

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

TO	J. W. Poarch	AT	Burlington	DATE	March 8, 1977
FROM	S. A. Edenbaum	AT	Burlington	COPY TO	D. C. Coldiron
SUBJECT	B. F. GOODRICH CLEAN REACTOR TECHNOLOGY PROJECT WEEKLY STATUS REPORT WEEK OF FEB. 27 - MARCH 5				L. Medeiros
					R. Richards
					G. I. Rozand
					J. P. Sandstedt ✓
					P. R. Scarito
					A. C. Siegel

Summary - Production

Copolymer

Nine additional batches were produced in reactor one this past week. Included were three batches of 390, four batches of 391, and two batches of 392. Thirty six batches have been produced since the last manual cleaning as of the end of the week and thirty nine at the time of this writing. We are continuing with the 1% coating solution.

Homopolymer

Reactor fourteen was manually and high pressure cleaned on March 3rd. To date seven batches have been produced, including four consecutive batches of BR501 at the start, and then three batches of 200 type homopolymer.

Fouling Results

Copolymer

Reactor one is still extremely free of any considerable buildup. In the author's opinion it is cleaner now than after twenty batches. This is probably due to the lower ratio of 390 batches run, compared to 391 and 392. For the first time some BR-521 types will be produced (week of March 6). Results on these batches will be reported next week.

Homopolymer

After seven batches of production reactor fourteen is near spotless. No buildup can be found, even on the baffle and agitator shaft. Please note that this reactor is in much better condition than reactor one and was much easier to clean using the high pressure water (outside firm). As a result, the initial coatings were applied to a cleaner surface. Especially encouraging about R-14 is how the BR-501 runs had no effect on fouling. Usually three or four of these runs severely foul the reactor, resulting in a shutdown for manual cleaning.

Operator Training

All shifts of baggers/cleaners have now been trained in the art of spraying/rinsing the reactors.

Equipment

- 1) a bulk solution makeup station utilizing a 55 gallon equipped with a lightening mixer has been assembled with the help of L. Medeiros. We hope to train the utility operators in solution makeup, as one 55 gallon per day will be required when five reactors are running on the BFG technology.
- 2) the air operated pump and portable truck cart have been ordered. Our objective here is to reduce spray time, and improve the safety of our spraying operation. (i.e. eliminate use of the pressure pot in the homo/co-polymer areas.) This equipment along with the bulk solution makeup will enable us to start up the other reactors.

Patching

With the assistance of L. Medeiros, reactor one was patched last week just prior to the shutdown over the weekend. "Curing" took place over the weekend shutdown. Three areas were selected for patching; part of the agitator shaft, bare exposed metal on the floor of the reactor, and a flanged-off nozzle on the dome. These areas allowed us to evaluate three different degrees of thickness of the patching cement. The shaft was "painted" with a thin solution, the floor was patched with a slightly thicker mixture, and the dome was "puttied" with as thick a mixture as possible. (BFG directions specify using as thick a mixture as possible for a given application). Results on the fouling on the areas will be reported next week.

Program

- I. Continue monitoring of reactors one and fourteen.
 - A) take vapor space samples of R-1 and R-14 to see effect of cleaner walls via BFG technology on reactor recovery.
- II. Set-up and train personnel in bulk solution makeup and new pump spray apparatus (as soon as it arrives).
- III. Startup another homopolymer and copolymer reactor within next two weeks.
- IV. Startup dispersion tower when homo and copolymer operations are converted to pump spray system. Spray pot will be moved over to dispersion plant at this time.


S. A. Edenbaum

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