

# VENTILATION SYSTEM OVERVIEW

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| <b>School District:</b>  | 52 - Prince Rupert   |
| <b>School Name:</b>  | Conrad Elementary  |
| <b>REQUIREMENT:</b><br>Regular inspection and maintenance of HVAC systems                          | Yes/No:<br>Yes   |
|  | Date of last inspection: 2022-09-01  |
|  | Date of next inspection: 2022-10-28  |
|  | Date and type of most recent maintenance:<br><br>Filter Change, DDC (direct digital controls) review   |
| <b>RECOMMENDATION:</b><br>Increase supply of outside air   | Yes/No:<br>Yes   |
|  | Detail:<br>Damper level is set to always stay a minimum position of 5% open, so fresh air is always entering the classroom when fan is turning. CO2 particle detection has also been reduced from the recommended 1,200 ppm to 800 ppm to ensure that more fresh air is entering the rooms throughout the day when CO2 level rises with occupants in the room.   |
| <b>RECOMMENDATION:</b><br>Upgrade filtration, including installing MERV-13 filters, where possible | Yes/No:<br>No  |
|  | Detail (Including filter grade):<br>District unit ventilators and air handlers were not originally designed to handle a MERV 13 rated (or higher) filters. It restricts the airflow too much and would cause motors to malfunction. The finer mesh filters would also reduce the actual amount of fresh air allowed into the room because fans were not designed to pull the air through such fine filtration. Current unit ventilators are using MERV 8 rated filters, and are changed at more frequent intervals 4-5 times per year. |
| <b>RECOMMENDATION:</b><br>Use other air cleaning or treatment technologies                         | Yes/No:<br>No  |
|  | Detail:<br>Outside air ingress is the best way to flush particulate out of the room. Fresh air comes in and pushes exhaust air out.  |
| <b>RECOMMENDATION:</b>   | Yes/No:<br>Yes   |

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| <p>Manage energy use and air distribution through building automation control systems</p> | <p>Detail:<br/>Classrooms are connected to a BAS (building automation system – direct digital controls), and regulate influx of fresh air to the classroom. There will be an increase in energy consumption to bring in more fresh air to the schools, we will monitor and do what we can to minimize costs and while increasing fresh air to the schools.</p> |
| <p><b>Other Relevant Information:</b></p>   | <p>If there are concerns that ventilation is not functioning correctly, please let your principal know and maintenance will be sent to investigate.</p>  |
| <p><b>District Contact for any Questions:</b></p>   | <p>Name: James Warburton</p> <hr/> <p>Phone Number: 250-627-2126</p> <hr/> <p>Email: James.Warburton@sd52.b.ca</p>   |