EMERGENCY PROCEDURE FOR CRYOGENIC LIQUID SPILL

This is defined as a leak of cryogenic liquid from an on-site storage tank and/or road tanker.

The MHRP process estimates that the off-site risk from the worst possible case - a major spill from the LO storage vessels - is relatively low. The most probable cause is liquid leaking through a ruptured pipe or hose following mechanical damage.

The primary risks from a cryogenic spill are:

- Oxygen Spill: Injury/property damage risk of fire from flammable materials in an Oxygen enriched environment or from contact with the Liquid Oxygen.
- Inert Gas Spill: Injury risk resulting from an Oxygen depleted environment or from contact with the cryogenic liquid.
- Widespread vapour cloud impeding safe access to the source of the leak/spillage. Distribution of the spillage through drains and to low lying areas.

A significant cryogenic spill would require the involvement of the Fire Services, but the primary points for the Officer In Charge to consider are:

1. What liquid is causing the spill - Oxygen or Inert Gas? 2.
Is it safe to turn off a valve to isolate the leaking pipe?
    - Is there a suitable accessible valve, not obscured by vapour cloud?
    - Use of personal Oxygen monitor?
    - Other appropriate PPE?
3. Can actions be safely taken to block the drains in the area.