INTER-OFFICE MEMO **TENNECO CHEMICALS, INC.**

TO	J. T. Sweeney	AT	Flemington	DATE	June 15, 1976
FROM	R. A. Donovan	AT	Flemington	COPY TO	R. F. Fanter D. M. Hershkowitz R. A. Lojewski W. Miringoff
SUBJECT	Modified Stripping Technique				

As per our discussion, Process Engineering has evaluated the effect that eliminating the recovery system during the cool down segment of the stripping cycle has on the residual VCM in the stripped slurry. The data generated is summarized in Table I. From this data, it can be concluded that the use of the recovery system during this segment has little benefit. Based on these findings, we recommend implementing this procedure for an extended plant run to insure reproducibility in maintaining a residual slurry VCM content less than 400 ppm. Using this procedure will result in a 10% decrease in the recovery system cycle time, which will be the limiting factor with the implementation of the split recovery system.

R. A. Donovan

RAD:ms

TABLE I

MODIFIED RECOVERY SYSTEM RESULTS

Sample	Temperature at Start of Steaming	Vacuum After Drift	Slurry VCM
B-2396	132°F	11.5" Hg	200 ppm
B-2408	127°F	12.5" Hg	234 ppm
B-2411	122°F	14.0" Hg	290 ppm
B-2427	134°F	12.5" Hg	331 ppm
B-2429	144°F	--	526 ppm
B-2446	132°F	11.5" Hg	391 ppm
B-2447	132°F	10.0" Hg	323 ppm

TABLE I
THEORETICAL STEAMER CYCLE

ITEM		TIME (MINUTES)
EVACUATION		15
TRANSFER IN	3	20
RECOVER REACTOR	2	20
RECOVER STRIPPER		10
STEAM	3	~~30~~ 33
DRIFT	1	15
COOL TO 170°F	2	5
TRANSFER OUT	4	20
TOTAL		135
		+15
		150

$$\frac{24 \times 2 \times 60}{135} = 21.33$$

TABLE II
IDLE TIME

No. I Stripper				No. II Stripper			
Date	No. Batches	Time Used	Time Idle	Date	No. Batches	Time Used	Time Idle
1/16/76	9	22 3/4	1 1/4	1/16/76	8	22	2
1/17/76	9	24	-	1/17/76	8	22	2
1/18/76	9	23 3/4	1/4	1/18/76	8	21 1/2	2 1/2
1/19/76	9	24	-	1/19/76	9	21 1/2	2 1/2
1/20/76	9	22 3/4	1 1/4	1/20/76	7	19 1/2	4 1/2
1/21/76	9	23 1/2	1/2	1/21/76	8	19 1/2	4 1/2
1/22/76	10	24	-	1/22/76	8	18 3/4	5 1/4
1/23/76	6	14 1/2	9 1/2 (DNU.)	1/23/76	5	11 1/4	12 3/4 (DNU.)
1/24/76	9	24	-	1/24/76	7	21 1/2	2 1/2
1/25/76	9	23	1	1/25/76	INSTRU. NOT WORKING		
1/26/76	9	24	-	1/26/76	9	22 1/4	1 3/4
1/27/76	INSTRU. NOT WORKING			1/27/76	7	17 1/4	6 3/4
1/28/76	8	22 1/2	1 1/2	1/28/76	8	20 3/4	3 1/4
1/29/76	8	22	2	1/29/76	8	19 1/2	4 1/2
1/30/76	9	20 1/4	3 3/4	1/30/76	8	18 1/4	5 3/4
1/31/76	8	22	2	1/31/76	8	21	3
2/1/76	9	24	-	2/1/76	9	21 1/2	2 1/2
17			23.00 = 384 ✓	17	9x3=27 8x9=72 7x3=21 5x1=5 125	312 + 24/4 318	59 + 28/4 7 66

10x9=90
178
136
2.03

361
318
679 HRS

178
125
303 batches

318 / 125 = 2.54

318
66
384 ✓

679 / 303 = 2.24 HRS ~ (133)

COLORITE 006885

TABLE III

REACTOR VCM RECOVERY

TECHNIQUE	VCM (VAPOR SPACE)
[illegible] To Max. Vac.	162,000 ppm
Recover To Max. Vac.	213,500 ppm
Recover To Max. Vac.	236,360 ppm
Jacket Temp = 150°F, Recover To Max. Vac.	33,512 ppm
"	73,255 ppm
"	8,631 ppm
"	24,110 ppm
"	39,492 ppm
"	53,536 ppm
"	920 ppm
"	11,620 ppm
"	906 ppm
"	600 ppm

TABLE IV

FORMULATION JAC-112 (NO EHP)

T No.	Batch No.	Reactor No.	Heat Up Time	Run Time
6072	306	3	1 Hr 15 min	8 Hr 5 min
6072	307	4	1 Hr 35 min	8 Hr 10 min
6072	308	9	1 Hr	8 Hr
6072	310	10	1 Hr 5 min	7 Hr 55 min
6073	309	2	1 Hr 20 min	8 Hr 35 min
6073	312	8	1 Hr 10 min	8 Hr 30 min
6073	314	7	1 Hr	8 Hr
6075	315	3	1 Hr 20 min	8 Hr 15 min
6075	317	4	1 Hr 10 min	7 Hr 45 min
6075	318	10	1 Hr 5 min	8 Hr
6075	319	2	1 Hr 15 min	8 Hr 15 min

Average Heat Up Time = 72 min.

Average Run Time = 8 Hrs 8 min.

TABLE III

FORMULATION 366 - 115 (1½ EHP)

...r No.	Batch No.	Reactor No.	Heat Up Time	Rxn Time
26152	688	4	55 MIN	7 Hrs
26154	689	10	50 MIN	7 Hrs 25 MIN
26153	690	5	1 Hr 10 MIN	8 Hrs
26160	703	9	55 MIN	7 Hrs 30 MIN
26160	704	4	55 MIN	7 Hrs 15 MIN
26160	705	1	55 MIN	7 Hrs. 35 MIN
26183	775	4	1 Hr	7 Hrs 15 MIN
26183	776	3	55 MIN	7 Hrs
26163	777	7	55 MIN	7 Hrs 15 MIN

Average Heat Up Time = 56 MIN.
Average Rxn Time = 7 Hrs. 22 MIN.