

WINDOW FRAME ASSESSMENT

**Massachusetts Rehabilitation Commission
Worcester Branch
340 Main Street
Worcester, Massachusetts**



Prepared by:
Massachusetts Department of Public Health
Bureau of Environmental Health
Indoor Air Quality Program
June 2017

Executive Summary

Based on conditions seen during the visit, no sampling or other actions regarding window frame caulking are recommended.

Background

Building:	Massachusetts Rehabilitation Commission (MRC)
Address:	340 Main Street, 5th floor, Worcester, Massachusetts
Assessment Requested by:	Deborah Coleman, Executive Office of Health and Human Services
Reason for Request:	Concerns regarding condition of window caulking
Date of Assessment:	May 23, 2017
Massachusetts Department of Public Health/Bureau of Environmental Health (MDPH/BEH) Staff Conducting Assessment:	Michael Feeney, Director, Indoor Air Quality (IAQ) Program
Building Description:	Multi-story building in downtown Worcester; the MRC is located on the 5 th floor.
Building Population:	Approximately 130 employees and visitors from the public
Windows:	Openable in some areas

Methods

Please refer to the IAQ Manual for methods, sampling procedures, and interpretation of results (MDPH, 2015).

Note that this building has been visited by the Massachusetts Department of Public Health (MDPH) BEH/IAQ program several times before to address issues relating to particulate infiltration from the ground-floor food service and other IAQ concerns. Reports from these visits are available on the MDPH website at:

<http://www.mass.gov/eohhs/gov/departments/dph/programs/environmental-health/exposure-topics/iaq/iaq-rpts/cities-and-towns-w.html>.

The IAQ Program was asked to provide technical assistance regarding the potential impact of window caulking at MRC. The IAQ Program assessed the building to ascertain if window caulking existed inside the windows frames of the MRC space. If present, the assessment would then assess whether the window caulking was being managed in a manner consistent with recommendations made by the US EPA, “Practical Actions for Reducing Exposure to PCBs in Schools and Other Buildings Guidance for school Administrators and Other Building Owners and Managers” (Appendix A). In this document, the US EPA makes the following recommendations regarding window caulking:

- Clean inside schools and other buildings frequently to reduce dust and residue.
- Encapsulate the caulking.
- Ensure that ventilation systems are operating. (US EPA, 2015).

Please note that the MDPH does not recommend sampling window caulking since testing would disturb the integrity of the window caulking which would likely release various pollutants into the indoor environment.

BEH/IAQ staff examined all window frames for window caulking throughout the MRC office. The assessment of windows determined if window caulking was present, if it was intact, and whether any caulking debris was present on window frames or sills indoors.

Results and Discussion, Window Frame Conditions

Window frames throughout the MRC offices did not have any window caulking. Window frames in the building are either:

- Wood with machine-carved stiles and rails in the interior side of the window sash. These windows are held in place in the interior side by the wood of the frame with no caulking.
- Metal frames with either molded or flat stiles and rails in the interior side of each window sash. The windows are held in place in the interior side by the metal of the frame with no exposed original caulking. Some windows have been repaired using a caulking gun. This caulking material is intact.

Recommendation

No interior sides of window frames had caulking. Based on these observations, there are no materials present inside the building that would pose an exposure hazard from materials in window caulking.

References

MDPH. 2015. Massachusetts Department of Public Health. Indoor Air Quality Manual: Chapters I-III. Available at: <http://www.mass.gov/eohhs/gov/departments/dph/programs/environmental-health/exposure-topics/iaq/iaq-manual/>.

US EPA. 2015. Practical Actions for Reducing Exposure to PCBs in Schools and Other Buildings Guidance for school administrators and other building owners and managers July 28, 2015. Available at: https://www.epa.gov/sites/production/files/2016-03/documents/practical_actions_for_reducing_exposure_to_pcb_in_schools_and_other_buildings.pdf