

# VENTILATION SYSTEM OVERVIEW

This template has been developed to support school districts in sharing information on ventilation systems at the school level. This includes information on how systems meet requirements for regular inspection and maintenance, and additional mitigations that have been put in place to promote student and staff safety throughout the pandemic.

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| <b>School District:</b>                                                                                      | 38 - Richmond                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>School Name:</b>                                                                                          | Quilchena Elementary                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>REQUIREMENT:</b><br>Regular inspection and maintenance of HVAC systems                                    | Yes/No:<br>Yes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|                                                                                                              | Date of last inspection:<br>9/4/2025                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|                                                                                                              | Date of next inspection:<br>12/4/2025                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|                                                                                                              | Date and type of most recent maintenance:<br>Every morning Monday thru Friday, all buildings are checked via DDC (direct digital control) system. Checklist includes: CO <sub>2</sub> levels, temperatures, air flow and alarm notifications on boilers, air handling units, supply fans, exhaust fans, return fans and hydronic circulation pumps. If a problem is present, a technician is dispatched that day. Trend logs are also created logging temperatures, time of unit startup and shutdown plus CO <sub>2</sub> concentrations throughout the day. |
| <b>RECOMMENDATION:</b><br>Increase supply of outside air                                                     | Yes/No:<br>Yes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|                                                                                                              | Detail:<br>Maximize amount of outside air, number of air exchanges, daily flushing prior to daily occupancy.                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>RECOMMENDATION:</b><br>Upgrade filtration, including installing MERV-13 filters, where possible           | Yes/No:<br>Yes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|                                                                                                              | Detail (Including filter grade):<br>Upgraded all filters in building with MERV 11 as per the latest version of the HVAC guidelines issued by the Ministry.                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>RECOMMENDATION:</b><br>Use other air cleaning or treatment technologies                                   | Yes/No:<br>No                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|                                                                                                              | Detail:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>RECOMMENDATION:</b><br>Manage energy use and air distribution through building automation control systems | Yes/No:<br>Yes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|                                                                                                              | Detail:<br>Use of DDC to manage heat and air flow.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Other Relevant Information:</b>                                                                           | Complete duct cleaning was executed in summer 2024                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>District Contact for any Questions:</b>                                                                   | Name: Feng Zhou, Manager, Electrical & Mechanical Maintenance                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|                                                                                                              | Phone Number: 604-668-7828                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|                                                                                                              | Email: fzhou@sd38.bc.ca                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |