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Report for: Margaret Sergent
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Subject: **School Inspection**
School 28
450 Humboldt St., Rochester, NY 14610

On Tuesday, December 22, 2020, Ed Olmsted and Jennifer Long as well as Margaret Sergent, representing the Rochester NY Teachers Association inspected representative classrooms at School 28 located at 450 Humboldt St., Rochester, NY. The survey team included representatives of the Rochester City School District (RCSD) including Stacie Darby, Environmental Health and Safety, Matthew Seeger, Schools Facilities Management, and Tom Keysa of Schools Facilities Management. The survey was done as part of the exposure control program for pandemic SARS-CoV-2. The Rochester City Schools District instituted many exposure control measures for the coming year including mandatory wearing of masks, distancing of occupants (reduced occupancy), enhanced cleaning, operating the ventilation systems with a maximum fraction of outside air, and installation of ASHRAE MERV 13 filters, where the HVAC units can accommodate them, and the provision of air purifiers to all occupied spaces. Each school will temperature screen entrants and have a nurse's office. Students with symptoms or suspected of having COVID-19 will be isolated in an isolation room.

The building will be utilized this January for in-school classes starting with special education students and phasing in elementary and middle school students. This inspection was requested prior to the students' return. The survey was done on December 22, 2020, and included the following:

1. A visual inspection of a number of representative classrooms, nurse's office, and isolation room as well as the mechanical room(s);
2. Taking airflow measurement at supply outlets, return/exhaust grilles, and open windows using a TSI 9515 VelociCalc Air Velocity Meter (anemometer); and,
3. A visual inspection of the building ventilation system(s).

The findings include:

1. School 28 is a modern building and is served by a central ventilation system consisting of air handler units located in a penthouse mechanical room. The units are designed to provide a mixture of outside air and return air modulated by dampers. Each supply fan has an associated return fan. Mixed air is filtered through MERV 13 filters and heated or cooled in fan coils in the unit. Filters with MERV-13 or higher ratings are recommended for HVAC systems due to its ability to filter smaller particles, including viruses.
2. From these air handler units, that tempered and filtered air is distributed via a system of ductwork that has variable air volume dampers (VAV) with re-heat coils. VAVs modulate the supply of air to a zone based on the temperature requirements. In all occupiable spaces in the school, the supply air ductwork terminates at supply diffusers located on the ceiling. In addition, the space above the drop ceiling serves as a return air plenum.
3. Along with the mechanical ventilation system, classrooms have windows which can be opened for outside air. However opening windows is not necessary since the mechanical ventilation system delivers outside air that is heated and filtered.
4. There are also exhaust fans on the roof that serve the bathrooms.
5. All the above-mentioned components of the school's central mechanical ventilation systems were examined and found to be working.
6. Air velocity measurements were taken at the supply diffusers in the designated rooms to be used in January, including the nurse's office, Room 105, 152, 150, 159, 169, 243, 232, and 225. All outlets were found to be delivering ventilation air to the room. The airflow in room 159 was minimal but the exhaust was working well.
7. Exhaust vents were checked in representative bathrooms and were found to be moving air out of the bathroom.

CONCLUSIONS

The school has a central mechanical ventilation system with MERV 13 filters and that provides a mixture of outside air taken from the roof and return air. All air is filtered and heated. The return and supply fans were all working. The exhaust fans were also working. Temperature readings indicate the heating system is working in each classroom. Classrooms also have operable windows. The school is ready for occupancy. The ventilation system filters all supply air through MERV 13 filters and mixes outside air. The ventilation system in combination with wearing of masks, screening students, social distancing, and sanitizing of surfaces as well as other controls provide a sufficient level of infection prevention. It is recommended that the VAV be checked in room 159.