Monsanto

FROM (NAME & LOCATION) ~~K.~~ E. Boucher, W. G. Krummrich Plant

DATE: January 11, 1974

cc: W. C. Engman
G. L. Johnson
A. E. Leisy
D. K. Lynch

SUBJECT: GENERAL ELECTRIC
HUDSON FALLS, N.Y.

REFERENCE: CONTAMINATED AROCLOR 1016

TO: J. R. Savage
General Offices -
B2SL

Recommendation

We have been asked to rework 30,000 gallons of Aroclor 1016 containing about 0.4% Unox 4-206 diepoxide and contaminated with up to 0.2% DOP. We recommend WGK not rework this contaminated Aroclor 1016. The long department rework time (2-3 months) would cause problems, the recovery is poor, and costs are high - $55,000. We cannot guarantee quality Aroclor 1016 will be made. The Aroclor would need to be porocel treated at General Electric.

Discussion

Dan Lynch provided process details. Rework involves contacting Aroclor 1016 with 93% Sulfuric Acid (10% by weight), neutralized with caustic followed by a water wash, dehydration, and then distilling over lime.

Our rework facilities consist of #1 Still and Receiver, Blend Tanks #1 and #2, and #1 Mix Tank. The existing 10,000 gallons of distilled residue in #1 Mix Tank must be removed. Our Corrosion Group warned us that we may lose the zinc-tin lining in our Blend Tanks because of the acid-caustic treatment. The steel transfer lines must be replaced with aluminum piping. Also drumming facilities are needed for montars. To avoid cross-contamination of other department materials porocel treatment is not possible. Cost of modification is $35,000. Construction time is estimated at 3-5 months.

Using #1 Still for reworking a large amount of material presents a labor problem. We do not want to create a permanent job. Therefore the rework will be done on overtime. Each 1000 gallon batch will require two shifts with two men per shift. Rework 30,000 gallons is expected to take 2-3 months.

DSW 297609

Cost

Cost breakdown is as follows:

Material	$2200
Incineration	2200
Fuel	100
Labor	11,000
Lab	1,400
TSD	1,100
Research	2,000
Expense	35,000
Total	$55,000

$$\text{Recovery cost/cwt} = \frac{\$55,000}{280,000\ \#} \times 100\ \#$$

$$= \$19.64$$

Timing

It would take at least 7 months to rework the Aroclor after approval is given.

Kenneth E Boucher

Kenneth E. Boucher
Technical Services Department

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DSW 297610