Division Headquarters
March 9, 1964

R. M. Hutchison - Franklin
C. Stelchek - Denison
H. E. Kahlen - Long Beach

Acetone Test Method
PVC Pipe

Research Report 455-133 dated 2/4/64 made two specific recommendations regarding subject test; 1) section samples to expose mid wall on all samples irrespective of wall thickness and 2) run temperature at 75° to 80° F. This report led me to recheck CS 256-63 and I found that it calls for sectioning wall thickness in excess of .125" to 1/16" and for conditioning samples for 48 hours at 73.4±1.8°F and 50 ± 2%RH and for testing at same.

Obviously, a 48 hour conditioning period completely negates any value of this test as a production tool. In addition, we are not set up to even hold the acetone at the specified temperature on the production floor.

I discussed this question with Mr. Hucks and would like to offer the following for your consideration and comment.

1) Run the samples on the production floor as at present.
2) Hold the acetone to a minimum temperature of 70° F. Measure the temperature of the acetone at the start of each test & record.
3) In the event of a failure, make appropriate adjustments in the process and recheck.
4) Test a duplicate to each failing sample in the laboratory adjusting the acetone temperature to 73.4°F ± 1.8" F.

An alternative procedure would be to provide a means of controlling the acetone temperature right on the production floor. This might be somewhat costly and we would like to determine if it is really necessary. Item 2 versus 4 above should establish this.

May we please have your reaction.

As regards sectioning all samples to mid wall, I assume it will result in a more stringent test than that of CS 256 putting us at a further disadvantage. We presently call for two hour acetone as opposed to the 20 minutes of CS 256.

However, not withstanding this objection, I would appreciate any comments you might have of the problems you would encounter if mid wall sectioning of all samples was to be adopted.

Attached for your information is a letter I have written Mr. Hucks re this subject.

F. T. PETERSEN

cc: J. B. McCarty
H. J. Whalen
R. T. Hucks - Finderne
W. E. Volwiler - Franklin
J. E. Hesse - Denison
A. Harris - Long Beach
J. D. Macdonald - Mvl

TRADE SECRET
J-M 83

715