases). The proposed Part 5 program involves the following three categories of changes to the plant systems:

- A. Revise incinerator and monomer recovery system controls to eliminate all but emergency vinyl chloride vents to the atmosphere. The existing atmospheric vent in the discharge line of the vinyl chloride compressors would be deleted and automatic controls to shutdown the compressors at high discharge pressures would be installed. The controls proposed would also include provisions to shut-off the inlet to the gas-holder at a predetermined high dome level. PVC batches would be held at this point and any degassing in progress would be stopped. Excessive high pressure situations would be relieved by emergency vents on the individual pieces of equipment.
- B. Make revisions and additions to the plant to minimize air leakage into the vinyl chloride recovery system (thus minimizing vinyl chloride bearing gas to be handled). These revisions would include three changes:
 1. Vent non-condensables from the slurry stripping system's barometric condensers to the Antevacuum System rather than the post vacuum system (the antevacuum system discharges to the atmosphere while the post vacuum system discharges to the gas-holder).

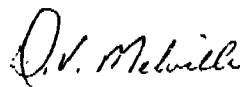
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2. Install an oxygen analyzer system to monitor flows in lines leading to the gas-holder. This system will aid in trouble-shooting air leaks into the system. (This job may be part of this or another project).
 3. Instruct operators to use the antevacuum system to vent nitrogen from the emulsion autoclaves after transfer to storage. (No Engineering support is required).
- C. Improve the incinerator service factor by increasing spare part inventory and improving preventive maintenance practices.

PVC operations raised several questions concerning the operation of the vinyl chloride compressors and the emergency release of vinyl chloride thru equipment safety valves. Tech Services agreed to investigate schemes proposed by PVC Operations and to make changes in their proposed scope where necessary.

Engineering will begin preliminary work on these and other items for a part 5 request for this job upon receipt of a final process scope. Tech Services has tentative plans to issue a final process scope letter the week of May 29, 1978.


D. V. Melville

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cc: Mr. H. B. Beeson