

## **ERMI SAMPLING INSTRUCTIONS**

## Summary

Dust samples are collected by vacuuming approx. 2  $m^2$  in the living room and 2  $m^2$  in a bedroom for 5 minutes each with a Mitest sampler-fitted vacuum or the DustChek<sup>TM</sup>, directly adjacent to the sofa or bed, respectively.

## Detailed procedure

- 1. Remove the top and bottom caps and set aside, retaining for later use. Check to make sure the cassette contains the collection filter.
- 2. Insert the hose attachment of the vacuum into the broader, wide end of the cassette.
- 3. Start the vacuum. Start the stopwatch, place the sampler in one corner of the marked sampling area, and begin to collect dust from the area by placing the narrow, oval-shaped end of the DustChek<sup>™</sup> (or Mitest sampler) in contact with the sampling surface.
- 4. Slightly tilt the sampler to one side to allow a slight gap between the sampling surface and the sampler. (A sampler that is allowed to remain flush against the sampling surface will decrease vacuum efficiency by restricting airflow and will prevent sample uptake).
- 5. Slowly sweep the sampling area from one end to the other using overlapping passes, adjusting the rate until the entire 2 m<sup>2</sup> is covered over the course of the five minute sampling period.
- 6. Turn off the vacuum. To prevent loss of material, tilt the cassette nozzle upward before turning off the vacuum.
- 7. Remove the DustChek<sup>™</sup> (or Mitest sampler) from the hose and visually inspect it to verify it contains enough sample. The sampler should contain 30 100 mg dust. If more dust needs to be collected, repeat steps 3 6.
- 8. Replace the caps onto the cassette ends and place the cassette directly into zip-type bag. Do not tap the DustChek<sup>™</sup> (or Mitest sampler) as the micro-fine dust is needed for analysis. Label the sample appropriately and record the sample description on the Chain of Custody form.

## **Reference:**

Vesper S, McKinstry C, Haugland R, Wymer L, Bradham K, Ashley P, Cox D, Dewalt G, Friedman W. Development of an Environmental Relative Moldiness Index for US Homes. J Occup Environ Med. 2007 Aug;49(8):829-833.