

Ethanolamines/Glycol Ethers Tier 3 Procedure

Section Number: 209
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Title: High Pressure In T-211 Or D-210
References: Glossary Of Equipment Identification

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209. High Pressure In T-211 Or D-210

1.0 Objective:

1.0 To provide a guide to the actions that should be taken to minimize the affect of high pressure in the ammonia handling system for the ethanolamines process.

2.0 Responsibility:

2.1 It is the responsibility of the operations supervisor and the lead senior operations specialist to ensure that this procedure is understood and used in case of high pressure in the ammonia handling or front-end of the ethanolamines process.

2.2 It is the responsibility of the operations personnel to ensure that this procedure is executed in a safe and efficient manner.

3.0 Special Notations:

3.1 High pressures in the ammonia handling system (T-211, D-210, D-215) can be attributed to several different causes. Inerts in the steam feeding T-220 or T-230 can result in the system pressuring up. Loss of cooling water from the cooling tower to the E-210 or E-211 exchangers can also result in an increase in system pressure because the ammonia is no longer being condensed in D-210 and T-211, respectively.

3.2 To minimize the inerts in the system, the reboilers for the system should be swapped to 235 psig steam instead of flash steam during start-up of the glycol ethers (GE) plant if vessels have been opened during the GE plant outage.

3.3 In the event inerts do get in the steam system, the vents on the individual condensate drums for the system reboilers, as well as the vents on the flash steam system (D-510), should be opened to atmosphere to bleed the inerts from the system.

3.4 Whenever, D-210 and/or T-211 are pressured up, cold condensate should also be introduced into the T-211/D-210 system as follows: (cold condensate provides cooling and drops the ammonia concentration causing the pressure to drop in the system)

3.4.1 Hook up cold condensate flex hose at D-215 to the suction of P-211a at the quick connect fitting.

3.4.2 Open the condensate block valve upstream of the flex hose and close the P-211A suction block valve. Use P-211A to pump this condensate into T-211 and D-210 to reduce system pressure.

3.4.3 Disconnect the flex hose after use. This system is not intended to be permanent piping.

3.5 In the event that cooling water flow to the E-211 or E-210 exchangers is interrupted, determine cause and re-initiate flow.

Revisions

Revision No. 1	12-11-95	Yearly review
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Revision No. 2	11-14-96	Corrected the word "reduce" in Section No. 3.4.2.
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