

June 12, 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 29th – 30th, 2024 Mercury inspection of the Wall Township High School Gym for airborne mercury vapors. The objective of this assessment were to determine if the gym's overhead air handling systems are effective at controlling airborne mercury levels during the spring season thermostat settings and outdoor air introduction rates.

Methods

The following methods were followed during this assessment:

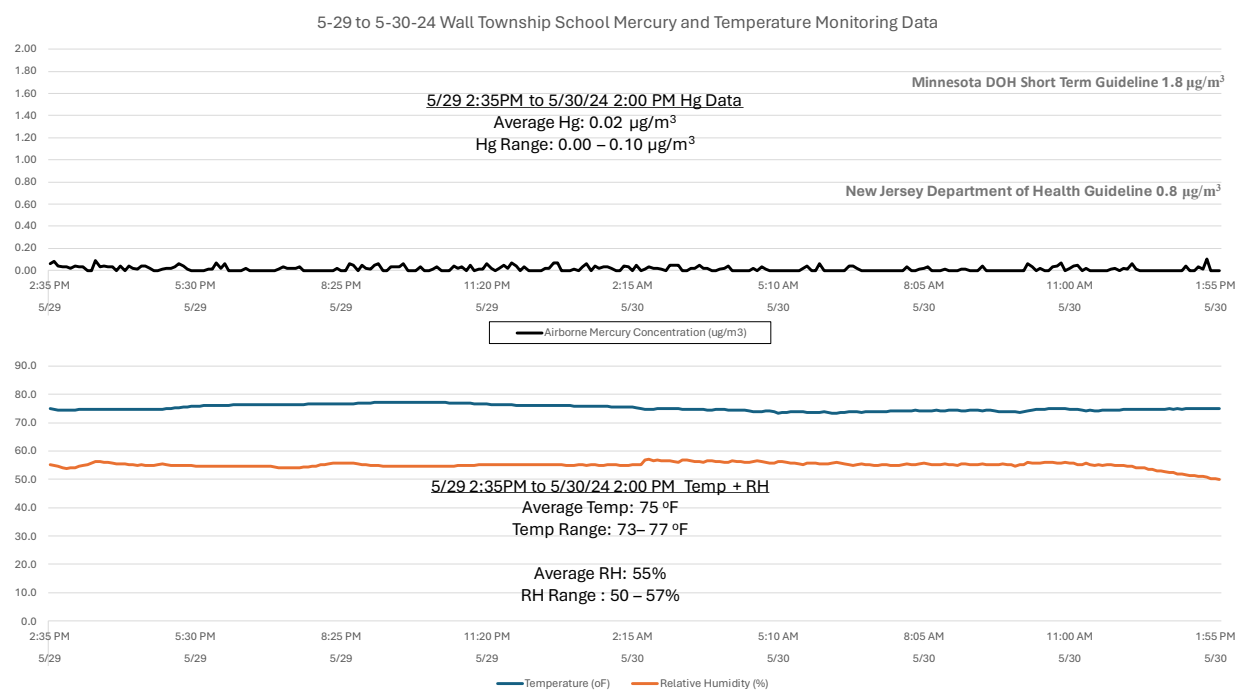
- Continuous air monitoring was conducted over an approximate 24-hour period within the gym between approximately 2:35 PM on May 29th, 2024 and 2:00 PM on May 30th, 2024.
- All mercury air monitoring was conducted using a calibrated Jerome J505 Mercury Vapor Analyzer with a reported detection limit of 0.05 $\mu\text{g}/\text{m}^3$ which reads as low as 0.00 $\mu\text{g}/\text{m}^3$ 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 0.01 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$). Outdoor temperature ranged between approximately 67 to 76°F over the course of the inspection.
- Airborne mercury levels measured near the gym center at the bleachers between May 29th-30th, 2024 monitoring period, **averaged, 0.02 $\mu\text{g}/\text{m}^3$ (range 0.00 - 0.10 $\mu\text{g}/\text{m}^3$)**; well below the NJDOH Guideline of 0.8 $\mu\text{g}/\text{m}^3$.
- Gym temperature averaged 75°F (range 73-77 °F) during this monitoring period. Relative humidity averaged 55%.

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 over the May 29-30th, 2024 monitoring period averaged 0.02 $\mu\text{g}/\text{m}^3$; significantly lower than the NJ Department of Health guideline of 0.8 $\mu\text{g}/\text{m}^3$.

Recommendations

1. The gym’s HVAC system should continue to be operated at current settings.
2. Routine periodic non-abrasive custodial cleaning of the gym should continue.

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

Sincerely,
Richard A. Lynch
 Richard A. Lynch, MBA, CIH
 Certified Industrial Hygienist
 NJ Licensed Indoor Environmental Consultant
www.esmcorp.com

Reviewed and Authorized:
Richard M. Lynch
 Richard M. Lynch, Ph.D., CIH, CMC, CMRS, CHF/M
 NJ Licensed Indoor Environmental Consultant
 President, ESMCorp
rlynch@esmcorp.com