

THE COMMONWEALTH OF MASSACHUSETTS DEPARTMENT OF LABOR

DIVISION OF OCCUPATIONAL SAFETY

OCCUPATIONAL HYGIENE / INDOOR AIR QUALITY PROGRAM

www.mass.gov/dos/iaq

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File No.: 05S-0305

Commissioner

June 28, 2005

John Thiffault Director of Facilities Reading Public Schools 62 Oakland Road Reading, MA 01867

Dear Mr. Thiffault:

The Division of Occupational Safety ("DOS") has been contacted regarding an alleged health hazard at the workplace maintained by you at the Wood End Elementary School, 85 Sunset Rock Lane in Reading. Pursuant to Mass. Gen. L. ch. 149, section 6, it is the responsibility of DOS to investigate occupational hygiene hazards in the workplace, to recommend controls to eliminate such hazards and to assist counties and municipalities to comply with applicable health regulations. The alleged hazards relate to excessive heat and problematic indoor air quality at this building. A comprehensive assessment of the indoor air quality at this location was conducted by the Massachusetts Department of Public Health (DPH), with detailed recommendations provided in their report dated December 2004.

We do not plan to conduct an on-site inspection at this time in light of the DPH assessment. However, we request that you provide us with information on the status of implementing each of the DPH recommendations.

Items:

Item 1: Continue to work with the roofing contractor to schedule roof repairs during unoccupied periods. Ensure that outside contractors check in with school maintenance personnel before conducting repairs/activities that create odors, dusts fumes, etc.

Item 2: Use local exhaust ventilation and isolation techniques to control for renovation pollutants (i.e., deactivation and sealing of AHUs).

Item 3: Continue working with HVAC contractor to troubleshoot problems and develop a preventive maintenance plan prior to turnover of ownership of mechanical ventilation system and components.

- Item 4: Change filters for air-handling equipment as per manufacturer's instructions or more frequently if needed. Ensure filters fit flush in their racks with no spaces to prevent bypass of unfiltered air.
- Item 5: Consider having the ventilation system balanced by an HVAC engineer every five years (SMACNA, 1994).
- Item 6: Ensure classroom doors are closed during periods of school occupancy to maximize exhaust ventilation.
- Item 7: Encourage faculty and staff to report concerns regarding temperature control/preventive maintenance issues to the facilities department via the main office or alternate reporting procedure.
- Item 8: For buildings in New England, periods of low relative humidity during the winter are often unavoidable. Therefore, scrupulous cleaning practices should be adopted to minimize common indoor air contaminants whose irritant effects can be enhanced when the relative humidity is low. To control for dusts, a high efficiency particulate arrestance (HEPA) filter equipped vacuum cleaner in conjunction with wet wiping of all surfaces is recommended. Avoid the use of feather dusters. Drinking water during the day can help ease some symptoms associated with a dry environment (throat and sinus irritations).
- Item 9: Continue with plans to install ceramic tiles in the atrium to prevent wetting of GW.
- Item 10: Ensure all plants are equipped with drip pans. Examine drip pans periodically for mold growth and disinfect with an appropriate antimicrobial where necessary.
- Item 11: Consider adopting the US EPA (2000b) document, *Tools for Schools*, in order to provide a self assessment and maintain a good indoor air quality environment at your building. The document is available from the Internet: http://www.epa.gov/iag/schools/index.html.
- Item 12: Refer to resource manuals and other related indoor air quality documents for further building-wide evaluations and advice on maintaining public buildings. These documents are located on the MDPH's website: http://www.state.ma.us/dph/beha/iaq/iaqhome.htm.

In addition to the above DPH recommendations, please address the following additional item:

Item 13: Implement measures to reduce excessive heat in second floor classrooms during periods of high outdoor temperature. Provide staff with heat stress relief measures such as use of alternative work areas, increased work breaks, and adequate hydration as outlined in the enclosed information.

Within fifteen (15) working days of your receipt of this letter, please fill out and send to DOS the attached Investigation Response Form. Please indicate on the form the results of your investigation and, if recommendations have been implemented and hazards eliminated. If you have not implemented the above-listed recommendations, please indicate why and how and when you will implement recommendations in order to eliminate the hazard in the future. If DOS does not receive a response from you within fifteen (15) working days of your receipt of this letter, it will conduct an on-site inspection in order to determine if the alleged hazards have been corrected.

Enclosed is information which may be useful to you while investigating and correcting the alleged hazards. In addition, DOS will assist you if you have any questions concerning this matter or if you need any air sampling in order to determine if a hazard exists. The engineer assigned to this case is Hilary Eustace. Please feel free to contact her at 617-969-7177, extension 333 if you need any assistance.

Sincerely,

Robert Kenrick

Program Manager