OLMSTED ENVIRONMENTAL SERVICES, INC. 1992 Route 9, Garrison NY 10524

phone 845 424 4077 • fax 845 424 3482 • email <u>Olmsted.mac@me.com</u>

Date: February 6, 2021

Report for: Margaret Sergent Second Vice-President Health and Safety Chairperson 30 North Union Street, Suite 301 Rochester, New York 14607

Email: mmsergent@rochesterteachers.com

Prepared by : Ed Olmsted, CIH, CSP

Subject: Ventilation System Screening School 34 – Dr. Louis Cerulli School, 530 Lexington Avenue, Rochester, NY

On Thursday, January 28th, 2021 Ed Olmsted and Margaret Sergent, representing the Rochester NY Teachers Association and Matthew Seeger, representing the Rochester City School District Facilities Management office, inspected representative classrooms, and the ventilation systems at School 34, The Dr. Louis Cerulli School, located at 530 Lexington Avenue, Rochester, NY.

The ventilation 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. 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. More information on the RCSD reopening plans can be found on the RCSD website.

The building will be utilized for in-school classes for elementary school students. This inspection was requested prior to the students return in mid-February 2021. The survey included the following:

- 1. A visual inspection of a number of representative classrooms, nurses office and isolation room as well as the mechanical rooms.
- 2. Taking airflow measurement at 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).

Rooms inspected include the main office, rooms 112, 111 (nurses office), 108, 103, and 100. Observations and measurements are summarized below:

- School 34 was partially renovated and has a masonry exterior and is of concrete and steel construction. The building is served by univents in each classroom that provide a mixture of outside air and room air. The univents have a heating coil and filters are rated at MERV 13. The rooms are also heated by perimeter steam radiators. There are exhaust fans on the roof that pull air from the bathrooms. Each classroom has operable windows that can be opened for outside air. There are gravity (passive) vents in the coat closets in each classroom that allow for natural exhaust of air to the roof. Air flows to the roof from the univent mechanical supply of outside Univents were inspected and in rooms 112, 111, 108, 103 and 100. They were found to be working properly.
- 2. Windows were opened in each classroom to verify they are working.
- 3. <u>Nurse's Room (Room 111)</u> This office has a supply vent that was found to have no airflow. The air handler is on the BMS system and the main controls were adjusted and airflow restored. There is also an operable window. The bathroom has a working exhaust vent and there is a HEPA air cleaner running in the nurse's office.
- 4. <u>Isolation Room</u> The current isolation room is in the main office. This office has an air handler above the ceiling that recirculates air throughout the main office suite. The isolation room should be moved to another location. Consider Room 110A or the room adjacent to the boiler room. Room 110A has its own univent and is located near the nurse's office, exit 5 and student bathrooms. The room adjacent to the boiler room has operable windows and there is an exhaust fan that discharges into the boiler room. A MERV 13 filter should be secured over the exhaust fan so that air does not bypass the filter.
- 5. <u>Room 103</u> The univent was working and the windows were operable.
- 6. <u>Room 108</u> The univent was working and the windows were operable.
- 7. <u>Room 112</u> The univent is located above the ceiling. This unit has an outside air duct. The univent was working and delivering ventilation air.
- 8. <u>Main Office</u> The air handler above the window was found to be working and delivering ventilation air. The rooms also have operable windows.

CONCLUSIONS

The school has univents with MERV 13 filters and that provide a mixture of outside air taken from the roof and return air. All air is filtered and heated. The exhaust fans were working. Opening a window a few inches was found to provide sufficient air changes through natural ventilation. The school is ready for occupancy. The operable windows, 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 isolation room be moved out of the main office.



Typical ventilation scheme in the school. A passive return located in the closet with an univent under operable windows.