

AIR QUALITY, MOLD TESTING, ERGONOMICS, OSHA

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May 31, 2023

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

Dear. Dr. Handerhan,

This report summarizes the results of our May $16^{th}-17^{th}$, 2022 Mercury inspection of the Wall Township High School Gym for airborne mercury vapors. The objectives of this assessment were to determine if the gym's overhead air handling systems are effective at controlling airborne mercury levels during the winter season thermostat settings and outdoor air introduction rates.

Methods

The following methods were followed during this assessment:

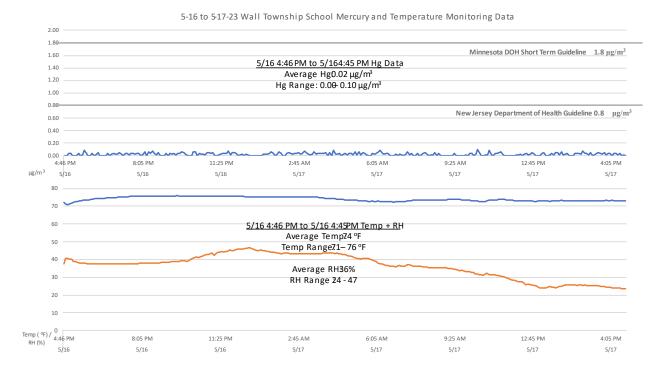
- Continuous air monitoring was conducted over an approximate 24-hour period within the gym between approximately 4:46 PM on May 16th, 2023 and 4:45 PM on May 17th, 2023.
- All mercury air monitoring was conducted using a calibrated Jerome J505 Mercury Vapor Analyzer with a reported detection limit of $0.05 \,\mu\text{g/m}^3$ which reads as low as $0.00 \,\mu\text{g/m}^3$ with a resolution of 0.01.
- Temperature and humidity were measured using a TSI Q Trak VelociTrak IAQ Meter.

Findings

Findings revealed the following:

- Outdoor airborne mercury was at approximately 0.02 micrograms per cubic meter (μg/m³). Outdoor temperature ranged between approximately 68 to 75°F over the course of the inspection.
- Airborne mercury levels measured near the gym center at the bleachers between May 16th -17th, 2023 monitoring period, averaged, 0.02 μg/m³ (range 0.00 0.10 μg/m³); well below the NJDOH Guideline of 0.8 μg/m³.
- Gym temperature averaged $74^{\circ}F$ (range $71\text{-}76^{\circ}F$) during this monitoring period . Relative humidity averaged 36%.

Figure #1 below displays the results of the mercury, temperature, and humidity findings over the monitoring period.



Conclusions and Recommendations

Based upon the above, airborne mercury levels within the Wall Township High School gym between May 16-17th, 2023 monitoring period averaged 0.02 ug/m³: significantly lower than the NJ Department of Health guideline of 0.8 ug/m³.

Recommendations

- 1. Routine periodic non-abrasive custodial cleaning of the gym should continue.
- 2. Continue to operate the gym's air handling system to introduce outdoor air while maintaining low interior temperatures.

Thank you for the opportunity to assist you with the evaluation. Please contact me with any questions at (856)764-3557.

Sincerely,
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