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October 17, 2018

Mr. Gualter T. Almeida
Director
Office of Court Management | Facilities Management & Capital Planning
Suffolk County Courthouse
Three Pemberton Square, Room 106
Boston, MA 02108

RE: Springfield District Court, Mercury Air Sampling, 50 State Street, Springfield, Massachusetts (EH&E 22629)

Dear Mr. Almeida:

Environmental Health & Engineering, Inc. (EH&E) provides this report describing the results of screening level measurements for the presence of mercury in the Springfield District Court Building (the Building) located at 50 State Street in Springfield, Massachusetts. This evaluation was conducted at the request of the Office of Court Management in response to indoor environmental quality concerns related to mercury in the Building. EH&E's survey results and details of the evaluation are provided in the following sections of this report. Please note that this report and EH&E's findings are subject to the limitations in Appendix A.

MEASUREMENTS OF MERCURY IN AIR

EH&E conducted a limited survey of selected areas of the Building on October 5, 2018. This survey included obtaining measurements of mercury concentrations in air using a real-time mercury vapor analyzer (Jerome J405). The Jerome J405 is a low-level mercury detection instrument with a detection limit of 500 nanograms per cubic meter (ng/m^3).

Evaluation for the presence of mercury vapor was conducted in limited locations selected by occupants of the Building and EH&E. Results of the mercury vapor testing did not identify the presence of mercury vapor in any of the sampling locations. All measurement results were less than the detection limit of 500 ng/m^3. A table indicating locations and concentrations measured in the Building is provided in Appendix B.

MERCURY SCREENING CRITERIA

EH&E conducted a review of current guidance levels related to mercury vapor exposure to identify relevant criteria for use in this evaluation. The U.S. Environmental Protection Agency (EPA) and the Agency for Toxic Substances and Disease Registry (ATSDR) Joint EPA/ATSDR National Mercury Cleanup Policy Work group established action level guidelines for mercury in indoor air.[1]

This group established an acceptable action level for normal occupancy for sensitive individuals in residential settings of less than 1,000 ng/m^3. For occupational settings during normal occupancy the established action level is less than 3,000 ng/m^3. The occupational concentration is based on the residential action level of 1,000 ng/m^3 adjusted for a workday (i.e., 24/7 exposure reduced to a 40-hour workweek).

CONCLUSION

EH&E verified that the airborne concentrations of mercury were below the detection limit of 500 ng/m^3 in all locations sampled. The results are also below the residential action level of 1,000 ng/m^3 and occupational action level of 3,000 ng/m^3 in all locations sampled. EH&E continues to work in collaboration with the Office of Court Management to address the indoor environmental quality concerns in the Building.

If you have any questions, please do not hesitate to contact me at 1-800-TALK EHE (1-800-825-5343).

Sincerely,

Matt A. Fragala, M.S., C.I.H.
Senior Scientist/Practice Director, Education & Commercial

Appendix A Limitations
Appendix B Data Table

[1] https://www.atsdr.cdc.gov/emergency_response/action_levels_for_elemental_mercury_spills_2012.pdf

Appendix A
Limitations

1. The Environmental Health & Engineering, Inc. (EH&E) indoor environmental quality assessment described in the attached report number 22629, *Springfield District Court, Mercury Air Sampling 50 State Street, Springfield, Massachusetts* (hereafter "the Report"), was performed in accordance with generally accepted practices employed by other consultants undertaking similar studies at the same time and in the same geographical area; and EH&E observed that degree of care and skill generally exercised by such other consultants under similar circumstances and conditions. The observations described in the Report were made under the conditions stated therein. The conclusions presented in the Report were based solely upon the services described therein, and not on scientific tasks or procedures beyond the scope of described services, nor beyond the time and budgetary constraints imposed by the client.

2. Observations were made of the site as indicated within the Report. Where access to portions of the site was unavailable or limited, EH&E renders no opinion as to the condition of that portion of the site.

3. The observations and recommendations contained in the Report are based on limited environmental sampling and visual observation and were arrived at in accordance with generally accepted standards of industrial hygiene practice. The sampling and observations conducted at the site were limited in scope, and therefore cannot be considered representative of areas not sampled or observed.

4. Where sample analyses were conducted by an outside laboratory, EH&E has relied upon the data provided, and has not conducted an independent evaluation of the reliability of these data.

5. The purpose of the Report was to assess the characteristics of the subject site as stated within the Report. No specific attempt was made to verify compliance by any party with all federal, state, or local laws and regulations.

Appendix B
Data Table

Table B.1 Mercury Vapor Concentrations Measured at Springfield District Court, 50 State Street, Springfield, Massachusetts, October 5, 2018

Room Number	Time (p.m.)	Location	Concentration (ng/m^3)
204 Lobby A	1:55	Desk	ND <500
	1:56	Window	ND <500
	1:57	Unit Ventilator – Fan On	ND <500
	1:58	Unit Ventilator – Fan On	ND <500
	1:59	Floor	ND <500
	1:59	Chair	ND <500
	2:00	Thermostat	ND <500
	2:01	Table	ND <500
Hallway	2:05	Outside Courtroom 3	ND <500
	2:06	Outside Courtroom 3	ND <500
	2:07	Outside Courtroom 4	ND <500
207 Lobby A	2:10	Center of Room	ND <500
	2:11	Desk	ND <500
	2:12	Unit Ventilator	ND <500
	2:13	Desk	ND <500
	2:15	Desk	ND <500
207 Lobby B	2:16	Desk	ND <500
	2:16	Desk	ND <500
	2:17	Center of Room	ND <500
101	2:20	Window	ND <500
	2:21	Conference Table	ND <500
	2:22	Computer Desk	ND <500
	2:23	Desk	ND <500
	2:24	Floor	ND <500
Main Clerk Office	2:28	Window	ND <500
	2:29	Window	ND <500
	2:30	Window	ND <500

ng/m^3 nanograms per cubic meter of air

Measurements were obtained using the Jerome J405 + Mercury Vapor Analyzer.