R.K. Occupational and Environmental Analysis, Inc.
401 St. James Ave.
Phillipsburg, NJ 08865
908-454-6316/908-454-4818 (fax)
rkenvironmental@entermail.net
mguinni69@verizon.net

September 10, 2018

Ms. Kari McGann, Superintendent Flemington-Raritan Regional School District Ms. Kari McGann Superintendent of Schools 50 Court Street, Flemington, New Jersey 08822-1300 Phone: (908) 284-7561 Fax: (908) 284-7656

kmcgann@frsd.k12.nj.us

Re: Status Report

Dear Ms. McGann

We enclose our status report as of the date of this letter with respect to remedial activities conducted in your facilities. We have been working diligently over the past two and a half weeks to remove filth associated with uncontrolled moisture in district facilities. All rooms exhibiting unusual fungal populations in your schools upon initial assessment have been successfully remediated and have passed Post-remediation Verification (PRV) testing and assessment. There are a few areas needing additional cleaning and re-testing and assessment but we believe that all other areas in your schools are ready to be re-occupied with the following exceptions as follows:

<u>Copper Hill ES</u>: All rooms have been successfully cleaned with no unusual fungal populations seen in any room remediated. The school can re-open.

<u>J.P. Case Middle School:</u> All rooms have been successfully cleaned with no unusual fungal populations seen in any room remediated. The school can re-open.

<u>Raritan-Fleming Intermediate School</u>: Rooms with unusual fungal populations have been successfully remediated with the exception of rooms 17, 24 and the basement area outside of the lower Gym. Impacted rooms not yet addressed have been isolated with containment and negative pressurization to preclude pollutant transport from dirty rooms to cleaned locations. The school may re-open.

<u>Francis A. Desmares ES</u>: All rooms have been successfully remediated (with the exception of Rooms 2,3,4, and 6 which have been isolated and will be re-cleaned and post-tested until passing clearance. The school may re-open.

<u>Barley Sheaf ES</u>: Rooms 23, 24, 26, 28, 39, 49 will be tested again to determine the effectiveness or remedial work and will remain "off-limits" until successful results are obtained in testing procedures. Air scrubbers have been set up in Room 36, the Art Room, the Library and the Faculty Room which still exhibit unusual fungal populations and need additional cleaning and addressing Faculty room which showed very heavy growth. All other rooms may be re-occupied.

Robert Hunter ES: Rooms 111 and 125 and the Library are isolated and require additional cleaning and air scrubbing. Once cleaning is complete, PRV testing and assessment will be completed and the rooms may be re-occupied after passing this testing. All other rooms may be re-occupied.

Please be advised that there are currently no health-based standards and there are no "safe" or "unsafe" levels of exposure to fungi. We base our clearance recommendations on the presence/absence of unusual fungal populations in indoor locations we evaluate. The ultimate criterion of the ability of a remediated area to be occupied is the ability of occupants to occupy a remediated area without being adversely impacted by ambient conditions. Therefore we strongly advise you through your Nursing staff to closely monitor occupant health following re-occupancy for such symptoms as aggravation of asthma, sinus congestion, sneezing, wheezing, and those who present with symptoms as "my allergies are acting up in this room." If this is the case for a given room and a number of occupants in a particular room, we will come back and do further assessment.

With respect to those rooms that will be re-occupied, we did not identify any imminently hazardous conditions or unusual fungal populations in the air samples or surface tape lift tests.. These results are consistent for a clean, dry indoor environment and these rooms may be expected to present a transparent learning environment for students and staff.

If you have any questions or need further information please feel free to call us at (908) 454-6316. We look forward to continuing to serve you.

