

Interoffice Communication

To Shift Supervisors
From M. C. Manion
Date March 28, 1984
Subject MARCH 1984 PROCESS CHANGES

Listed below are several modifications which have been made during the March 1984 turnaround. Please review these changes with your shifts:

1. FRIC-101 (RSP mode)

The remote set point (RSP) mode for the R-101 ethylene flow controller has been revised to reflect a molar ratio. The ratio which was typically in the range of 3.5 to 3.8 will now be in the range of 0.9 to 1.0.

2. AIC-101 and FIC-104

Prior to the turnaround, the trim chlorine flow to R-101 was controlled directly by AIC-101 and the flow displayed by FR-104. FR-104 has now been replaced with a flow controller FIC-104 which can be operated in the manual, automatic or RSP mode. In the manual, or automatic mode, the trim chlorine flow control valve is controlled directly by FIC-104 (AIC-101 will not affect the valve). In the RSP mode, FIC-104 is cascaded with AIC-101 (the output of AIC-101 provides the set point to FIC-104). The normal mode of operation will be AIC-101 in auto and FIC-104 in RSP.

3. LIC-103

The T-101 level controller LIC-103 will now fail to a closed position on an R-101 shutdown. The provox has been configured such that on an R-101 shutdown, LIC-103 will switch to the automatic mode with a set point at 105% which will close the valve.

4. FIC-179

The recycle EDC flow controller to T-101 (FIC-179) will fail to a closed position on an R-101 shutdown.

5. R-101 High Temperature Alarm

The provox has been reconfigured such that an audible alarm will accompany an R-101 High Temperature Alarm.

6. FIC-103

The orifice and d/p cell for the liquid chlorine flow controller have been changed back to liquid chlorine service. The units of flow will remain in LBS/HR.

7. FIC-170

The units of flow for the natural gas to R-101 have been changed to SCF/HR.

8. HIC-207

A new automatic control valve has been installed in the H-207 vent line. The control valve is to be used to adjust the vent flow as necessary to the incinerator. The valve is to remain manually blocked-in when venting is complete.

9. T-450 Rundown Line

A chain operated valve has been installed in the rundown line to T-450. This valve has been installed to isolate the T-450 tank from the wash system. The valve is located above FIC-183 near T-101. It will be normally closed.

10. HCL Vent Containment

A new pressure controller PIC-216C has been installed to allow the HCL column to be vented to the incinerator absorbers. PIC-216C will operate 3-4 psig above the set point of PIC-216B and PIC-216A will operate 3-4 psig above the set point of PIC-216C. Therefore, during a pressure upset in the HCL column, vents will first be routed to the HCL absorber column at the incinerator unit. The amount of flow through PIC-216C will be limited to a flowrate (approximately 18,500 lb/hr) which will allow the absorbers to operate within temperature and pressure limits. If the over-pressure condition in C-202 cannot be relieved by PIC-216C, then the existing HCL vent valve PIC-216A will vent HCL to the vent scrubber C-500. A new flow controller has been installed to regulate the C-500 Dump flow automatically.

A new provox display (Display 45) contains the following group of instruments for the HCL vent containment:

<u>Instrument</u>	<u>Description</u>
FIC-522	C-500 Dump Flow Controller
FQI-216	HCL Vent Accumulator to C-500
FR-216	HCL Vent flow to C-500
PIC-216C	HCL Vent to Incinerator Absorber
FQI-Reset	Reset switch for Accumulator FQI-216

This system will be tested after starting of the unit.

11. HCL Column Seal Tray

During the turnaround the HCL column seal tray was repaired. It is suspected that a significant amount of internal reflux was occurring at the seal tray from leakage. (This would account for the increased cooling obtained from increased seal tray level.) As a result of eliminating the internal reflux caused by leakage, the reflux should now be more accurately controlled by the reflux control valve TRC-208.

12. Oxy Startup Procedure

The oxy startup procedure has been updated. The new procedure is accessed by depressing the "Print Log" function key and entering "2".

13. Vinyl Column Baffle

A new baffle has been installed at the bottom of the vinyl column around the outlet line to the reboilers. The purpose of the baffle is to prevent reboiler fouling associated with sudden shutdowns.

14. BL-305 A & B

The two drain valves located on the bottom of the packing gland housings at each recovery compressor will remain car-sealed at all times. This will allow water to drain from the housing in the event a packing gland cooling water tube should rupture. (If water does accumulate in the packing gland chamber, it will leak both to the process side of the compressor and into the oil.)

If there are any questions, please contact me.

Mark C Manion

M. C. Manion

cc: RAC, JWW, MLA, RB, S.S. (4)
JRH (3), Operators (35)

CCR 000016031