

May 29, 2020

Ms. Paula J. Smith
Business Administrator
Cape May County Technical School District
188 Crest Haven Road
Cape May Court House, NJ 08210

Dear Ms. Smith,

This report summarizes the results of the May 20, 2020 mercury air monitoring of the Cape May Technical School MAC gym. This report is a follow-up to our mercury screening report of March 4, 2020. Mr. Richard A Lynch, MBA, CIEC, conducted this assessment.

Airborne Mercury Test Results

The MAC gym's overhead air handler was operating at the time of inspection. Operating parameters were reported at 24/7 occupied mode at set point 65°F.

Air Monitoring Findings revealed the following:

- Outdoor airborne mercury was measured at approximately 0.05 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$) approximately equivalent to the lower detection limit for the J505 Mercury Vapor Monitor. Outdoor temperature was approximately 52°F@45% relative humidity at the time of monitoring (it was raining at the time).
- MAC Gym – Spot monitoring for mercury within the MAC gym revealed airborne mercury levels ranging between 0.15 and 0.19 $\mu\text{g}/\text{m}^3$; well below the NJ Department of Health guideline of 0.8 $\mu\text{g}/\text{m}^3$.
- Continuous air monitoring conducted within the center of the MAC gym between approximately 9:55 AM and 2:15 PM revealed average airborne mercury levels at 0.16 $\mu\text{g}/\text{m}^3$ and a maximum of 0.21 $\mu\text{g}/\text{m}^3$; well below the NJ Department of Health guideline of 0.8 $\mu\text{g}/\text{m}^3$. Average gym temperature during this monitoring period was 67°F (see figure #1 below).
- Airborne mercury levels in all surrounding areas including the boys and girls locker rooms, weight room, gym hallway and main hallway were ranged between 0.06 to 0.16 $\mu\text{g}/\text{m}^3$; well below the NJ Department of Health guideline of 0.8 $\mu\text{g}/\text{m}^3$.

Conclusions and Recommendations

Based upon the above, it is our professional opinion that the airborne mercury levels within the

MAC gym during our May 2020 monthly air monitoring with the HVAC running in 24/7 occupied mode at 15% minimum outdoor air damper position ranged between 0.06 and 0.21 $\mu\text{g}/\text{m}^3$; substantially lower than NJ Department of Health guideline of 0.8 $\mu\text{g}/\text{m}^3$.

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

Sincerely,

Richard M. Lynch

Richard M. Lynch, Ph.D., CIH, FAIHA, CMC, CMRS, CHFM

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Certified Microbial Consultant

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