

Christine Clancy, P.E., DPW Commissioner

HANDOUT BOH 2.5.2020

TO: Eileen Donoghue, City Manager

FROM: Christine Clancy, P.E., DPW Commissioner

DATE: February 5, 2020

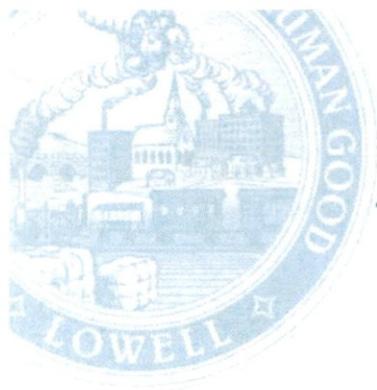
RE: BOH Update: Indoor Air Quality Assessment LHS and Freshman Academy

The City has received indoor air quality assessment reports dated December 2019 of the Lowell High School 1922 and 1980 buildings. These indoor air quality assessments were conducted as a follow up to an assessment completed in 2017. The City has received the Freshman Academy Indoor Air Quality Report and is reviewing the report and the recommendations made within the report.

The completed indoor air testing included testing of carbon dioxide levels, temperature, relative humidity, carbon monoxide, and fine particulate matter (PM2.5). The air quality results showed improvements from the 2017 results yet still exceedances in the carbon dioxide levels. Carbon dioxide levels that exceed the MDPH guidelines of 800 parts per million (ppm) typically indicate lack of air exchange or ventilation. Given the age and condition of the LHS HVAC system and with the new high school construction in the horizon, it is understandable that ventilation issues exist; however, the City also recognizes and as recommended in the report, improvements can be made to certain areas of the school or specific rooms in an effort to further improve air quality.

The City DPW, Health Department, and School Department conducted a site visit of both the 1922 and 1980 buildings on January 9, 2020. As an outcome to the meeting, action items are summarized below. The City and School Department will work on these recommendations on the month of February, and particularly during February vacation, and provide another update to the Board of Health in March.

1. School Department will replace several old carpets that remain in the 1922 building during February vacation. Any other older carpets that remain will be steam cleaned beginning in February and continue through the rest of the school year.
2. General cleaning of other tile or wooden floors and dusting of rooms to be completed on February vacation and completed on a routine basis by the School Department.
3. City DPW and School Department to complete cleaning on all air intake/exchange vents in month of February and quarterly cleanings to be completed. Any abandoned ducts to be cleaned and sealed up in an airtight manner by the DPW where feasible.
4. Report recommends adjustment to the supply and exhaust ventilation where possible and rebalancing of the system where feasible. This is being evaluated by DPW to see where adjustments are feasible and cost effective given the age of the system and the proximity to the construction of the new LHS.



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5. Some rooms were found with furniture that blocked ventilation. Rooms were noted and adjustments will be made by School Department.
6. Report recommends use of openable windows to supplement fresh air during temperature windows. This currently is implemented; however, the City DPW and School Facilities Department will review this recommendation to see if a policy is required. Windows will have to be closed outside of occupied hours.
7. Recommendation made in cooking room located in basement of 1922 building to remove a gas stove or replace it with an electric stove.
8. The report recommends replacement of water damaged ceiling tiles and installation of missing ceiling tiles. A majority of the tiles have been replaced or installed and will continue to be replaced through the month of February.
9. The report recommends replacement of flooring in a closet in Room 105A. This closet has been limited access until repairs are made.
10. Any water damaged plaster or walls noted on site walk will be removed and replaced. These areas were limited throughout both buildings.
11. School Department to establish policies on use of portable AC units and refrigerators on carpeted areas.
12. Vines were noted growing on the building façade. DPW will cut the roots of these vines to limit growth.
13. The report noted rooms with dry erase or chalk materials or cleaning agents. School Department to establish a policy on storage of these materials in a closet or closed area.
14. School Department to discuss placement of printers, copiers, and laminators in the school and coordinate with DPW if can be located in a well ventilated area.

Cc: Kara Keefe Mullin, Assistant City Manager
JoAnn Keegan, Interim Director, Health and Human Services
Jim Green, Deputy Commissioner Lands & Buildings
Jim Hall, Rick Underwood; Lowell Schools