

9-19-84

STATUS of this request -

per Clayton Smith @ TACC/AUSTIN
Compliance

He says it's there all the analysis
+ review + is now going thru the
Red tape for each Dept to sign off
Should be on way to Bill Stewart
shortly - 2-2½ weeks before we
get official letter of approval,
he thought -

Tell MEE → Budget for getting
the analysis out - we also need to
work up a method for reporting -
and what they say in the approval -



UNION CARBIDE CORPORATION P O BOX 471, TEXAS CITY, TEXAS 77590

HEALTH, SAFETY AND
ENVIRONMENTAL AFFAIRS

July 23, 1984

Mr. Clayton Smith
Compliance Section
Texas Air Control Board
6330 Highway 290 East
Austin, TX 78723

Subject: Request for Change in Method of Compliance with
Part 61, NESHAPS Regulation for Vinyl Chloride
Monomer Control, Sources Following VCM Strippers, --
Additional Information in Support of Request Letter
dated May 25, 1984

Dear Mr. Smith:

This is in response to your request for a written explanation of the earlier reported exceedances of the stripped varnish (copolymer) samples from the semiannual reports required by 40 CFR, part 61.70 (c)(2), (continuous stripping).

You had asked for an explanation for the A_{ti} values greater than 400 ppm that were listed in reports of our operations in 1978, '79, '80 and 1981. These are listed in the attached Table I. We began submitting these semiannual reports beginning with the period September 1978 thru February 1979.

A review of the information we have on our stripping operations at those times indicates that the high values were associated either with startup or shutdown conditions on the various polymerization systems. The autoclaves are normally operated in a continuous mode with varnish circulation as well as internal agitation, plus balanced feed and discharge flows. During start-up and shut-down procedures, the degree of monomer conversion to polymer changes and non-uniform mixing could result in variable varnish compositions being fed to the strippers. These variations could upset the equilibrium conditions in the stripping stills (which have no mechanical agitation) and could be reflected in samples taken at that time.

However since 1982, as indicated in my request letter of May 25, 1984 under the section entitled Process Improvements, we have made several significant changes that give much better control of the polymerization of the VCM which results in higher conversion to copolymer and thus less residual monomer remains to be stripped out. Please refer to that section of my original letter.

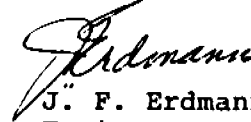
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That these changes have been successful is reflected in the improved lower levels of A_{ti} in the past three years, as related in the Historical Data section of my request letter. We firmly believe that now we have a much better control of the polymerization with these improvements and that the earlier exceedances are not likely to recur.

Should you have any questions about this or need additional information, please call me.

Very truly yours,



J. F. Erdmann, P. E.
Environmental Protection
Coordinator
(409) 948-5126

JFE:IR
Attachment
Cc: Ms. Victoria Wang
TACB/Bellaire
TSVRVCM3

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Bcc: J. B. Levertton/S. J. Footer
NESHAPS (VCM) File
R. C. Wise - 500
G. F. Tacquard/S. A. Dickerson
S. M. Norwood/D. R. Hall
M. E. Eisenhower
R. M. Arnold
W. P. Nickles

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050892

TABLE I
LISTING OF VCM EXCEEDANCES FROM REPORTED
VARNISH STRIPPING OPERATIONS, SOLUTION VINYLs UNIT, TEXAS CITY

Reporting Periods with Dates of Individual Exceedances:

<u>I. Semi-Annual Report for Sept '78 thru Feb '79 (168 days of operation)</u>		
	Oct 17, 1978 -	405.1 ppm
	Nov 4, '78 -	1020.4
	Dec 17, '78 -	1272.9
	Jan 6, '79 -	611.7
	Jan 16, '79 -	726.1
	Jan 20, '79 -	537.8
<u>II. Semi-Annual Report for Sept '79 thru Feb '80 (182 days of operation)</u>		
	Sept 4, '79 -	596.7
	Jan 4, '80 -	612.0
<u>III. Semi-Annual Report for Sept '81 thru Feb '82 (122 days of operation)</u>		
	Oct 18, '81 -	794.9

There were a total of nine exceedances since the start of the sampling and analytical program on Sept. 18, 1978 thru February 28, 1982, a total of 1177 operating days.

This amounts to 99.2% of the total operating days that our unit has been in compliance for this period, before the process improvements were made.

Since Mar 1, 1982 to date there have been no exceedances of the 400 ppm A_{ti} limit.

TSVRVCM3

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