

INTEROFFICE COMMUNICATION

Westlake, Louisiana
January 28, 1969

TO: Mr. L. N. Vernon - Westlake

SUBJECT: MINUTES OF MEETING--HCL PURIFICATION PILOT PLANT

A meeting was held at Westlake on January 14, 1969, to review and discuss the HCL purification pilot plant design package issued by the Process Engineering Department.

Those in attendance were:

PED

J. B. Cameron
D. J. Lorine
R. S. Matthews
J. E. Pearson

VCM

R. H. Gerlach
J. D. Minott
D. K. Peters

The comments on the design generated by plant personnel were presented as a format for the meeting. These comments along with the answers resulting from the discussion are attached.

RH Gerlach

R. H. Gerlach
Chief Process Engineer

RHG-MC

Attachment

cc: DJL-RSM-JEP-WBSto-JBC
DKP-JHD-JDM
HDB

(CCR 000034164

COMMENTS ON HCl PURIFICATION PILOT PLANT DESIGN

Specification Sheets

1. Provide tubing size and layout for Thermon coil, H-1.

Comment: PED agree.

2. Why is there no fouling resistance for the tube side of H-3?

Comment: The plant will provide the fouling resistance given on the original HCl preheater.

3. Specify that the H-3 baffles must not permit build-up of condensate on the shell side.

Comment: Condenser outlets will be provided between each pair of baffles.

4. The control valve for FRC-1 must be designed for a flowing pressure drop less than 10 psi and shut-in drop of 150 psi. We would prefer an Annin valve with Demotor operator.

Comment: PED agree, the valve will be checked at a pressure drop of 2 or 3 psi.

5. PdI-1 should have purged leads.

Comment: PED agree, a bubbler will be provided for the purge gas.

6. PdI-1 must be designed for at least 140 psig.

Comment: PED agree.

7. Will the TRC-1 valve be operable at $1/3$ the flow and 5 times the pressure drop? Also, is the surface large enough with 40 psig condensing steam?

Comment: PED will check valve.

8. Material of construction of thermowells.

Comment: Standard stainless steel will be used.

9. A Hastelloy "B" orifice would be better for FRC-1.

Comment: PED agree.

10. PG-1 a chemical seal is unnecessary; use a standard gauge with K-monel tube.

Comment: PED agree.

11. TRC-1 temp. range should be in centigrade to be consistent with control board.

Comment: Will be 0-150° C.

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12. TRC-IV prefer an Annin valve be used. In any event--would be better with a stellite seat.

Comment: PED agree.

Dwg. SD-1359-42-4B

1. Add a relief valve with locked open block valve in addition to the rupture disc on D-1. Disc assembly should include a downstream PG and limiting flow check.

Comment: PED agree.

2. The relief from D-1 should tie-in to the HCl relief header.

Comment: PED agree.

3. The nitrogen connection at the inlet to D-1 should have a double block and bleed.

Comment: PED agree.

4. Sample connections should reduce to $\frac{1}{4}$ " tubing connections.

Comment: PED agree.

5. What is the flush connection tied to?

Comment: The flush connection will not be piped up. Valve will be installed for future connections.

6. Provide a bypass for the cartridge filter.

Comment: Will leave out.

7. Add a note that FRC-1 is to tie in to the oxy shutdown system.

Comment: PED agree.

8. Provide a pressure gauge at the top of D-1.

Comment: PED agree.

9. A slide gate valve should be installed on the top manway. This will be necessary for loading the reactor from seal bins.

Comment: Will be installed later if found essential to the loading operation.

Dwg. SD-1359-42-5-B

1. The bypass for PRC-216V has been removed.

Comment: PED will revise the flowsheet.

2. A pressure gauge should be installed for the shell side of H-3.

Comment: PED agree.

3. Provide a dial thermometer or TI for checking TRC-1.

Comment: PED agree.

4. TIC-303 sensing point will probably have to be relocated to allow tying in the 4" return line.

Comment: PED agree.

5. Discuss system pressure drop.

Comment: FRC valve will be rechecked.

General Comments

1. A separate vaporizer will be required for sending HCl to Ancon. Without a separate unit, the flow will have to be shut off during startups and upsets in the VCM Plant.

Comment: So noted.

2. Piping should be low temperature steel up to H-3.

Comment: PED agree.