

December 19, 2022

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

Dear. Dr. Handerhan,

This report summarizes the results of our December 12th – 13th, 2022 monitoring 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:

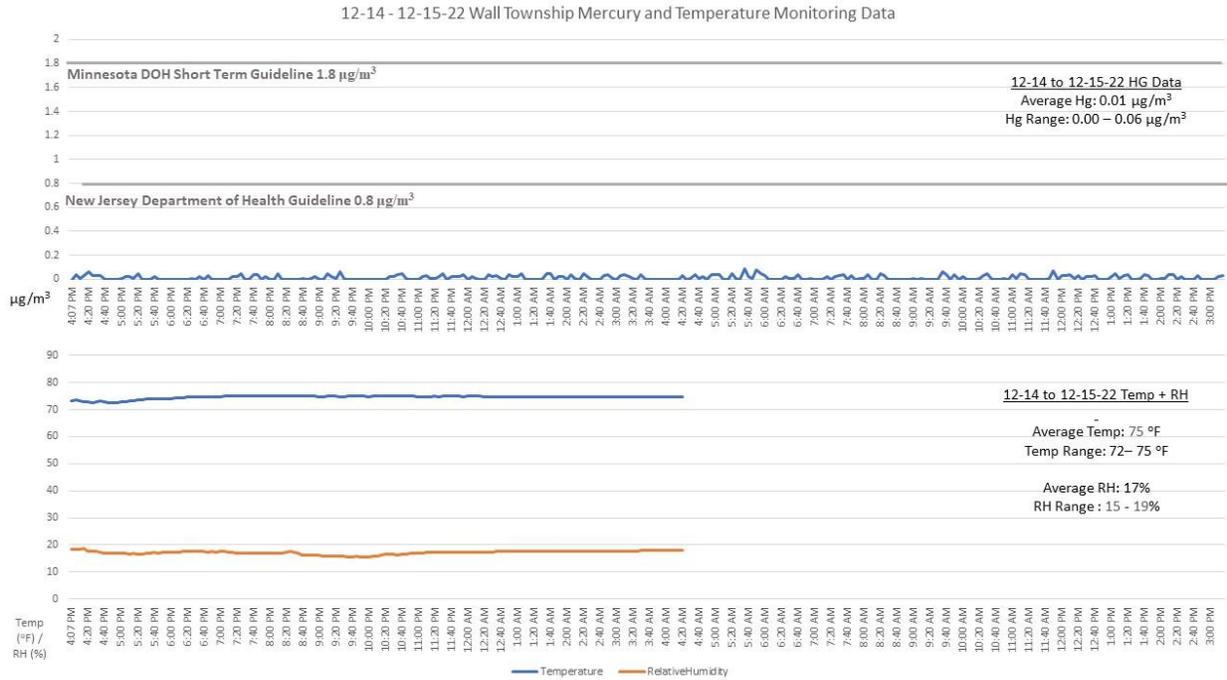
- Continuous air monitoring was conducted for mercury over an approximate 23-hour period within the gym between approximately 4:00 PM on December 12th, 2022 and 3:00 PM on December 13th, 2022.
- All mercury air monitoring was conducted using a calibrated Jerome J505 Mercury Vapor Analyzer with a reported 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 between 4:00 PM on December 12th through 4:00 AM on December 13, 2022.

Findings

Findings revealed the following:

- Outdoor airborne mercury was at approximately 0.02 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$). Outdoor temperature ranged between approximately 32 to 44°F over the course of the inspection.
- Airborne mercury levels measured near the gym center at the bleachers between December 12th - 13th, 2022 monitoring period, **averaged, 0.01 $\mu\text{g}/\text{m}^3$ (range 0.00 - 0.06 $\mu\text{g}/\text{m}^3$)**; well below the NJDOH Guideline of 0.8 $\mu\text{g}/\text{m}^3$.
- Gym temperature averaged 75°F (range 72-75 °F) during this monitoring period. Relative humidity averaged 17%.

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 during the December 12-13th, 2022 monitoring period averaged 0.01 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. Our next Q3/Q4 monitoring will be conducted in April-May, 2022

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
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 NJ Licensed Indoor Environmental Consultant
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