STANDARD OPERATING PROCEDURE # FDO 4.009

Subject: Changing Bag Filters on Cold Water Circulating System

Purpose and Scope: This is a standard procedure for safely changing bag filters contained in the cold water system filter housings located in building 40.

Procedure:

When the pressure differential across the filter exceeds 5 psig:

1. Close the filter housing inlet and outlet valves.
2. Open the drain valves on the side of the filter housing.
3. Open the vent valves at the top of the filter housing cover.
4. Drain the filter housing until water no longer flows from the drain valve on the side of the filter housing.
5. Loosen the 3 wing nuts on the filter housing cover.
6. Check to see that there is no residual pressure in the filter housing by moving the filter housing cover slightly.
7. If no residual pressure is evident, swing the 3 wing nuts aside and open the filter housing cover.
8. Remove the coil spring from the filter housing.
9. Remove the filter bag from the filter housing by grasping it at the top edges and lifting slowly to allow the water to drain from the bag.
10. Remove the filter bag and clean the inside of the filter housing, paying close attention to the lid gasket and bag seal area.
11. Install a new filter bag, making sure that the top of the bag fits properly against the seal shoulder.
12. Install the coil spring on top of the bag seal.
13. Reinstall the filter housing lid gasket.
14. Close the filter housing lid and swing the wing nuts into place.
15. Thread the wing nuts on evenly until they are all hand tight.
16. Tighten the wing nuts slightly with a wrench. **DO NOT OVERTIGHTEN!**
17. Close the drain valves on the side of the filter housing and the vent valves at the top of the filter housing cover.
18. Slowly open the filter housing inlet valve and check for leaks.
19. Vent air from the filter housing by opening the vent valves at the top of the filter housing cover.
20. When all air has been vented from the filter housing, close the vent valve and open the water outlet valve to put the filter in service.

Developed by: [Signature]
Marshall Seymour
Director
Utilities, Energy & Sustainability

Approved by: [Signature]
Dr. James Barnett
Associate Vice President
Facilities Development & Operations