

Facility Ventilation: Health & Safety Human Resources

CM-18-21 Appendix C

Facility Ventilation

Current conditions:

- In 2020, aligning with best practice recommendation from ASHRAE**, the City upgraded air filters to a Minimum Efficiency Reporting Value of 13 (MERV 13). Compared to the standard filters typically used, MERV 13 filters have greater capability of filtering small particles (including virus containing aerosols) from the air.
- In addition, where equipped, fresh air intake dampers were opened as much as feasible to introduce more fresh air into City facilities

**ASHRAE = American Society of Heating, Refrigerating and Air-Conditioning Engineers

Risks:

- The more efficient air filters, as well as the increase in fresh air intake, results in the filters becoming loaded/dirty more than with typical (pre-COVID) operating conditions. The loaded/dirty filters were observed when performing the standard 90-day filter change service.
 - Loaded/dirty filters may restrict air flow and reduce overall air changes (clean air) in the space

Decision:

- In consultation with our HVAC service contractor, a recommendation to increase the frequency of filter changes from every 90 days to every 60 days was proposed and approved by the Emergency Control Group.
 - The higher efficiency filter (MERV 13), increase in fresh air and increase in the frequency of filter changes is a temporary COVID-19 ventilation control measure and these enhancements are not intended to be continued beyond the pandemic.
- Costs
 - Approximate total cost, \$50,000 for next 12 months funded from COVID account.