Sincerely,

Michael McGuinness

Michael McGuinness, CIH, CET, CIAQP ABIH-certified in Indoor Environmental Quality Principal

References

- American College of Occupational and Environmental Medicine (ACOEM). Evidence Based Statement Adverse Human Health Effects Associated with Molds in the Indoor Environment.
- American Conference of Governmental Industrial Hygienists (ACGIH). *Bioaerosols: Assessment and Control*. Macher, J. 1989.
- American Industrial Hygiene Association (AIHA). Field Guide for the Determination of Biological Contaminants in Environmental Samples (1st and 2nd Editions). Dillon, HK, Heinsohn, PA, and Miller, JD. Falls Church, VA. 1996.
- American Industrial Hygiene Association (AIHA). *Recognition, Evaluation and Control of Indoor Mold.* Prezant, B., D. Weekes and J.D. Miller, Ed's. Falls Church, VA. 2003.
- American Industrial Hygiene Association (AIHA). The Facts about Mold pamphlet.a2003.
- American Society of Heating, Refrigerating, and Air-Conditioning Engineers, Inc. (ASHRAE). Standard 62-2013: Ventilation for Acceptable Indoor Air Quality (ANSI Approved). 2013.
- American Society of Heating, Refrigerating, and Air-Conditioning Engineers, Inc. (ASHRAE). *Standard 55: Thermal Comfort*
- Berry, M. <u>Protecting the Built Environment Cleaning for Health</u>. TriComm Press. Research Triangle Park, NC. 1994.
- California Environmental Protection Agency, Air Resources Board, Report to the California Legislature. *Indoor Air Pollution in California*. 2005.
- Canada Mortgage and Housing Corporation (CMHC). *Moldy Houses: Why They Are and Why We Care* and *Additional Analysis of Wallaceburg Data: the Wallaceburg Health and Housing Studies*. 2002.
- Health Canada. Fungal Contamination in Public Buildings: Health Effects and Investigation Methods. 2004.
- Institute of Inspection, Cleaning and Restoration Certification (IICRC). *IICRC S-500: Standard and Reference Guide for Professional Water Damage Remediation*. 3rd Edition, 2006.
- Institute of Inspection, Cleaning and Restoration Certification (IICRC). IICRC S-520: Standard and Reference Guide for Professional Mold Remediation. 2003.

- Institute of Medicine (U.S.) Committee on the Assessment of Asthma and Indoor Air. Washington, D.C. National Academy Press, 2000. *Clearing the Air: Asthma and Indoor Air Exposures* and *Damp Indoor Spaces and Health*. 2004.
- International Academy of Indoor Air Sciences, International Society of Indoor Air Quality and Climate. Proceedings from annual Indoor Air conferences, 2002, 2005, 2008 and 2011.
- McGuinness, M. (U.S.) Analysis of Settled Dust Another Diagnostic Tool for the IEQ Practitioner. Proceedings of the 2011 International Society of Indoor Air Quality and Climate (ISIAQ) Conference; Austin, TX; June 2011
- McGuinness, M. *Post-remediation Verification One Practitioner's Approach*. Proceedings of the 2011 International Society of Indoor Air Quality and Climate (ISIAQ) Conference; Austin, TX; June 2011
- McGuinness, M. "Initial Microbiological Assessment in Four New Condominiums." Proceedings from the Third International Conference on Bioaerosols, Mycotoxins, and Fungi; Eastern New York Occupational and Environmental Health Center, Albany, NY. 2003
- McGuinness, M., Matthew Dieda, Meredith Yuran, David Wieller and Amy Warner. "An Analysis of Outdoor Air Reference Samples in the Eastern US." Proceedings of Indoor Air 2002, the 9th International Conference on Indoor Air Quality and Climate, Monterey, CA.
- McGuinness, M. "Mold Remediation Procedures at an Elementary School in New Jersey." Proceedings of Indoor Air 2002, the 9th International Conference on Indoor Air Quality and Climate, Monterey, CA.
- New York City Department of Health, Bureau of Environmental & Occupational Disease Epidemiology. *Guidelines on Assessment and Remediation of Fungi in Indoor Environments*. 2000.
- New York State Committee for Occupational Safety and Health (NYCOSH). *Methods for Evaluation of Indoor Mold Growth*. NY State Department of Health
- US Environmental Protection Agency (EPA). *Mold Remediation in Schools and Commercial Buildings*. EPA 402-K-01-001, March 2001.
- US Environmental Protection Agency (EPA). Building Air Quality A Guide for Facility Owners and Managers.