

Ethanolamines/Glycol Ethers

Tier 3 Procedure

Section Number: 1123
Issue Number: 2.0
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Title: Ammonia Car - Ruptured Off Loading Arm
References: Glossary Of Equipment Identification (Text # 114)

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1123.Ammonia Car - Ruptured Off Loading Arm

1.0 Objective:

- 1.1 To provide a guide to the actions that should be taken in the event of such an emergency. To perform this task in a environmentally sound and efficient manner without injury to personnel or damage to equipment.

2.0 Responsibility:

- 2.1 It is the responsibility of the operations supervisor and the operations personnel to ensure that this procedure is utilized in the event of an emergency involving the rupture of the ammonia off loading arm.
- 2.2 It is the responsibility of the operations personnel to ensure that this procedure is used as a guide to appropriate actions to be taken in the event of such an emergency.

3.0 Special notations:

- 3.1 If the check valves on the ammonia tank car hold and the trip valves on the ammonia compressor hold, the degree of the spill will be decreased considerably. The sprinkler system and deluge guns should knock down a great deal of the ammonia. If the check valves don't hold this could result in an evacuation of the block and neighboring blocks. It is very important that security be notified as soon as possible so that they can make the proper announcements and notifications of people out of the division.
- 3.2 It might be possible, with use of a chemical suit and scott air pak to block in the leak.
- 3.3 The board person will coordinate the activities of the lab and outside operators.
- 3.4 Emergency procedures are written with the intention of having in black and white what procedure should be followed under ideal circumstances. They do not take the place of common sense. If there is a fire, we have a fire department to handle it. Don't tackle something that could injure you because you don't have the experience or training to handle it. Small fires in trash cans or some insulation fires can be handled by most of us. Don't wind up making the problem worst by getting hurt or rushing in and doing the wrong thing. The same thing applies to spills and other emergencies.

-----use common sense and the correct personal protective equipment-----

- 3.5 Prior to initial investigation of what is suspected to be a significant ammonia spill, scott air paks should be donned by all personnel going into the area.

4.0 Outside Operator

- 4.1 Upon indication of the spill, an operator will investigate the spill after putting on a scott air pak.
- 4.2 Outside operator's investigation of spill finds that the liquid ammonia unloading arm has ruptured while off loading an ammonia car.
- 4.3 If during daytime working hours, the outside operator should instruct the board person to announce the spill and have all personnel not associated with shift operations report to the maintenance shop for a head count and further instructions.
- 4.4 Put as many deluge guns on the spill as possible. Also instruct the board person to trip the sprinkler system for that area.
- 4.5 Request additional help as needed from other plant personnel.
- 4.6 After directing as many deluge guns as possible on the spill area, suit up with rubber boots and slicker suits. Put on scott air paks (if not already on) and go to spill area using a route that is upwind of the spill.
- 4.7 With the help of the other operations specialist isolate the ruptured arm by blocking in the valves on the ammonia car and the air operated valves on the tank car rack.
(2 person job)
- 4.8 Assist plant security as required.

5.0 Board Person:

- 5.1 Trip DS-205 sprinkler system.
- 5.2 Trip TS-2010 ammonia unloading emergency shutdown.
- 5.3 Call security (333) and report spill. Give name, department, type of spill, chemicals involved, and location of spill, and specific help needed such as fire truck or ambulance. Send someone to direct security into block.
- 5.4 Call plant superintendent as time permits.
- 5.5 After consulting outside operator, and with his or her approval, instruct both operations specialist to put on slicker suits and scott air paks.

5.6 Monitor plant operations.

7.0 Revisions:
