Monsanto

FROM (NAME & LOCATION): E. E. Stewart, W. G. Krummrich Plant

DATE: December 5, 1972

cc A. E. Leisy
R. L. Fields

SUBJECT: PROJECT 3956 "Alterations to HCl Distribution System"

REFERENCE:

TO : Messrs.
Virgil Brawley
Bill Engman
Bob Heider
Dave Macdonald
Bob McCutchan

The above met 12/4/72 to review pending alterations to the HCl distribution system per Project 3956. In essence the system can be depicted per the attached sketch.

At present a seal tank exists to prevent Dept. 246 off-gas from being sewered at Dept. 236. The liquid seal appears to be gone, and possibilities exist for sewering 246 off-gas at Dept. 236. Installation of the double control valves on the highline will prevent the flow of gas from Dept. 246 to the drowning jet at Dept. 236.

1. The only problem to be resolved with the highline valves is supervisory responsibility for operation of the control scheme, and maintaining a written schedule of the test intervals with verification that testing was performed per schedule. Per Dale Schillinger's Safety Review minutes of 5/11/72, Mr. Leisy will designate supervisory responsibility.

The off-gas piping modification and control instrumentation will be installed at Dept. 246 to eliminate sewering off-gas containing PCB when 246 gas is available in excess of the 217 requirements. A high header pressure will result in the automatic shutdown of the chlorine feed to all batch and continuous chlorinators. Instrumentation at the off-gas drowning jet will restrict the flow of water to those periods if pressure on the header continues to increase after the chlorine valves are automatically closed.

Additions that must be incorporated into the original project package of 7/17/72 are:

1. Provide recording of high line ΔP valve position in the 246 control room.

MONS 029747

IN - 10 REV. 1/72

2. Trace and insulate water piping at 246 off-gas drowning jet to prevent freezing during winter when water isn't being used on jet.

3. Trace and insulate chlorine feed lines to batch chlorinators in section between automatic chlorine valves and entrance to chlorinator. To prevent freezing of biphenyl when chlorine is shut off and material flows from chlorinator back into chlorine feed line.

Possible problems are anticipated after the system is installed during periods when Dept. 246 is sole source of HCl to Dept. 217. Fluctuations in demand for HCl may cause intermittent pressure build-ups in the off-gas header with frequent resultant automatic shutdowns of the chlorine feed. This will be evaluated after the project is installed.

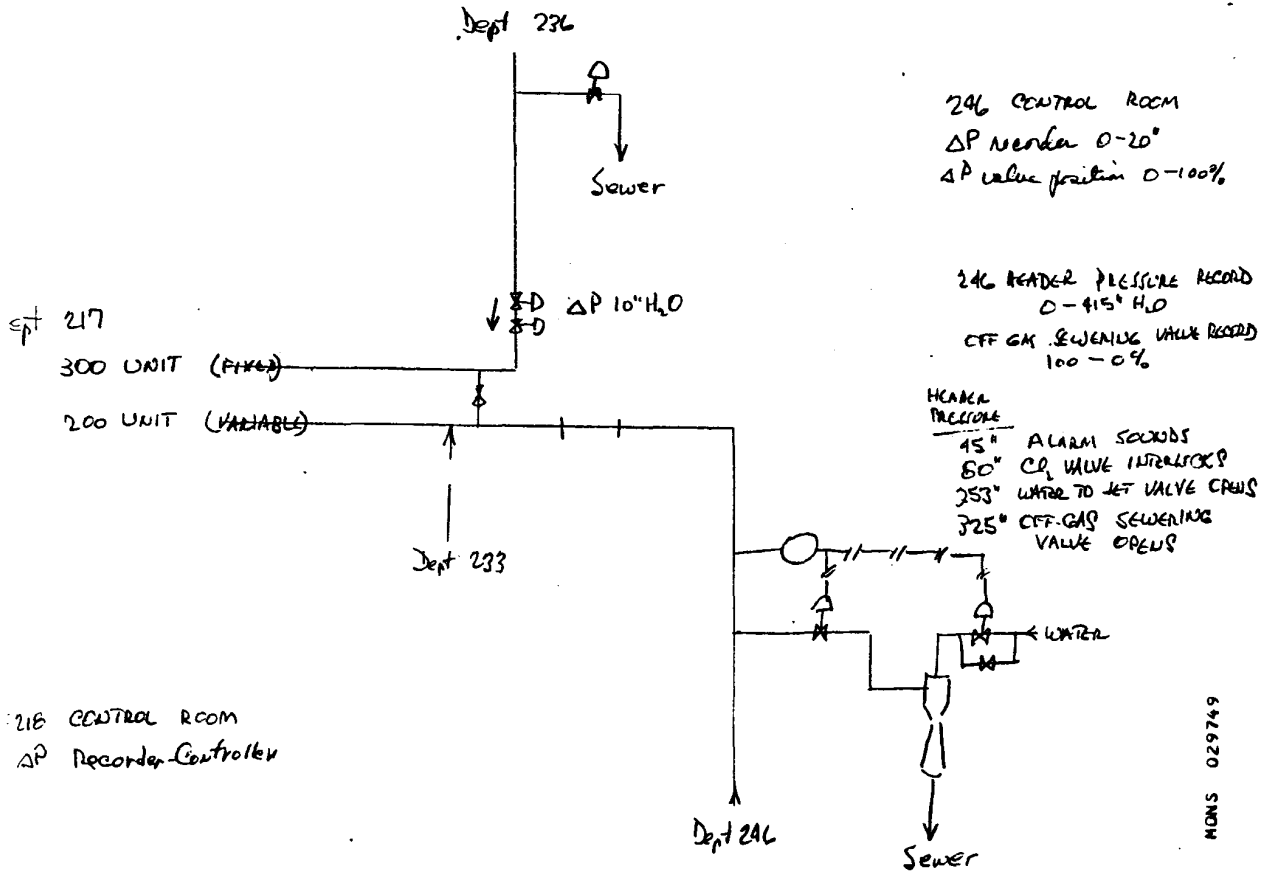
1. In the event frequent shutdowns do occur and become intolerable it may be necessary to by-pass the header pressure - chlorine feed interlock until the problems can be resolved.

2. It will be necessary to continue using water on the jet via bypass until the aeration process step be discontinued or separated from the off-gas drowning jet.

This project is scheduled for completion in January per Dick Burbott.

Ed Stewart
Technical Services Department

/tm
att.


Dept 236
Sewer
246 CONTROL ROOM
ΔP Recorder 0-20"
ΔP valve position 0-100%
246 HEADER PRESSURE RECORD
0-415" H2O
OFF GAS SEWERING VALVE RECORD
100-0%
Dept 217
ΔP 10" H2O
300 UNIT (FIXED)
200 UNIT (VARIABLE)
HEADER PRESSURE
45" ALARM SOUNDS
80" Cl2 VALVE INTERLOCKS
253" WATER TO JET VALVE OPENS
325" OFF-GAS SEWERING VALVE OPENS
Dept 233
WATER
218 CONTROL ROOM
ΔP Recorder-Controller
Dept 246
Sewer
MONS 029749