Safety hazards associated with draining the DCH chiller system.

- The IR is often like a construction zone during times that this procedure will be implemented. Be aware of you surroundings. Have appropriate IR-2 safety training, keep in touch with the green hat safety personnel. Wear hard hats while in the hall.

- The floor area around the chiller is hazardous. Many pipes, lines and hoses cross the floor. Use care when walking, moving and standing.

- The chiller cover and side panels can be awkward to remove. Use caution and plan where to put the objects before removal.

- Many of the valves that must be manipulated in this procedure are in difficult to reach places. Locate and examine the valves. Plan your actions
Procedure for draining and drying the DCH chiller system

- Turn off the pump by pressing the red “Pump Off” button on the lower control panel (figure 1).
- Turn off main power to Chiller.
- Remove the top cover – no tools required – and the side panels of the chiller unit. (Phillips screws)
- Open the drain valve (MV9), located under the reservoir (figure 2).
- Wait until all the water has drained out.
- When the reservoir is empty close MV2 – the endplate supply valve (figure 3).
- Open MV11 and MV12 (figure 4) – the eductor valves – this will begin to suck water from the cooling system into the tank. Leave for 30 minutes.
- Close MV12
- Close MV1 (figure 5) – electronics supply. Open MV2.
- Open MV12 again and suck the water from the endplate circuit into the tank. Leave for 30 minutes.
- Close the eductor valves MV11 and MV12.
- Any circuit that will be opened or not refilled within 1 day should be dried with compressed air.
- Make certain that the return valve (MV 4,5,6) of each circuit to be dried is open and that the purge air pressure is set to ~10 PSI (G 3, at the rear of the reservoir). Open hidden air valve (figure 6).
- Close the main supply valve MV 8 (figure 4) and open the air valve MV 7 (figure 4), near G 3.
- Leave for 60 minutes
- Close MV7 and MV2
- Open MV1 (figure 5), open MV7
- Leave for ~12 hours.
- Close MV7.
Figure 1 – chiller power and pump on/off

Figure 2 - main drain and return line valves as seen from right side of chiller

Figure 3 - MV2 seen from top of right side of chiller

Figure 4 - eductor valves - etc... as seen from the back of the chiller

Figure 3 - MV1 as seen from right side of the chiller

Figure 4 - hidden air valve as seen from top right of chiller