

Monsanto

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FROM C. D. Riggs cc R. L. Bourget
D. L. Gendron
D. E. Philpott
DATE January 8, 1975
SUBJECT RVCM Storage, Loading, & Shipping
REFERENCE Memo 12/19/74
TO ~~R. W. Bueker~~
J. A. Tierney

This is to summarize action to date and to submit plans for the handling of RVCM per our discussion on 1/8/75.

Since the meeting with Bueker, Philpott, Tierney, and Riggs on 12/17/74 the following action has taken place:
(Reference memo 12/19/74)

* Approximately 10,000 gal. of RVCM has been pumped to #2 RVCM tank in K-1 tank farm. This is a lower fillage rate than anticipated. A revised estimate is that a quantity of 165,000 pounds will be accumulated and ready to ship week of 1/27/75.

* Samples have been taken from #2 tank and results are as follows:

12/20/74 - 28 ppm phenol in RVCM
1/3/75 - 26 ppm phenol in RVCM
1/3/75 - 0% peroxide in RVCM
1/3/75 - one sample taken and stored for visual evidence of polymer formation. No evidence of cloudiness as of 1/7/75.

* A temporary procedure has been written and used to transfer RVCM to #2 tank.

* 84 Bldg. phenol injection system was checked, and cleaned to insure operability.

* Reviewed need for check valve in line to tank #2 (Riggs, P. Tardif, D. Philpott) and considered fact that RVCM transfer pump pressure could in fact lift #2 tank relief valves. Existing system is considered adequate.

* Reviewed details of RVCM with Borden Co. 1/7/74 (Riggs/Joe Dagenfelder-Plant Manager). Borden has evidence that 10-20 ppm phenol concentration is adequate for shipment. They want RVCM with a 10-20 ppm phenol concentration but will use up to 24 ppm. A. P. Torrenzano recommended 40-50 ppm to start system out. Borden confirmed they do not use N₂ for rail car unloading.

Recommendations for future plans--

* It is recommended that the first rail car be shipped to Borden with 20-25 ppm phenol with the following sample plan:

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---Until rail car is loaded, sample tank #2 every 2 weeks and confirm

phenol	20-25 ppm
peroxide	0%

---Sample #2 tank just prior to loading and test for phenol and peroxide and check visual sample taken 1/3/75 for polymer formation.

---Sample rail car after loading and test for phenol and peroxide.

---Sample rail car, obtain results after weighed in West Springfield and before leaving for Leominster.

---If rail car does not get to Borden, Leominster within 5 days of leaving West Springfield (normal trip 4 days) then sample car in route and test for phenol and peroxide.

Borden plans to sample car upon receipt in Leominster.

Phenol concentration can be increased in #2 tank by increasing phenol system charge and phenol could be blown into a rail car if required.

Responsibility - PVC Mfg./T&M

- * Additional testing after the 1st rail car should include peroxide and phenol every 2 weeks and 1 stored visual sample (stored for 40 days).

Responsibility - PVC Mfg.

- * After accumulation of monomer data if results show sustained phenol levels and no peroxide and polymer then ship subsequent rail cars at 15-25 ppm, testing each car after loading for phenol and peroxide.

Responsibility - PVC Mfg.

- * Repair seal and refill oil reservoir in tank farm pump to be used for loading.

Responsibility - PVC Mfg.

- * Confirm that 30,000 lb. VCM cars can be safely and legally shipped with a 22,000 ^{90%} lb. load to Leominster.

Responsibility - T & M Supv.

- * A rough draft of the procedure for tank car loading operation has been prepared by J. Tierney. Procedure should be completed and approved. It was originally suggested that remaining vapor in the VCM car to be loaded with RVCN should not be pumped out because of the chance of introducing O₂. However, upon review, pressure in the empty car is not reduced to below 5 psig and the compressor system will not see RVCN. Therefore, the VCM cars will be pumped of vapors

as is the current procedure. The plan calls for loading empty VCM cars, shipping RVCM to Leominster and then returning empty RVCM cars to Dow for virgin VCM service.

- * Operation of tank farm pump and seal should be reviewed and included in tank farm pumping procedure.

Responsibility - PVC & T&M

- * Start stop switch and alarm for tank farm pump will be disconnected on 88 Bldg. kettle floor.

Responsibility - PVC

- * The need for a logging of #2 tank fillage was discussed. The 84 Bldg. lead operator log will be revised to include a record of 84 RVCM tank pumping and #2 tank fillage. *June 1971*

Responsibility - PVC/~~T&M~~



C. D. Riggs

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