Ministry of Education Ministère de l'Éducation

Deputy Minister Sous-ministre

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Memorandum to: Directors of Education

Secretaries/Treasurers of School Authorities

From: Kate Manson-Smith

**Deputy Minister of Education** 

Subject School Ventilation 2023-24

Since August 2020, over \$665 million in funding has been allocated to improve ventilation and filtration in schools, resulting in improvements to all existing ventilation systems in every school, deployment of approx. 100,000 standalone HEPA filter units, upgrades to school ventilation infrastructure and increased transparency for students, parents and staff.

Current active funding to support indoor air quality approximately includes:

- √ \$29.5 million included in the annual School Operations Allocation to support the
  increased costs related to optimizing ventilation in schools, which includes installing
  higher grade filters where possible and increasing fresh air intake.
- ✓ \$1.4 billion in annual renewal funding provided to school boards, which can be used to support ventilation improvements.
- ✓ \$450 million allocated to support HVAC and window upgrades under the federalprovincial COVID-19 Resilience stream of the Investing in Canada Infrastructure Stream (ICIP-CVRIS). These projects are largely all online by the end of this calendar year.
- √ \$26.5 million allocated in federal ICIP-Ventilation funding.

## 2023-24 School Year Guidance

Consistent with previous recommendations and in consultation with the Office of the Chief Medical Officer of Health, for the 2023-24 school year, we expect school boards to continue to build on established practices to optimize air quality to support healthy and safe learning environments for students and staff.

School boards are to continue plans for and/or make upgrades to improve ventilation infrastructure in schools across the province. Projects should be prioritized to meet appropriate minimum ventilation guidelines as outlined by the Ontario Building Code and the American Society of Heating, Refrigerating and Air Conditioning Engineers (ASHRAE).

In preparation for the 2023-24 school year, this memo includes:

- 1. Updated Ventilation Guidance and Best Practice
- 2. Standardized School Ventilation Measures Report

## **Updated Ventilation Guidance and Best Practice**

To continue creating and supporting a healthy and safe learning environment for students and staff, school boards should continue enhancing air quality in classrooms and learning environments.

The guidance for the 2023-24 school year builds on the best practice/checklist document released by the Ministry of Education in August 2021 (2021: B14 School Ventilation) and, where applicable, has been augmented to reflect the latest information from ASHRAE. School boards should review applicability of this guidance, with qualified persons, in the context of their school facilities and related building systems (including manufacturer recommendations) to ensure improvement measures are aligned with the specifications of existing systems.

School boards are expected to:

- ✓ Ensure ventilation systems in all schools are inspected and in good working order for the new school year.
- ✓ Continue inspection and maintenance of ventilation systems throughout the year.
- ✓ Calibrate HVAC systems for maximum air flow and increased fresh air intake, while recognizing specification and limits of existing systems.
- ✓ Use highest rated Minimum Efficiency Reporting Value (MERV) filter that can be accommodated by the system (MERV-13 if possible) and regularly:
  - Inspect filters to make sure they are installed and fit correctly.
  - Replace filters and consider increasing frequency of filter changes to maintain overall performance.
  - Check that sufficient airflow can be maintained based on HVAC design criteria.
- ✓ Keep ventilations systems running when buildings are occupied, including by support staff and vendors.

Please consult ASHRAE guidance in the context of your facilities operating parameters and system specifications, working with qualified persons as required (e.g., building engineers and occupational hygienists).

For buildings/rooms that rely on natural ventilation/no HVAC system:

- ✓ Open windows for short times at intermittent intervals, if safe to do so (assess to prevent re-entry of building exhaust). Doing so for a few minutes at a time during the day can still improve air quality, with minimal impact on the indoor temperature.
- ✓ Assess exhaust systems (review to ensure exhaust air is not re-entering the building e.g., windows, science labs, washrooms) and ensure restroom exhaust fans are functional and operating at full capacity when the building is occupied.

Ontario's leading standard of a standalone HEPA unit in every kindergarten class, in all learning spaces in schools without mechanical ventilation and mechanically ventilated spaces that are not supported by MERV-13 filters, continue to be required by the province. As noted in prior memos, portable HEPA units are highly effective at capturing and removing airborne particles and pollutants, and in turn significantly improving indoor air quality. In operating these units, school boards are expected to:

- ✓ Size the units appropriately for the classroom or learning environment in which they are used. For instance, in larger classrooms and learning environments, more than one HEPA unit may be required.
- ✓ Regularly maintain units per manufacture requirements, visually inspect intake for debris and clean as necessary.

School boards should also ensure that implemented measures do not introduce new health hazards to the setting, for example:

- Do not open windows and doors, if doing so poses safety or health risk to students and staff, e.g., risk of falling, triggering asthma symptoms, exposure to wildfire smoke etc.
- Do not prop open fire doors to increase ventilation and/or reduce exposure to frequently touched door handles.
- Avoid use of technology or devices that may pose safety or health risks, e.g.,
   commercially available ionizing air cleaners and other unproven technologies. The following documents provided by Public Health Ontario are a good resource:
  - Use of Portable Air Cleaners and Transmission of COVID-19 (publichealthontario.ca)
  - Heating, Ventilation and Air Conditioning (publichealthontario.ca)
- Avoid direct air flow around people's breathing zones to reduce respiratory droplets being dispersed from person to person. Rather than air flow at head level, options would be to direct the air upwards or to exhaust room air out of an open window while other open windows draw fresh air in.

## **Standardized School Ventilation Measures Report**

For the 2023-24 school year, school boards are required to communicate school-specific ventilation improvement measures centrally on their school board website. Consistent with ventilation reports that have already been posted on school board websites, the school boards are asked to reflect all standardized ventilation measures in effect in each school. This report intends to enhance transparency for school communities, including students, parents, and staff,

and provide consistent communication across the province. The report for public posting includes information related to:

- School Board Ventilation Strategy
- School Board Ventilation Investments
- School-level Ventilation and Filtration Measures

To make this exercise as streamlined as possible for school boards, the ministry has taken the following steps:

- Pre-populated board-specific ventilation workbooks with previously provided information.
- Integrated worksheets to automatically populate the report required for public posting.

School boards should be prepared to respond to any inquiries about their school board strategies and school-level information, including ventilation systems in their schools, measures taken, and projects that have been completed or are expected to be completed.

School boards are required to complete their reports by September 25, 2023, and publicly post them on their websites no later than September 29, 2023. In advance of public posting, please send your completed school ventilation workbook to <a href="mailto:capital.policybranch@ontario.ca">capital.policybranch@ontario.ca</a> by September 25, 2023.

We hope that enhanced communication will support a broader understanding of completed and ongoing work to improve ventilation in your schools.

Kate Manson-Smith Deputy Minister

## c: Senior Business Officials

Executive Director, Association des conseils scolaires des écoles publiques de l'Ontario (ACÉPO)

Executive Director, Association franco-ontarienne des conseils scolaires catholiques (AFOCSC)

Executive Director, Ontario Catholic School Trustees' Association (OCSTA)

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