

Illinois Department of
**Public
Health**

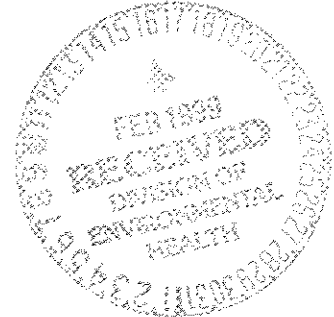
John R. Lumpkin, M.D., M.P.H., Director

4302 North Main Street • Rockford, Illinois 61103-1209

February 11, 1999

#102029901

WINNEBAGO COUNTY - Winnebago
McNair Middle School
Environmental Toxicology Program



Mr. Burns, Principal
McNair Middle School
100 E. McNair
Winnebago, IL 61088

Dear Mr. Burns:

On February 5, 1999 an indoor air investigation was conducted in the science room at the above school. This investigation was a result of a mercury spill that occurred in the room on February 1, 1999. As you are aware, a small amount of mercury was spilled on the floor near the front of the room. Some of the mercury went under a small wooden desk top cabinet.

A Jerome Mercury Vapor Analyzer was used during this investigation to measure the levels of mercury vapor in the room. Those results are attached.

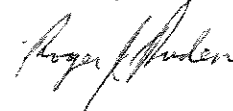
As you can see, the level of mercury vapors ranged from non-detectable to 0.004 milligrams per cubic meter of air (mg/m^3) in the breathing zone in the classroom. The mercury vapor level just above the spill area was $0.010 \text{ mg}/\text{m}^3$. The mercury vapor level inside the cabinet was $0.073 \text{ mg}/\text{m}^3$. It is interesting to note, that detectable levels of mercury vapor were not noted in the room until the cabinet was opened and our investigator began moving around the front of the room.

The State of Illinois currently uses an indoor air standard for mercury of $0.01 \text{ mg}/\text{m}^3$ (for non-occupational exposures). Although the breathing zone levels in the classroom are below this, we still strongly urge that you take steps to lower the levels further. Our recommendations to accomplish this are as follows;

- 1) Remove the front wooden cabinet from the room. This cabinet appears to be contaminated and may be contributing to some of the slightly elevated levels of mercury detected in the classroom. The cabinet should be discarded. If you choose to keep the cabinet, it should be aired out for several months then retested before placing back in a classroom.
- 2) A mercury spill kit (or powdered sulfur) should be used on the floor in the area of the spill. This will amalgamate any mercury to a form that does not vaporize as readily. (Please note that powdered sulfur is flammable)

Information regarding mercury was left with you during the investigation. If you have further questions, please feel free to contact myself or Steve Johnson at our Rockford Regional Office, 4302 North Main Street, Rockford Illinois 61103, telephone 815/987-7511.

Sincerely,



Roger J. Ruden, P.E.
Regional Engineer

SJ:sj

cc - Central Office
- Rockford Regional Office
- Winnebago County Health Department

enc.

McNair Middle School
 Winnebago, IL
 February 5, 1999
 Steve Johnson, Illinois Department of Public Health

Location	mg/m ³	Location	mg/m ³
NE front - BZ	ND	Inside cabinet	0.035
"	ND	SE front - floor	0.003
SW back - BZ	ND	SE front - BZ	0.003
"	ND	SW back - floor	0.003
Above spill area - BZ	ND	SW back - BZ	0.004
Next to spill area - floor	0.003	Outside room in hall - BZ	ND
"	0.003	"	ND
Just above spill area - floor	0.010	Middle of room - BZ	0.003
"	0.007	"	0.004
Inside cabinet, off bottom	0.073	"	0.003
Above spill area - BZ	0.003	"	0.003

ND = Not Detected
 BZ = Breathing Zone

Jerome Mercury Analyzer, sensor regeneration 2/5/99 - analyzer appeared to be functioning properly, ND at office and outside of science room in hall