

CC: RLP
O. J. Allen
KER
INTERNAL CORRESPONDENCE

CHEMICALS AND PLASTICS

SOUTH CHARLESTON PLANT P. O. BOX 8004, SOUTH CHARLESTON, W. VA. 25303

To (Name) John Carvajal
Division
Location

Date September 26, 1974

Originating Dept.

Answering letter date

Copy to M. E. Eisenhour
W. R. Manning
R. N. Wheeler, Jr.

Subject Parameters for Selected VCI
Levels at Dispersion Resins
Unit

The attached estimates are submitted in response to your request for information concerning Dispersion Resins Unit (1) Investment Estimates for Projects to achieve 50, 25, and 10 ppm VCI TLV (threshold limit value levels), (2) Existing TWA (time-weighted averages), and (3) Extent of Fresh Air Mask wearing.

I. Investment Estimates for 50, 25 and 10 ppm VCI TLV

A. 50 ppm TLV

<u>Projects</u>	<u>Cost Estimate, M\$</u>	<u>Status</u>
1. Chromatograph	20	Complete
2. Breathing Air System	10	Complete
3. Dryer Control Room Air Conditioning	20	Complete
4. Enclose VCI Compressor	5	Complete
5. Chromatograph Micro - Computer	10	In Engineering
6. Transfer Operation Automation	40	Approved
7. Condenser Brine Cooling	40	In Engineering
8. Discharge Stack #1 Dryer	30	In Engineering
9. Reactor Control Room Air Conditioning	30	In Engineering
10. Dryer Cuno Filters	40	Submitted for approval
11. Autoclave Ventilation System	<u>280</u>	In Engineering
Subtotal, 50 ppm TLV	525 ^a	

UCC 090794

B. 25 ppm TLV

<u>Projects</u>	<u>Cost Estimates, M\$</u>	<u>Status</u>
1. Latex Stripping System	1,000	Conceptual Stage
2. VCI Gas Holder	250	Conceptual Stage
3. Contingencies	<u>125</u>	Conceptual Stage
Subtotal, 25 ppm TLV	1,375 ^b	

C. 10 ppm TLV

<u>Projects</u>	<u>Cost Estimates, M\$</u>	<u>Status</u>
1. Solvent Cleaning System	400	Conceptual Stage
2. Contingencies	100	Conceptual Stage
3. Autoclave Replacements	<u>1,200</u> ^d	In Engineering
Subtotal, 10 ppm TLV	1,700 ^c	On Hold

NOTES:

a, b, c: Subtotals a, b and c for 50, 25 and 10 ppm are additive; e. g., the total cost for 25 ppm TLV would be \$525M + \$1,375M = \$1,900.

d : Autoclave replacements needed to stay in business.

II. Time-Weighted Averages

A. Average TWA

The average 8-hour TWA for the entire unit is 7.5 ppm VCI; this is the September 25th month-to-date average VCI concentration from chromatograph data. This is really a potential exposure TWA. The actual exposure TWA would be somewhere near this value. The laborer would be closest the average potential VCI exposure.

B. Maximum TWA

The actual maximum TWA can only be guesstimated, since fresh air masks are worn in areas and on jobs known or suspected to be above 50 ppm; the best guess is 20 ppm. Chromatograph summaries indicate that the highest potential TWA ever recorded for an 8-hour period was 36.8 ppm; the highest in September was 15.9 ppm. The utility fitter has the highest potential VCI exposure.

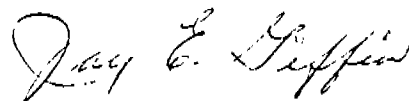
III. Fresh Air Mask Wearing

The following lists the per cent time each hourly man at Dispersion Resins Unit now wears a fresh air mask:

<u>Job Title</u>	<u>Percentage</u>
Utility Fitter (2)	31
Transfer Operator	19
Charging Operator	18
Laborer	9
Utility Operator	7
Operations Mechanic	6
Dryer Operator	5
Board Operator	3
Weighmaster (2)	0
Average	12%

The estimates provided in above Section I thru III are subject to rapid changes as progress is made on installation of additional improvements, both capital projects and budget-financed projects.

Sincerely,


Jay E. Giffin

JEG/klt

UCC 090796

Medical Occup Health Vinyl Chloride

UNION CARBIDE CORPORATION

Chemicals & Plastics

270 Park Avenue, New York, New York 10017

*Notes: RFE, RWS, JBL, RLF, ROK, GFT, DED
DTH (MIL), JCH, JCC*

RECD. OCT 2 1974 RWS.

To: Messrs. C. J. Brounstein
T. W. Carmody
J. L. Carvajal
M. E. Eisenhour
R. N. Wheeler
J. W. Whittlesey
D. L. Wiley
N. L. Zutty

Date: September 27, 1974

PLANT AGRS. FILES

From: Dr. A. B. Steele

M. E. EISENHOUR

Subject: Record of Conversation Related to Proposed Permanent OSHA Standard
on Vinyl Chloride Exposure -- Firestone Plastics Company

Mr. T. C. Walker, President, Firestone Plastic Company, summarized today the outcome of his conversations of Tuesday and Wednesday with Mr. John H. Stender, Assistant Secretary of Labor for OSHA, and with members of his staff.

