

GAIL (India) Limited

Gas Processing Unit, Gandhar

GAIL (India) Limited, Gandhar, is committed to adopt best HSE practices available globally to enhance the safety of Man, Machine and Environment. Many major innovative measures have been undertaken by GAIL, Gandhar, during 2021 to 2023, out of these, one measure is explained below for better understanding of the activities.

Installation of Integrated Fixed Foam Tanks for Fire Protection of Naphtha Tanks

1. Background:

Gas Processing Unit of GAIL (India) Limited, Gandhar has two nos of External Floating Roof Naphtha Storage Tanks, which are provided with Rim Seal Based Fire Detection and Suppression System, Foam Pourers, Medium Velocity Water Spray System and High Expansion Foam Generator. All the systems are fulfilling Fire Protection of highly flammable Naphtha storage facilities.

Earlier, as per standard requirement of various the foam pourers and foam generators were having individual sources for feeding fire protection media (water and firefighting foam) and it was a challenging task for fire personnel to feed the fire protection media in all the foam pourers and foam generators during the scenario of fire in Naphtha Storage area.

Therefore GAIL (India) Limited, Gandhar has installed a closed loop foam tanks and integrated these with existing Foam Pourers and Foam Generators based fire protection system. A photograph of the newly installed system shown below:-



2. *Benefits:*

The integrated fixed foam tanks system has ability to protect fire personnel from extensive heat, minimizes response time of fire crew by means of opening of any one valve to operate whole fire protection system. Moreover, this advancement of fire protection system of hydrocarbon storage has following other advantages :-

- Easy Availability of foam storage near the risk area at all the times.
- System can be operated from a faraway location, no need to go near the tank to supply foam.
- Common source of extinguishing media (Foam) for foam pourer as well as foam generator.
- Sunlight protection for the stored foam in the foam tank (Safe storage as foam do not degrade with the passage of time).

