

AIR QUALITY, MOLD TESTING, ERGONOMICS, OSHA

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December 21, 2020

Dr. Tracy Handerhan, Superintendent Wall Township Schools 1620 18th Ave Wall Township, NJ 07719

Dear. Dr. Handerhan,

This report summarizes the results of the December 2-4,2020, air monitoring of the Wall Township High School gym for airborne mercury vapors. This assessment was conducted as a follow-up to our November 2020 monitoring. In that report we described that

"Based upon our review of the Partner Engineering reports and findings from our September 18 through September 29, 2020 inspections and air monitoring it is our professional opinion that the rubberized floor within the Wall Township South Gym contains some mercury likely used as a catalyst. Bulk mercury levels were varied ranging from less than 1 to approximately 73 parts per million. Air sampling and monitoring data collected from within the gym using a variety of methods including air sampling and laboratory analysis, as well as several monitoring rounds in June, July and September 2020 all revealed extremely low airborne mercury levels ranging between none detected to a maximum of 0.1 micrograms per cubic meter; all well below the NJ Department of Health guideline of 0.8 µg/m3 for protection of preschool aged children using school gyms and far below the PEOSHA 8-hour Permissible Exposure Limit 100 µg/m3 for teachers and staff.

Based upon all of the above, it is our professional opinion that the airborne mercury levels within Wall Township High School South Gym do not present any imminent health risk to students or staff at the levels measured. In accordance with the guidance from the NJ Department of Health, the gym is safe for use by students and staff at the levels measured."

This report describes follow-up continuous air monitoring conducted within the gym on December 2-4, 2020.

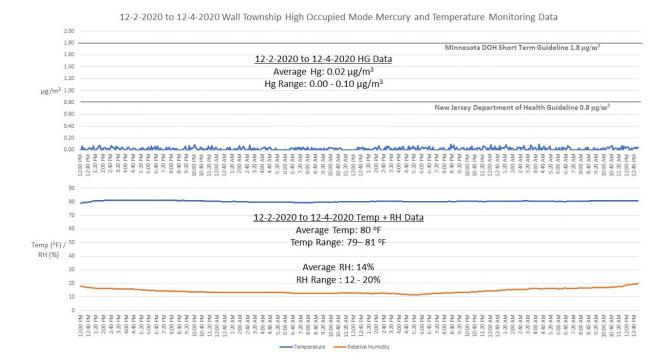
Evaluation criteria and methods are identical to those previously reported and will not be repeated herein.

Air Monitoring Findings

Monitoring findings reveled the following:

- Continuous air monitoring conducted within the gym on December 2-4, 2020 averaged 0.02 μg/m³ (range 0.00- 0.10μg/m³); substantially lower than the NJDOH Guideline of 0.8 μg/m³.
- Gym air temperature averaged 80° F (range $79 81^{\circ}$ F) at average relative humidity of 14% (range 12 20%)

Figure #1 below show details of continuous monitoring results.



Conclusions and Recommendations

Based upon the above, airborne mercury levels within the Wall Township High School gym during our December 2-4, 2020 monthly air monitoring revealed that airborne mercury levels were significantly lower than the NJ Department of Health guideline of 0.8 ug/m³.

Recommendations

- 1. Regular non-abrasive custodial cleaning of the gym should continue.
- 2. Thermostat settings should be lowered to 68-72°F

Thank you for the opportunity to assist you with the evaluation. Our next monitoring will be conducted in January 2020. Please contact me with any questions at (856)764-3557.

Sincerely,

Richard M. Lynch

Richard M. Lynch, Ph.D., CIH, FAIHA, CMC, CMRS, CHFM

Certified Industrial Hygienist

Certified Microbial Consultant

Certified Microbial Remediation Supervisor

Certified Healthcare Facility Manager

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Certification of Instrument Calibration

Environmental Safety Management Corp 21 E. Scott Street Riverside, NJ 08075 RMA# 2721737

This is to certify that the Jerome J505-0005 Atomic Fluorescence Mercury Analyzer, Serial Number 50500325, was calibrated with standard units traceable to NIST.

Calibration Status as Received:

In Calibration

	Actual	Calibration Gas	Allowable Range
Incoming:	26.76 μg/m3 Hg 0.22 % RSD	25.00 μg/m3 Hg	22.50 - 27.50 μg/m3 Hg <5%
Outgoing:	24.88 μg/m3 Hg 0.32 % RSD	$25.00~\mu g/m3~Hg$	23.75 - 26.25 μg/m3 Hg <3%
Calibration Verification:	μg/m3 Hg % RSD	0.300 μg/m3 Hg	0.255 - 0.345 μg/m3 Hg <15%

Calibration Status as Left: In Calibration

Estimated Uncertainty of Calibration System: 3.5%

Calibration Date: 09-Jan-2020

Recalibration Date: 08-Jan-2021

Temperature °F: 68.80

% Relative Humidity: 25.50

Approved By:

rackie Kreitlaw

Title: Jackie Kreitlow - Quality Control

Date Approved: 09-Jan-2020

Equipment Used:

Permeation Tube: <u>S89-6</u> NIST#: <u>ISO13265</u>; 072958

Calibration Date: 17-Jan-2019 Calibration Date Due: 17-Jan-2020

DynaCalibrator: M-1998 NIST#: 19-2952

Calibration Date: 26-Apr-2019 Calibration Date Due: 25-Apr-2020

Digital Multimeter: 64070755 NIST#: 7003135

Calibration Date: 11-Apr-2019 Calibration Date Due: 11-Apr-2020

Mass Flow Controller: 54807 NIST#:236847

Calibration Date: 6-Jul-19 Calibration Date Due: 6-Jul-20

Calibration Procedure Used: 730-0165

AMETEK Brookfield certifies that the above listed instrument meets or exceeds all published specifications and has been calibrated using standards whose accuracy is traceable to the NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY within the limitations of the Institute's calibration services, or have been derived from accepted values of natural physical constants, or have been derived by the ratio type of self-calibration techniques.

Disclaimer: Any unauthorized adjustments, removal or breaking of QC seals, or other customer modifications on your Jerome Analyzer WILL VOID this factory calibration, because any of the above acts could affect the calibration and readings of the instrument. Further, AMETEK Brookfield WILL NOT be responsible for any liabilities created as a result of using the instrument after such adjustments, seal removal, or modifications.

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