

October 15, 2024

Mr. Kelvin White
Director, Facilities
North Plainfield School District
33 Mountain Avenue
North Plainfield, NJ 07060

Dear Mr. White,

This report summarizes the results of the October 2nd – 3rd, 2024 mercury air monitoring of the Somerset Intermediate School gym for mercury vapors. Evaluation criteria and methods are identical to those previously reported and will not be repeated herein.

Methods

The following methods were followed during this assessment:

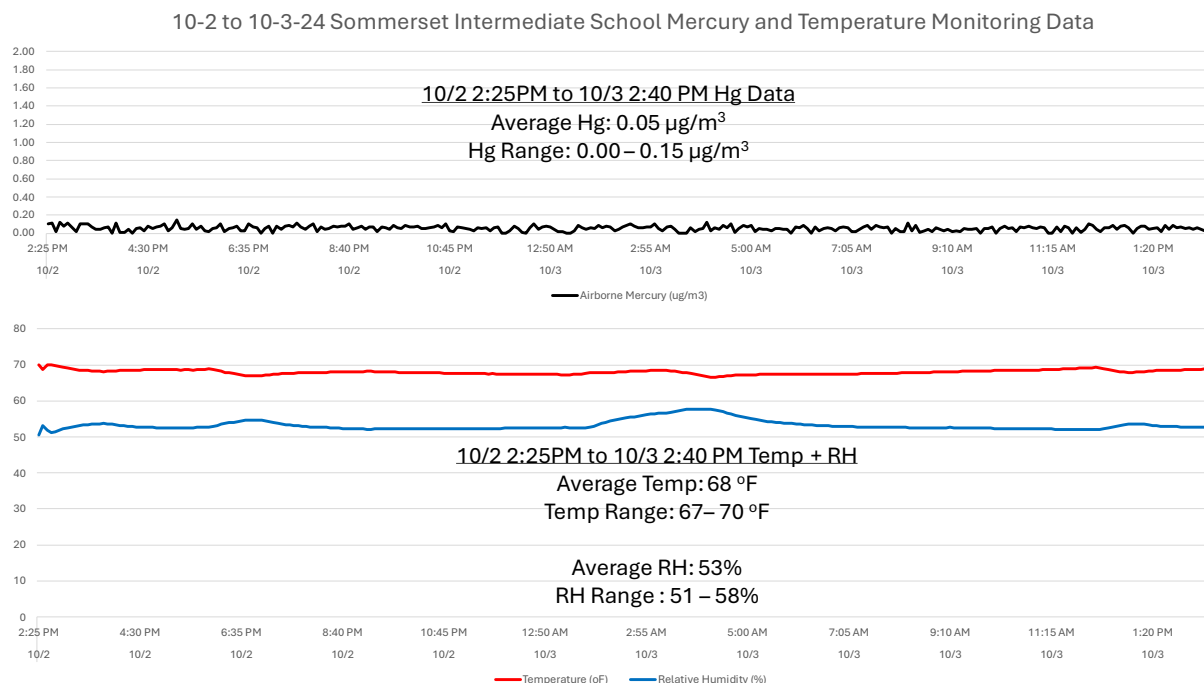
1. Continuous air monitoring was conducted within the gym during normal occupancy by students and staff between approximately 2:25 PM on October 2nd to 2:40 PM on October 3rd, 2024
2. All mercury air monitoring was conducted using a calibrated Jerome J505 Mercury Vapor Analyzer with a reported detection 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.
3. Temperature and humidity were monitored over the same period using a TSI Q-Trak 7575 IAQ monitor.

Findings

Findings revealed the following:

- Outdoor airborne mercury was measured at approximately 0.01 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$). The outdoor temperature ranged between 57-74°F during the inspection.
- Airborne mercury levels measured in the gym between 2:25 PM on October 2nd to 2:40 PM on October 3rd, 2024, **averaged 0.05 $\mu\text{g}/\text{m}^3$ (range 0.00 to 0.15 $\mu\text{g}/\text{m}^3$); well below the NJDOH Guideline of 0.8 $\mu\text{g}/\text{m}^3$.**
- Gym temperature averaged 68°F (range 67-70 °F) during this monitoring period. Relative humidity averaged 53%, consistent with NJ Department of Health guidelines.

Figure #1 below shows details of continuous monitoring results.



Conclusions and Recommendations

Based upon the above, airborne mercury levels within the Somerset Intermediate School gym during our October 2024 quarterly air monitoring averaged 0.05 $\mu\text{g}/\text{m}^3$ substantially lower than NJ Department of Health guideline of 0.8 $\mu\text{g}/\text{m}^3$. No unusual mercury exposure hazard is suggested for students, staff or visitors.

Recommendations

Based upon these findings, continue to operate the gym's HVAC system under the current temperature and fresh air introduction settings during the remainder of the fall 2024 season.

Our next routine mercury monitoring will be scheduled during the winter December/January period.

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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