

Liquid Nitrogen Main Tank Fill Procedure

Division of Research Support Chemical Stockroom

1. Due to proximity limitations, the Division of Research Support staff may assist in the opening and closing of the valves below the tank while the delivery person is monitoring the pump at the surface level.
2. Leave the door propped open during the fill to ensure easy entrance and exiting.
3. If at any time the outdoor oxygen sensor “Alarm 2” sounds, stop the pump, close the valves, exit the breezeway and shut the door. When the repeater monitor inside the building displays safe oxygen levels have returned, restart the filling procedure.
4. Attending Division of Research Support staff will use the following procedure check-list:
 - The delivery person will connect fill line on top of the tank.
 - Close “Economizer” valve below tank.
 - Do not open the “Liquid” valve
 - Open “Tri-Cock A” valve below tank.
 - Open “Tri-Cock B” valve below tank.
 - The delivery person will start the filling pump on the delivery truck. The fill will take about 30 minutes.
 - An insignificant amount of nitrogen gas will be escaping from the “Tri-Cock B” pipe opening.
 - The tank is full when the small amount of gas escaping from the “Tri-Cock B” pipe opening turns to a small amount of liquid nitrogen.
 - The filling pump on the delivery truck is turned off by the delivery person.
 - Close “Tri-Cock A” valve.
 - Close “Tri-Cock B” valve.
 - Open “Economizer” valve.
 - The delivery person will disconnect fill line on top of tank.
5. Call 766-3277 UW Safety to notify the departure of US Welding from campus.
6. The Division of Research Support staff who attended the fill will sign and date this procedure. The original will be kept in The Chemical Stockroom files.