Replacement of HVAC Compartment Filters – Basic Medical Sciences Building

Required Equipment & Supplies:

- Approved asbestos warning signage.
- Asbestos caution tape.
- Poly drop sheet (6-mil or better).
- Disposable coveralls c/w attached hood.
- Half-face negative pressure respirator equipped with new or tested P-100 filters.
- Necessary hand tools and equipment (ie. screwdriver, etc.).
- 6 mil asbestos labelled poly bags and a roll of duct tape.
- Hand pump sprayer with amended water.
- HEPA filtered vacuum or wash bucket with amended water and washcloths.

Optional Equipment:

- Hand pump pressure sprayer with amended water.

Work Procedures:

1. Place a drop sheet, consisting of one layer 6-mil polyethylene sheeting, at the base of access hatch or doorway leading to each filter compartment. Ensure drop sheet is sized accordingly to accommodate waste being generated and to provide a suitable staging area for worker access/egress to and from each filter compartment.

2. Isolate the immediate work area from the balance of the Mechanical Room via the installation of asbestos caution tape at the perimeter of the above drop sheet. Provide and post required signage at the perimeter of the work area, in such a manner as to clearly identify the area as an Asbestos Work Area.

3. Coordinate unit shutdown with the Physical Plant Engineer on shift. Ensure the fan has come to a complete stop and has been properly locked and tagged out in accordance with current University of Manitoba standardized “Tag-out” procedure prior to entering the filter compartment.

4. Don required personal protective equipment (PPE) prior to entering the filter compartment. At minimum, required PPE shall consist of a set of disposable coveralls and a half-face negative pressure respirator equipped with P-100 filters. Ensure coveralls being donned cover any existing or reusable clothing and come equipped with attached head cover (hood) and elasticized cuff at worker wrists and ankles.

5. Enter filter compartment and mist down filter using the hand pump pressure sprayer with amended water. Commence filter replacement as per manufacture’s instruction. Place each filter directly into a labelled 6-mil polyethylene waste bag as it is removed. Do not allow filter medium to drop to the floor of the filter compartment.

6. As work progresses, transport sealed polyethylene waste bags to drop sheet provided adjacent to each access hatch or doorway.

7. HEPA vacuum and/or damp wipe surfaces throughout each filter compartment. Repeat cleaning process until all visible trace of dust, debris or any filter medium has been removed.

8. Proceed with installation of replacement filters as per manufacture’s instruction.
9. Exit filter compartment. Ensure all tools, equipment, and any left over materials are removed from each filter compartment prior to worker egress.

10. Immediately upon egress, worker(s) shall proceed to double bag all waste generated during the above filter change-out.

11. Following the completion of the above process, and while still wearing his/her respirator, remove disposable coveralls and place them inside a sealed and labelled polyethylene waste bag. Any dedicated footwear shall be removed, HEPA vacuumed or wet wiped and inspected for any signs of residual dust, debris or filter medium.

12. Proceed to perimeter exit, remove respirator, then proceed directly to designated wash station where each worker shall complete the following:
   a. wash exposed skin and respirator with soap and water; and
   b. seal inlet side of respirator filters with tape then remove filters for testing or dispose of as asbestos-contaminated waste.

13. Report to the Physical Plant Engineer on shift and coordinate unit start-up.

14. Return to the above Mechanical Room and transport sealed asbestos waste bags to designated waste storage site. Dispose of drop cloth as asbestos-contaminated waste. Removal of waste shall be coordinated at times approved by an APO and where possible, while the adjoining areas are unoccupied.