Monsanto

FROM (NAME & LOCATION): G. L. Johnson - W. G. Krummrich

DATE : April 8, 1974

cc: V. Brawley
T. Carrico

SUBJECT : AROCLOR 1254 STABILITY

REFERENCE : Meeting 4/3/74.

TO : Those Present:

K. E. Boucher
W. C. Engman
J. A. Gloeckner
H. J. Horner
D. W. Johnson
G. L. Johnson
J. R. Kuster
A. E. Leisy
S. H. Vogel

The above met on April 3, 1974, to discuss the recent Aroclor 1254 stability problems. A brief review was given of actions already taken at Dept. 246, which includes:

1. Changing the finished goods 1254 storage tank circulating filters.
2. Changing the polishing prefilter to #1 absorber (Porocel Column).
3. Checking the thermometers/hydrometers used for batch chlorination.
4. Checking 1254 quality passing through the #3 still system.
5. Checking moisture level at #7 storage (1154 feed stock).
6. Checking moisture level in #2 and #3 batch chlorinators.
7. Running "isolated" 1016 column bottoms as 1154 feed stock.
8. Running "double" catalyst charge 1154 batches.
9. Checking $FeCl_3$ levels in "single" and "double" charged batches.
10. "Bad" 1254 has been blended to give "good" Pyranol 70-30.
11. "Bad" 1254 has been released for shipment to transformer customers.
12. AR&D has simulated plant S.T.O. distillation of crude 1154.
13. Changing out #1 absorber Porocel (in process).

Despite the above actions, the thermal chemical chlorides (TCC's) and Monsanto (Munch) stabilities remain out of specification.

Other possible sources of instability were discussed, and an action plan was drawn up. These actions and their areas of responsibility include:

DSW 310128

K. E. Boucher, et al
AROCLOR 1254 STABILITY

PRODUCTION

1. Operate only a single batch chlorinator for a 2-3 day period.
2. Check adequacy of Cl_2 demister elements. Inspected - 9/10 - not blinded.
3. Check the batch chlorinators Cl_2 spargers.
4. Check the batch chlorinators temperature instruments.
5. Check the #3 still system temperature, level and pressure instruments. all OK
6. Check the continuous chlorinators Cl_2 spargers. (Item 6 on hold.)

LABORATORY

7. Check $FeCl_3$ levels on 1154 batches for 2-3 days.
8. Lab chlorinate pre-January 1974 biphenyl to 1154 and lab distill.
9. Lab chlorinate post-March 1974 biphenyl to 1154 and lab distill.
10. Lab distill "bad" finished goods 1254.
11. Evaluate WGK analysis of methyl-biphenyl content in biphenyl.

A subsequent meeting will be scheduled late April to discuss the results of these actions.

If you have any questions, please contact me.

Gary

Gary L. Johnson
Station 2005

bp

DSW 310129