

Facilities Maintenance & Cleaning Overview

HVAC Systems

MERSD has reviewed its Heating, Ventilation and Air Conditioning (HVAC) systems and identified methods to maximize introduction of outside fresh air, and improve air filtration, in accordance with DESE recommendations and guidance. HVAC systems in all three MERSD facilities have been upgraded in recent years to facilitate these adjustments, although due to the varying ages of each building, some differences do exist, as noted below.

HVAC systems will begin running 2 hours before the start of each day in order to maximize fresh air introduction prior to staff and student arrival. Systems will continue to run for 2 hours after the end of each day to ensure a complete refreshing of indoor air each day. HVAC system settings will also be adjusted to eliminate or minimize the use of recycled air to the extent possible. Upgraded, recommended MERV-13 and MERV-14 air filters have been introduced in all classrooms to more effectively treat incoming fresh and returned air. Filters will be changed quarterly instead of our previous semi-annual process, to further improve air quality. MERSD is also contracting with a 3rd party to professionally clean out all components of the HVAC systems prior to the start of school, which will not only improve air quality, but also improve ventilation efficiency. Exhaust fans at all schools have been serviced over the summer, and in some cases replaced to ensure full functioning when school re-opens.

As outside air temperatures begin to drop, further changes to HVAC settings will be necessary to balance the need for outdoor, fresh air, with sustainable indoor temperatures that are conducive to a learning environment. This calibration will also be necessary to prevent significant damage to the HVAC systems from introduction of colder, fresh air. MERSD has engaged an HVAC design engineer to review all settings to promote optimal fresh air ventilation and occupant safety.

Manchester Memorial Elementary School

The new two-story classroom wing, which will be operational at the start of the school year, contains the latest in HVAC technology, including a building automation system (BAS) that facilitates control of HVAC settings and maximization of fresh air intake. The ventilation system in the new school uses displacement technology to introduce fresh air into the building at low velocities, which further helps to improve air quality. In the older D-wing and gymnasium, which have yet to move to the new system, HVAC dampers will be adjusted manually to bring in maximum outside air.

Essex Elementary School

MERSD introduced a new BAS system in FY19, through a Green Communities grant program in partnership with the Town of Essex. This BAS, like that in the other school buildings, facilitates control of HVAC settings and maximization of fresh air intake. The BAS is in place for approximately half of all classrooms, although plans to extend the system – a significant capital project – have previously been identified to occur in the next several years, either through a similar grant program, or through Stabilization Reserves. In spaces not currently covered by the BAS, HVAC dampers can be adjusted manually to bring in maximum outside air.

Manchester Essex Regional Middle High School

Modern HVAC equipment was installed with the new school project in 2010. The entire building is covered by a modern BAS that facilitates control of HVAC settings and maximization of fresh air intake.

Daily Cleaning & Sanitizing

Staffing

- Consider adding 3 custodians whose primary responsibility will be to disinfect the schools.
- All custodial staff will be properly trained on cleaning protocols, and be provided with the appropriate PPE according to the CDC and EPA.
<https://www.cdc.gov/coronavirus/2019-ncov/community/reopen-guidance.html>

Equipment

- All appropriate PPE items for staff/students set forth by CDC have been ordered and delivered.
- 200 hands free soap and sanitizer dispensers have been ordered, and will be installed throughout the district prior to the start of school.
- 5 electrostatic disinfectant sprayers have been ordered and expected to be delivered in mid-August. Training and trials runs will be conducted to determine time it takes to disinfect all school buildings.

Locations

- Hands free soap dispensers will be installed in all bathrooms and classrooms sinks.
- Hands free sanitizer dispensers will be installed in all entries/exits, hallways, shared activity spaces, offices, recess areas, etc.
- All classrooms will be provided with hand sanitizer pump bottles with 75% alcohol, as well as disinfecting wipes and paper towels.

Chemicals

MERSD will use disinfectants and cleaners that are registered by the EPA. They include the following

- **Multi-Clean 128 E-Fecticide** Disinfectant Cleaner. EPA Registration No. 6836-365-5449.
- **Hillyard Arsenal 1 Re-Juv-Nal:** Disinfectant/detergent cleaner. EPA Registration No. 6836-365-5449
- **Bru Tabs 6S-**Disinfecting tablets for electrostatic sprayers. EPA Registration No 71847-6-106

Cleaning Areas

- Per Facility and Operation Guidelines the following frequently touch surfaces will be cleaned and disinfected between 3-4 times per day.
 - Door handles
 - Light switches
 - Handrails
 - Drinking fountains
 - Restrooms
 - Elevator buttons
 - Shared material/electronics
 - Etc.
- Per Facility and Operation Guidelines the following items will be cleaned and disinfected on a nightly basis.
 - Classroom desks
 - Tables
 - Chairs
 - Offices
 - Shared spaces
 - Etc.
- In addition on all remote days each building will receive a complete and thorough deep cleaning and disinfecting.