

TO A. C. Siegel
FROM J. W. Poarch
SUBJECT STEAM STRIPPING TESTS - LATEX,
ESR-499

AT Burlington

AT Burlington

DATE September 30, 1977

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As you are aware the latex steam stripping technique, if proven feasible, will have very little if any impact on productivity. The other alternative, nitrogen sparging, is projected to reduce productivity by 12 to 15 percent. The EPA time schedule requires that we be in compliance by October, 1978. If steam stripping is not a viable alternative, then nitrogen sparging must be used. The delivery time for the nitrogen compressors is 45 weeks. If we delay the confirmation or rejection of the steam strip procedure much longer, we will be unable to have the option of bringing the nitrogen sparge process on stream by the required date.

Before we reject nitrogen sparging in favor of steam stripping we should know: a. that steam stripping does not affect product quality of all product types, b. that steam stripping does not adversely affect the filterability of the latex.

In order to accomplish these two objectives we propose to run two four-batch trials on products heretofore not tested by steaming on a segregated lot basis, plus an extended three day trial on the product we have found to be most sensitive to steam stripping - 1755.

We propose to run the following tests:

Type 1742, 4 batches, week of September 26.

Type 0565, 4 batches, week of October 3.

Type 1755, extended three day trial, week of October 10.

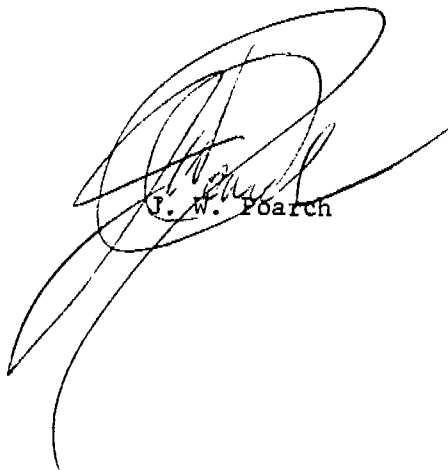
We anticipate no more than 20 to 30,000 lbs of lost productivity for each four batch trial. The three day extended trial will result in a loss of 10/20,000 lbs. if filtration goes well. We believe a three day test is the minimum length of test required to get a true indication of change in filtration rates. All of the above tests will be manned with Engineering personnel.

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Success with the above tests will give us the confidence to proceed with plans to use the steam stripping technique; however, more tests will be required to define more fully the engineering requirements of the process. Less than optimum results will require even further testing.

Your comments and input regarding this proposed program will be welcomed as well as the comments from those receiving copies of this memo. There should be mutual agreement on this proposal so that we may proceed.



J. W. Poarch

JWP/ib

COLORITE 019140

10/77

inserting & pulling tube EPA REACTOR GAS SAMPLING

NOTE: Air Mask Must Be Worn During Sampling Procedure

1. Have sample containers pre-marked - Date
Bottom, Middle, or Top Reactor No.
Batch No.
2. Cool reactor jacket below 100 degrees. (Reactor Operator)
3. Break vacuum with nitrogen to 3-5 PSI (Reactor Operator)
4. Set temp. control so that no cooling or heat.
5. Remove sample plug.
6. Open sample valve. (keep gas release to minimum by holding hand over port).
7. Insert bottom length tube. (keep gas release to a minimum by keeping finger on end of tube until ready to connect container).
8. Connect sample container. (marked bottom).
9. Open valves on container. (inlet first).
10. Purge gas through container for 2 minutes into coppus hose.
11. Check gas flow by discharging through water.
12. Trap sample in container. (close disch. valve first).
13. Disconnect container.
14. Remove tube. (min. gas release finger over open port or tube).
15. Insert middle length tube.
16. Connect sample container. (marked middle).
17. Open valves on container.
18. Purge gas through container for 2 minutes into coppus hose.
19. If reactor pressure drops so that you can't maintain good sample gas flow , during any part of sampling procedure, reactor operator is to add more N₂ until pressure is back up to 3-5 psi.
20. Trap sample.

21. Disconnect container.
22. Remove tube. (keep gas release to minimum).
23. Insert top length tube.
24. Connect sample container. (marked top).
25. Open valves on container.
26. Purge gas through container for 2 minutes into coppus hose.
27. Trap sample.
28. Disconnect container.
29. Remove tube.
30. Close sample valve.
31. Install plug.
32. Vent pressure from reactor. (Reactor Oper.)
33. Open reactor. (Reactor Oper.)
34. Take samples to the lab.