Likely Limits to Appear in VCM Standard Scheduled to Issue October 5, 1974:

- A. For the period from October 5, 1974 - January 1, 1975, the limit of VCM exposure will be continued at a 50 ppm ceiling.
- B. Effective January 1, 1975, the limit of exposure will be 5 ppm ceiling and 1 ppm TWA (8 hr.). Wearing of respirators will be at the option of the worker for exposures to a ceiling of 25 ppm; above 25 ppm ceiling, respirators will be mandated.
- C. Effective January 1, 1976, the limit of 5 ppm ceiling and 1 ppm TWA will be continued but wearing of respirators will be mandated at levels above 5 ppm.
- D. As of January 1, 1975, fabrication plants that can provide certified evidence that VCM levels in operations are below a ceiling level of 5 ppm will not be subject to the Standard. Fabrication plants that cannot so certify, will come under the same regulation as resin operations (see A, B and C above).

Mr. Walker advised that Firestone will undertake court action to attempt to set aside the standard and to stay its effective date. He is seeking to form a consortium of selected members of the PVC producer group to join Firestone in the action. I advised Mr. Walker that the Operations group relating to the PVC businesses within Union Carbide had recommended court action on this matter to the Management Committee and that no firm commitment could be made without approval of that Committee. A decision should be available early next week.

UCC 090797

September 27, 1974

To discuss procedural matters, Mr. Walter B. Connolly, Jr., Counsel for Firestone and a member of Vedder, Price, Kaufman and Kammholtz will contact our John W. Whittlesey.

A. B. Steele
A. B. Steele

ABS:ml

UCC 090798



INTERNAL CORRESPONDENCE

CHEMICALS AND PLASTICS

P. O. BOX 471, TEXAS CITY, TEXAS 77590

TO (NAME) Chief Operators - Bldg. 174
 COMPANY Operators - Bldg. 174
 LOCATION Vinyl Shift Prod. Supervs.

DATE September 30, 1974

COPY TO Mr. R. L. Frantz ✓
 Mr. F. L. Johnson
 Mr. R. H. May
 Mr. A. A. Peterson
 Mr. G. T. Pyle
 Mr. O. A. Shelton
 Mr. K. L. Topham

SUBJECT Personnel Responsibilities In
Suspension/Non-Solvent Area

Gentlemen:

A new operating position is to be established October 1 with responsibility for the VCI Recovery System. To allow for this, a departmental meeting was held to discuss an efficient re-distribution of duties in the Suspension/Non-Solvent area. The following is a summary of the results of this meeting. It should be noted that this is a tentative roster, subject to further change, therefore, your comments on this subject will be appreciated.

Shift Production Supervisors

1. The Day Shift Supervisor will see to it that all unnecessary outside lighting is off during daylight hours.

Chief Operators (or individual appointed by him)

1. Will be responsible for monitoring the VFA analyzer. This includes recording the time and reason for the alarm sounding and taking positive action to correct the mishap.

Suspension Autoclave Operators

Will be responsible for:

1. Charging, controlling, blowdown and vacuum stripping on the D-line autoclaves and recording the proper data.

UCC 090799

2. Sampling the resin upon blowdown.
3. Operating the autoclaves during an MEK wash cycle.

Non-Solvent Autoclave Operators

Will be responsible for:

1. Operating the C-line autoclaves and recording the proper data.
2. Cleaning plugged skin pots for C-line.
3. Operating the No. 1 compressor and Recovery System, and recording the proper data.
4. Operating the unloading of IPP catalyst.

Utility Man

Will be responsible for:

1. Cleaning plugged skin pots for D-line.
2. Cleaning blocked slurry lines.
3. Operating MEK system during an autoclave wash.
4. Preparation of additive mixes.
5. Transferring catalysts to Building 174.
6. Operating the water charge system.
7. Operating fresh VCl storage tank for both Suspension and Non-Solvent Area.
8. Operating the agitator seal system.

UCC 090800

VCl Recovery Man

Will be responsible for:

1. Operating the Off-Gas Recovery System and recording the proper data (to be specified later).
2. Operating the No. 2 compressor and recovery system, and recording the proper data (to be specified later).
3. Operating the D-line VCl recovery tanks.

All other duties not mentioned above, that are already assigned, will remain the same.

Sincerely,

R. P. Keefe

R. P. Keefe

RPK/st



INTERNAL CORRESPONDENCE

RLF

CHEMICALS AND PLASTICS

P. O. BOX 471, TEXAS CITY, TEXAS 77590

TO (NAME) Suspension/Non-Solvent Vinyl
COMPANY Chiefs and Operators
LOCATION Vinyl Resins Shift Prod. Supervs.

DATE October 1, 1974

COPY TO Shift Superintendents
Unit Supervisors and Engineers

SUBJECT Additional Operating Position

Effective today an additional operating position is being added at Building 174 - the position of Recovery Operator. Mr. Rick Keefe has written you a note outlining the major duties of this position and the other Building 174 positions. The purpose of this letter is to emphasize that by the addition of this position an increase in vinyl chloride efficiency is expected because of better control of the recovery systems the added manpower will allow.

Some additional logsheet readings will be required and better monitoring and control of monomer leaks is expected.

Emphasis in the unit has switched away from maximum production to maximum efficiency. Reasons for this are:

1. Limited monomer availability.
2. Increased cost of monomer.
3. OSHA and other regulations limiting monomer exposures.

Your help and cooperation in achieving our new objectives will be greatly appreciated.

Thanks,

R. L. Frantz

RLF/st

UCC 090802