

CertainTeed Corporation  
Pipe & Plastics Group  
P O Box 253  
Sulphur, LA 70663  
(318) 882-1441

CertainTeed

September 4, 1984

Mr. J. R. Wallace  
Plastics Technology Centre  
Esso Chemical Canada  
P. O. Box 69  
Sarnia, Ontario  
N7T 2P1  
CANADA

Dear Mr. Wallace:

I have attached the Initiator Risk Management Survey completed. CertainTeed Corporation's Lake Charles Polymer Plant is a five reactor 50 cubic-meter vessel bulk polymerization plant.

If you need more information, please let me know.

Best regards,



C. A. Gellner  
Plant Manager  
Lake Charles Polymer Plant

dap

Attachment - Initiator Risk Management Survey  
pc Vinyl Chloride Safety Association 1984 Folder

CTL020182

VINYL CHLORIDE SAFETY ASSOCIATION 1984  
INITIATOR RISK MANAGEMENT SURVEY

Your rating of the seriousness and appropriate level of checking for various hazards is requested

## HAZARD CLASSIFICATION

R A T I N G  
SER(1) CHECKS(2)

## 1. Initiator self-decomposition

- (a) In main storage area  
(b) Transferring to operations  
(c) In operations storage  
(d) Transferring to charge system  
(e) In charging system  
(f) Elsewhere (specify)

|            |          |
|------------|----------|
| <u>1</u>   | <u>3</u> |
| <u>3</u>   | <u>3</u> |
| <u>3/4</u> | <u>3</u> |
| <u>4</u>   | <u>3</u> |
| <u>4</u>   | <u>3</u> |
| _____      | _____    |

## 2. Initiator / monomer reaction

- (a) In charge vessel  
(b) In pump  
(c) In lines  
(d) Elsewhere (specify)

|            |            |
|------------|------------|
| <u>1</u>   | <u>3</u>   |
| <u>N/A</u> | <u>N/A</u> |
| <u>1</u>   | <u>1</u>   |
| _____      | _____      |

## 3. Wrong charge

- (a) Overcharge  
(b) Charge wrong reactor  
(c) Wrong initiator  
(d) Other errors (specify)

|          |          |
|----------|----------|
| <u>1</u> | <u>3</u> |
| <u>1</u> | <u>3</u> |
| <u>2</u> | <u>3</u> |
| _____    | _____    |

4. Other Hazards (specify) No Comments.

## Notes.

- (1) SER = Seriousness, grade the possible consequences as follows

Enter 1. for major plant damage, or serious injury  
2. for more than one days lost production.  
3. for environmental problem.  
4. for quality problem, or minor productivity loss.

- (2) CHECKS = Rechecking frequency appropriate to prevent error

Enter 1. for single check by operator, instrument, or computer  
2. for recheck by supervisor or one of the above.  
3. for second level of rechecking.

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Please indicate any incidents you have had in your plant,  
their seriousness and frequency  
HAZARD CLASSIFICATION

FREQUENCY  
SER(1) CASES/YRS.

1. Initiator self-decomposition

- (a) In main storage area  
(b) Transferring to operations  
(c) In operations storage  
(d) Transferring to charge system  
(e) In charging system  
(f) Elsewhere (specify)

0 /  
0 /  
0 /  
0 /  
0 /  
/

2. Initiator / monomer reaction

- (a) In charge vessel  
(b) In pump  
(c) In lines  
(d) Elsewhere (specify)

0 /  
0 /  
0 /  
/

3. Wrong charge

- (a) Overcharge  
(b) Charge wrong reactor  
(c) Wrong initiator  
(d) Other errors (specify)

/  
/  
/  
/

4. Other Hazards (specify)

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Notes. 0 is no incident.

(1) SER = Seriousness, grade the consequences as follows

- Enter 1. for major plant damage, or serious injury  
2. for more than one days lost production.  
3. for environmental problem.  
4. for quality problem, or minor productivity loss.

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## INITIATOR HAZARDS DUE TO INJECTION TO REACTOR IN CLOSED MODE.

| (See Note 1. previous page)                                |                                                | RATING |          |
|------------------------------------------------------------|------------------------------------------------|--------|----------|
| HAZARD                                                     | PRECAUTION                                     | OV.    | Comments |
| VCM leak into charge vessel reacts with residual initiator | (a) No charge vessel (pumped)                  | c      |          |
|                                                            | (b) Physical disconnect                        | c      |          |
|                                                            | (c) Double block and bleed                     | a      |          |
|                                                            | (d) Line blind                                 | d      |          |
|                                                            | (e) Water flush of vessel                      | d      |          |
|                                                            | (f) Monomer flush of vessel                    | a      |          |
|                                                            | (g) No precaution                              | d      |          |
|                                                            | (h) Another precaution (Specify)               |        |          |
| <hr/>                                                      |                                                |        |          |
| Build-up and blockage in line to reactor                   | (a) Water flush of line                        | d      |          |
|                                                            | (b) Monomer flush of line                      | a      |          |
|                                                            | (c) Continuous water flush of line             | d      |          |
|                                                            | (d) Other technique (Specify)                  |        |          |
| <hr/>                                                      |                                                |        |          |
| Quantity errors                                            | (a) Weight measurement (load cell)             | b      |          |
|                                                            | (b) Weight measurement (mechanical)            | d      |          |
|                                                            | (c) Volume (Vessel size)                       | d      |          |
|                                                            | (d) Volume (Flowmeter)                         | a      |          |
|                                                            | (e) Metering pump                              | d      |          |
|                                                            | (f) Combination (Specify a+c etc.)<br>a plus d |        |          |
|                                                            | (g) Operator check routine                     | a      |          |
|                                                            | (h) Computer check routine                     | a      |          |
|                                                            | (i) Other (Specify)                            |        |          |
| <hr/>                                                      |                                                |        |          |
| Improper distribution to reactors                          | (a) Separate reactor charge systems            | d      |          |
|                                                            | (b) Mobile charge system                       | d      |          |
|                                                            | (c) Operator checks on manifold                | b      |          |
|                                                            | (d) Manual disconnect                          | d      |          |
|                                                            | (d) Computer check on manifold                 | a      |          |
|                                                            | (f) Other (Specify)                            |        |          |
| <hr/>                                                      |                                                |        |          |
| <hr/>                                                      |                                                |        |          |
| Other hazards (Specify)                                    |                                                |        |          |
| <hr/>                                                      |                                                |        |          |
| <hr/>                                                      |                                                |        |          |

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Your Return Address for Mailing Review if Required  
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Mail Responses to the Initiator Questionnaire to :-

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