

Memorandum

FROM (NAME & LOCATION)

R. C. Herman - (6725) - General Offices

DATE April 10, 1969

cc

H. E. Waldrep - Anniston

H. L. Williams - "

SUBJECT Work Remaining on CEA 1430

R. M. Kountz

R. R. Cook

REFERENCE

R. A. Haydel - Anniston

L. Birchfield

TO : ~~Mr. Waldrep~~ -- Anniston

Confirming our discussion of April 8, 1969, the following problems remain to be resolved prior to closing CEA 1430.

1. Dust collection
2. Biphenyl temperature control.
3. Aroclor flaker operation.
 - a. Plastic material over the drum.
 - b. Flake breaker operation.
 - c. Housekeeping problems resulting from aroclor under the pan.
4. Level indication in the biphenyl hopper.
5. Pan for collecting drippage from hose station at the drumming scale.
6. Replace air operated vibrator on biphenyl hopper with an electric one.
7. Modify north truck dock to add adjustable steps.
8. Installation of drumming scale.
9. Install clay oven.

The following action is being taken to resolve these problems:

1. Dust Collection

Based upon an evaluation of the existing system by Bill Schuchat of CED, we feel that the problems of clogging in the rotoclone are caused by the condensation of aroclor and biphenyl fumes in the duct work. This occurs when the hot fumes come in contact with the cool air coming from the hoppers and the bagging operation. As condensation occurs, a eutectic is formed which is plastic in nature, and attracts the dust from the cool air stream resulting in a large amount of plastic material being fed to the rotoclone.

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April 10, 1969

We are going to modify the duct work such that less eutectic is formed in the duct. The eutectic which is formed will be collected in a sump rather than allowed to flow into the rotoclone or back down the ducts to the 1st floor. The ductwork drawing was mailed to H. E. Waldrep on 4/7, and a revised drawing was mailed on 4/10. Mr. Waldrep will expedite the fabrication of this new duct system. Based upon the time required for the fabrication, which I should know by 4/14, I will coordinate with you the installation date. During installation, the rotoclone must be disassembled and completely cleaned.

The sludge removed from the collection tank will be in the liquid state when both flakers are in operation, and in the solid state when only one flaker is in operation. Steps have already been taken to heat the re-circulating water in the collection system to a temperature above the melting point of the eutectic (40°C).

In the event that we still have problems with this system after the above steps are taken, we will have some alternate plans available.

Investigations are underway by Bill Schuchat to find a method of handling the fumes so that they might be collected separately from the dust. The laboratory at Anniston is evaluating H.B. 40 and 1242 or other liquids to see if biphenyl and aroclor could be dissolved. If a high boiling point solvent could be found, it could be used as the scrubbing media in the rotoclone. Bill Schuchat is working on the basis that this is an urgent problem. The work by the Anniston laboratory should be expedited as much as possible.

No LUCK!

DUST COLLECTION SUMMARY

- A. Modify ductwork system - revised drawing sent to CED Construction 4/10. *STATUS.*
- B. Clean out rotoclone during ductwork installation. this will be done by the plant. *LLF*
- C. Continued investigation by CED and Anniston for alternate plans. *?*

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April 10, 1969

2. Biphenyl Temperature Control

We will convert the steam heating system to a thermal heating/cooling system on the flaker pan, flaker feed tank, and the jacketed piping inside the warehouse. The plant will lower the temperature of the biphenyl storage tank to 80°C (or as close to 80°C as possible) the plant will shut off the steam to the jacketed transfer line during the transfer of biphenyl to the feed tank (day time transfers only).

A diagram of the new thermal system was sent to you on 4/8, for your comments. We are proceeding to order the new pump and instrumentation. We will not proceed with the piping design until we have your comments.

COMMENTS
4/15

3. Aroclor Flakers

A. Plastic material coming over drum. The ductwork modifications discussed earlier will stop the plastic drip back at the center of the drum. Goslin-Birmingham feels that the plastic material at the west end of the drum is caused by poor water distribution inside the drum. A new water distributor is being made by Goslin. The availability of this new distributor will be during the week of 4/14.

G.B.

B. Flake breaker stalling

This should be corrected by (A) above. The plant is purchasing a new flake breaker from Goslin. This new breaker will be insulated on the pan side to prevent build-up of flake on the sides of the breaker.

No!

C. Housekeeping problems - melted flake under the flaker pan.

The new flake breaker being purchased by the plant will have modified deflection plates which should preclude flake from getting under the pan. The rotation of the flake breaker has been reversed, and flake will be thrown away from the flaker pan.

Need
DEFLECTOR
EACH END.

4. Level Indication In Biphenyl Hopper

A "bindicator" will be purchased on 4/10. I will advise you as to when we will be ready to install it. You are aware that "bindicators" require regular maintenance.

?

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April 10, 1969

5. Pan for Collecting Dripage from Hose Station at Drumming Scale.

I will provide fabrication information to CED Construction as soon as I receive your recommendations as to the required size.

BY PHONE
4/14

6. Replace Air Operated Vibrator on Biphenyl Hopper with an Electric One.

An electric vibrator will be ordered by 4/11. ✓

7. Modify North Truck Dock to Add Adjustable Steps

The adjustable steps will be ordered by 4/11. The modifications to the dock will be made when the steps arrive.

NO MODIF.
NECESSARY.

8. Installation of Drumming Scale

This should be complete by 4/11. Upon completion of the installation, a Toledo representative will check-out the operation. It will be available for your use after the check-out. This should be 4/11 or 4/14.

NOT READY

9. Installation of the Clay Oven

This oven is at Anniston now. We are holding the installation pending your agreement as to its location.

SAFE? REV.

Upon the completion of the work outlined in this memo, the project will be closed. We are giving this work the highest priority, and I will keep you advised as to our progress.

R. C. Herman
R. C. Herman

RCH/bl

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