

Ethanolamines/Glycol Ethers In Plant Training (IPT)

Section Number :15
Issue Number :1.3
Origination Date :09-01-91 **Author: Mike Viator**
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Ethanolamines/Glycol Ethers Control Module Line-O-Logic

Answers:

- 1. State what EBV-1036 is.**
Incoming ethylene oxide emergency block valve.
- 2. State at what pressure EBV-1036 will alarm on low pressure.**
70 psig.
- 3. State at what pressure EBV-1036 will trip on low pressure.**
50 psig.
- 4. State what EBV-1041 is.**
Incoming propylene oxide emergency block valve.
- 5. State at what pressure EBV-1041 will alarm on low pressure.**
50 psig.
- 6. State at what pressure EBV-1041 will trip on low pressure.**
20 psig.
- 7. State what EBV-2072 is.**
Aqua ammonia emergency block valve at MX-201.
- 8. State two ways to open EBV-2072 after it trips.**
Put on manual in the field or go on bypass and hit reset button.
- 9. State at what percent of chart will EBV-2072 trip on aqua ammonia low flow.**
10 percent.
- 10. State what determines R-201 low NH3/EO ratio trip.**

HIC-2075A

11. **State what the low NH₃/EO ratio trip setting should be.**
No less than 1.6.
12. **State what valves trip when P-201 shuts down.**
EBV-2077 and EV-2071 (oxide control valve).
13. **State what happens when TS-2072 is energized (the total emergency shutdown button).**
 - A. P-212 continues running on total recirculation.
 - B. EBV-2072 closes at MX-101.
 - C. P-201 shuts down
 - D. EBV-2071 closes (EO emergency block valve at MX-201).
 - E. EV-2071 closes (EO control valve at MX-101).
 - F. P-205 shuts down
 - G. Anhydrous ammonia to D-210 closes (emergency block valve).
 - H. Anhydrous ammonia to D-210 closes (control valve).
 - I. Suction valve (EBV-2009) closes.
14. **State everything that will shut down P-101.**
 - A. Low oil pressure
 - B. High vibration (if not bypassed)
 - C. High discharge temperature
 - D. P-106 shuts down
 - E. P-104 shuts down
 - F. Low catalyst flow
15. **State two things that will shut down P-106.**
 - A. Catalyst line differential pressure (10" of water).
 - B. Catalyst line high temperature (alarms at 50 degrees, trips at 75 degrees).
16. **State what the low pressure alarm/trip is on the feed to R-101.**
 - A. Alarms at 240 psig
 - B. Trips at 188 psig
17. **State what the low pressure alarm/trip is on the feed to R-102.**
 - A. Alarms at 125 psig
 - B. Trips at 100 psig
18. **State what the high temperature alarm/trip is on the catalyst line to MX-101.**
 - A. Alarms at 50 degrees
 - B. Trips at 75 degrees
19. **State what the high pressure alarm/trip is on the feed to R-101, R-102, R-103.**
650 psig alarm and 700 psig trip on all three.

20. **State what the high temperature alarm/trip is on P-101 discharge to R-101.**
60 degree alarm and 80 degrees trip.
21. **State R-201 high/low pressure trip settings.**
High pressure 975 psig, low pressure 500 psig.

Revisions:

Revision No. 1	07-15-93	Yearly Review
Revision No. 2	12-18-94 12-18-94	Yearly Review Added 14F & changed 16A & 17A
Revision No. 3	12-23-97	Yearly Review