

October 25, 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 October 17-18, 2022 Mercury inspection of the Wall Township High School Gym for airborne mercury vapors. The purpose of this mercury monitoring was to determine airborne mercury levels within the gym following installation of the new South Gym rooftop air handling units, equipped with air conditioning. At the time of monitoring, two (2) of the three (3) newly installed rooftop air handlers were operating. Evaluation criteria are identical to those previously reported and will not be repeated herein.

## Methods

The following methods were followed during this assessment:

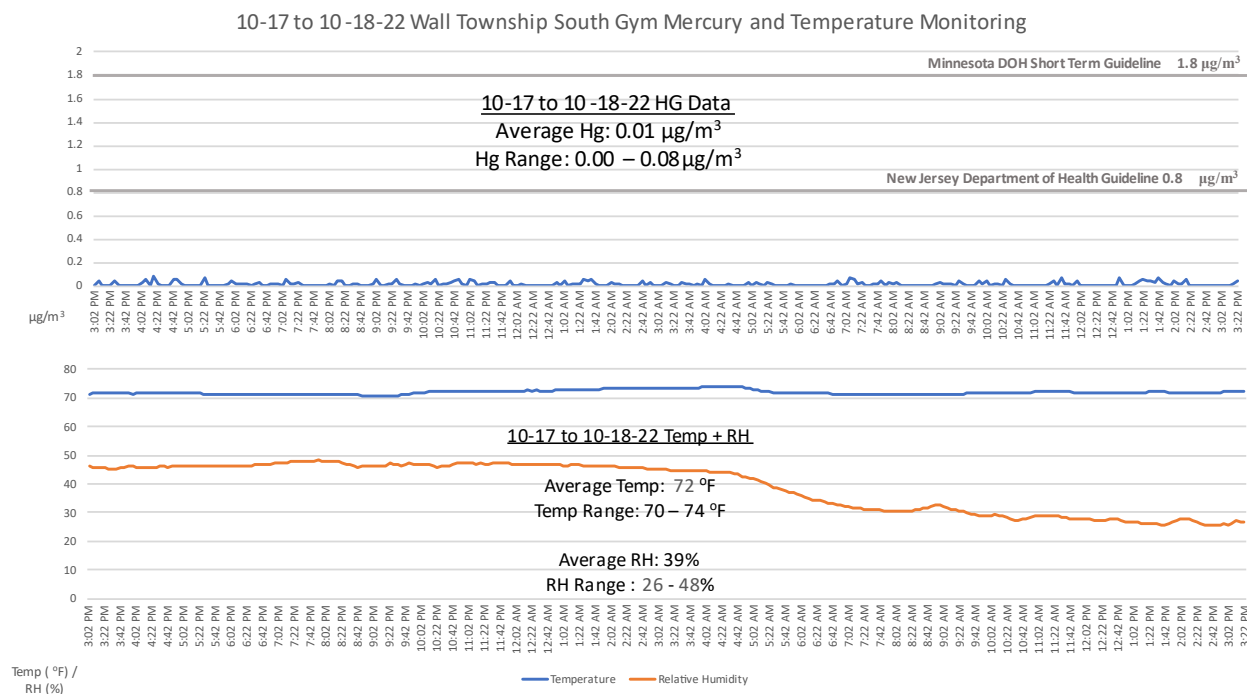
- Spot air monitoring was conducted for mercury in the hallways surrounding the South Gym.
- Continuous air monitoring was conducted over an approximate 24-hour period within the gym between approximately 3:00 PM on October 17, 2022 and 3:20 PM on October 18, 2022.
- All mercury air monitoring was conducted 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.

## Findings

Findings revealed the following:

- Outdoor airborne mercury was at approximately 0.03 micrograms per cubic meter ( $\mu\text{g}/\text{m}^3$ ). Outdoor temperature ranged between approximately 55 to 66°F over the course of the inspection.
- Airborne mercury levels within the **hallway outside of the gym were non-detectable at  $0.00 \mu\text{g}/\text{m}^3$** .
- Airborne mercury levels measured near the gym center at the bleachers between October 17-18, 2022 monitoring period, **averaged,  $0.01 \mu\text{g}/\text{m}^3$  (range  $0.00 - 0.08 \mu\text{g}/\text{m}^3$ )**; well below the NJDOH Guideline of  $0.8 \mu\text{g}/\text{m}^3$ .
- Gym temperature averaged 72°F (range 70-74 °F) during this monitoring period. Relative humidity averaged 39%.

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 October 17-18, 2022 monitoring period averaged 0.01 ug/m<sup>3</sup>: significantly lower than the NJ Department of Health guideline of 0.8 ug/m<sup>3</sup>.

### Recommendations

1. Complete repairs to the rooftop air handling unit which was not functioning at the time of inspection.
2. Routine periodic non-abrasive custodial cleaning of the gym should continue.
3. Our next monitoring will be conducted in December, 2022 during the heating season. During the December inspection we will work with Facilities to determine optimal outdoor air introduction rates and occupied/non-occupied period settings for the winter heating season.

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](http://www.esmcorp.com)

Reviewed and Authorized:  
*Richard M. Lynch*  
Richard M. Lynch, Ph.D., CIH, CMC, CMRS, CHFM  
NJ Licensed Indoor Environmental Consultant  
President, ESMCorp  
[rlynch@esmcorp.com](mailto:rlynch@esmcorp.com)