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## DCRSD Update 09.24.2020

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**Dudley-Charlton Regional School District** <notifications@dcrsd.org>  
To: Dudley-Charlton Regional School District <notifications@dcrsd.org>

Thu, Sep 24, 2020 at 5:19 PM

All,

I am writing to provide you with important information that was shared with the Dudley-Charlton RSD School Committee last evening at their regularly scheduled meeting. This information gives you preliminary reporting from Drummey Rosane Anderson Inc. (DRA) and Consulting Engineer Services (CES) who has completed a ventilation assessment of our heating, ventilation and air-conditioning (HVAC) systems in all of our schools. A comprehensive report is coming and the Dudley-Charlton RSD School Committee has scheduled a Special Meeting next Wednesday, September 30, 2020 at 7:00 PM that will be in-person for the committee and broadcast live through video streaming/conferencing. Consulting Engineer Services (CES) will present their report to the School Committee.

Over the past two weeks, central office administrators have had several consultative calls with Drummey Rosane Anderson Inc. (DRA) and Consulting Engineer Services (CES) regarding preliminary reporting on the DCRSD HVAC systems. I know that most will want to see the report but it is not available to date. With that understanding, it is necessary to provide information that will be confirmed in the report by CES and DRA. We learned that six out of the seven schools are in good operational standing and will require minimal work to ensure the systems are providing optimal ventilation as designed and necessary. For example, some adjustments will need to be made to the damper settings and we need to continue to install the correct MERV 7-13 filters in our systems as recommended. At Heritage School we learned that the current systems, while operational, have areas that are poorly designed and not optimal. To be clear, below you will read the two areas in the Heritage School that were not designed for a COVID-19 world and that we need to redress, but it has nothing to do with maintenance and how we run the current systems. The areas of redress are tied to the original design with the exception of updating the automated Energy Management System (EMS). To that end, we have been led to believe that there is no information that would cause us to prohibit staff and students from entering and working in our schools through the lens of health and well-being.

We must be on the same page regarding the term *mechanical ventilation* and *natural ventilation*. Mechanical ventilation introduces air exchange through an operational HVAC system in the school building. Natural ventilation introduces air exchange through, as an example, an open window. To ensure adequate overall ventilation throughout all schools, we will continue to introduce natural ventilation with at least one open window in rooms or offices that have windows and mechanical ventilation by controlling outside dampers. This will help sustain expected codes and standards for density occupancy and ventilation in our classrooms in a COVID-19 world.

To explain more about Heritage I respectfully need to remind everyone of the Department of Elementary and Secondary Education (DESE) July 22, 2020 Facilities Guidance. On pages 12 and 13, the document *states appropriate mask usage remains the best defense against all forms of respiratory transmission. Schools can further mitigate airborne transmission by increasing outdoor air ventilation or filtering of air that is recirculating within a room or building.* Based on this guidance, our HVAC assessment conducted by DRA and CES was to ensure our systems are operating optimally and as designed for ventilation. We were confident that our HVAC systems were working but to ensure optimal operation was the key to this assessment. What we are learning from Heritage is that there are three areas requiring redress;

*Energy Management System (EMS) with an estimated cost of \$175,000*

The EMS system provides automation and builds in efficiencies to the operation of the HVAC system. It has been successfully and efficiently operated manually by our staff for more than 5 years, but the recommendation to update this system will bring its functionality to optimal.

*Plenum access in the north wing of the school [the wing to the left of the main entrance when walking into the school] - The plenum is the space above the hallway ceiling that distributes mechanical ventilation. This is an estimated cost of \$50,000*

The mechanical ventilation in the school for classrooms is through a plenum in the hallways. Each wing of the school is structurally the same but the north wing has one less air handler [mechanical ventilator that moves air through the plenum]. Therefore, a design is forthcoming that will introduce optimal air at the end of the north wing plenum run to provide consistent and comparable mechanical ventilation as measured in the south wing of the school. This may entail knocking out a cinder block and placing in an additional wall vent and some ductwork. All classrooms and offices with windows meet the standards of ventilation but this project will ensure consistent air flow throughout all classrooms.

*Specific areas of the school, to include the library media center, reception office area and nurse's office have no introduction of natural ventilation or mechanical ventilation to bring in outside air. The estimated cost is unknown.*

These are considered closed air systems and are not appropriate, as is, in a COVID-19 world for full time occupancy. DESE guidelines speak to increasing outdoor air and filtering of air that is recirculating within a room or building to provide a standard of ventilation during COVID-19. Until we understand the redress in greater detail, we are closing the use of the library media center by staff and students and relocating full time occupants of the offices to new locations. Once we review the recommendations from DRA/CES, we will then establish next steps for the library media center, reception office and nurse's office.

Again, we have been informed that if occupied areas introduce natural ventilation we meet the standards and codes for occupancy of those environments. If we adjust dampers, we meet the mechanical ventilation standards and codes for occupancy with the exception of the three areas identified above in the Heritage School.

I apologize for the length of this email, but I know this is important information.

Respectfully,

Steven M. Lamarche

Superintendent of Schools