## MechSE WELLness

## **A11 Source Separation**

## Intent: Preserve indoor air quality and maximize olfactory comfort in occupied spaces.

Air pollution can be created from many indoor air sources common to an office or educational building, including storage areas of cleaning products, high-volume printers and copiers, and restrooms. The most effective way to curb internally generated air pollution is to capture it at its source before they spread to their surroundings.

Impact: Capturing or separating indoor sources of pollution helps achieve high indoor air quality.

## Requirements for the Sidney Lu Mechanical Engineering Building:

1. All restrooms, janitor rooms, and high-volume copier rooms are separated from others spaces with self-closing doors and utilize exhaust fan(s) to expel air to the outdoors rather than re-circulated.

How do we accomplish these requirements? Each restroom and janitor closet has dedicated space and a door that automatically closes to create separation from the occupied space. Each of these spaces also has dedicated exhaust ventilation that has been air balanced to ensure adequate capture and removal of pollutants. The exhaust fan(s) located on respective roof areas of LUMEB reject the air to the outdoors. These fan(s) operate 24/7. MechSE deploys smaller copiers / printers throughout the spaces to reduce concentrations of pollutants to non-harmful levels. We also prudently capture and exhaust air from above the 3D printing area and each of the laser cutters. No source separation is provided at the Starbucks, thus enabling a pleasant olfactory experience throughout LUMEB.



