

August 8, 2014  
Project No.: MA-147-14

Mr. Bob TerVeen  
Grand Rapids Public Schools  
900 Union Street, NE  
Grand Rapids, MI 49503

RE: Asbestos Air Clearance Testing  
North Park Elementary School- Flooring Project  
Grand Rapids, Michigan

Dear Mr. TerVeen:



119 West Cass Street  
P.O. Box 908  
Greenville, MI 48838  
Phone: 616-302-0819  
Web: [microairconsulting.com](http://microairconsulting.com)  
Email: [microairconsulting@gmail.com](mailto:microairconsulting@gmail.com)

This letter presents the results of asbestos air clearance testing conducted by MicroAir Consulting, LLC (MicroAir) inside North Park Elementary School located in Grand Rapids, Michigan. The air quality sampling was conducted in Rooms 100, 105, 123, 124, 125, 126 and 130 on August 5<sup>th</sup> thru August 8<sup>th</sup>, 2014 after floor tile removal.

## **AIR CLEARANCE TESTING RESULTS**

After the asbestos abatement activities were completed, MicroAir provided air clearance testing using phase contrast microscopy (PCM). The air sampling results indicated a fiber concentration within applicable regulatory limits for re-occupancy under the EPA 40 CFR, Part 763 AHERA standard. The air clearance samples collected in the locations described above were analyzed and the asbestos in air concentrations were calculated to be less than 0.01 fibers per cubic centimeter (f/cc).

## **EXPLANATORY NOTES**

### **Sampling and Analytical Methods**

The air samples were collected using a high volume pumps. The air sample pumps were calibrated prior to and after air sampling using a rotometer. MicroAir conducted a limited visual inspection of the areas prior to conducting the air clearance testing.

The PCM samples were collected on 0.8-micron pore size, 25-millimeter (mm) diameter, mixed cellulose ester filter membranes. The collection device was a 25 mm diameter cassette with an open-faced 50 mm extension cowl. The samples were analyzed using an Olympus™ phase contrast microscope.

Fibers greater than 5 microns in length with a 3:1 length-to-width ratio are counted. The PCM method does not differentiate between asbestos and other fibrous particulate matter. A minimum two field blanks were also analyzed to determine the filter's condition.

The PCM air samples were collected and analyzed in conformance with the National Institute of Occupational Safety and Health (NIOSH) Method 7400.



Any conclusions made are based on limited sampling and visual observations, and were derived in accordance with generally accepted standards of industrial hygiene practice. No other warranty, either expressed or implied, is made. In addition, the conclusions presented in the report were based solely upon the services described, and not on scientific tasks or procedures beyond the intended scope of services.

If you have any questions or require additional information, please contact me at 616-302-0819 or [microairconsulting@gmail.com](mailto:microairconsulting@gmail.com).

Sincerely,

**MicroAir Consulting, LLC**

*Christian T. Decker*

Christian T. Decker  
Owner

October 26<sup>th</sup>, 2018  
Project No.: MA-109-18

Mr. Marc Bennett  
Grand Rapids Public Schools  
Facilities Management & Planning  
900 Union, NE  
Grand Rapids, MI 49503



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P.O. Box 908  
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**RE: Report for Asbestos Air Quality Clearance Testing  
North Park Montessori Academy – Boiler & Tunnel Area**

Dear Mr. Bennett:

MicroAir Consulting, LLC (MicroAir) was retained by Grand Rapids Public Schools (GRPS) to conduct third party asbestos air quality testing including PCM air clearance monitoring at North Park Montessori Academy located at 3375 Cheney Avenue NE, in Grand Rapids, Michigan. Sampling was conducted after the abatement contractor completed removal of asbestos-containing materials on October 25<sup>th</sup>, 2018.

### **Scope of Work**

The scope of MicroAir's services included collecting asbestos air quality clearance samples for airborne asbestos fibers and final visual inspections of the work areas.

### **Worker Certifications**

Abate-Pro provided a crew of 2-4 asbestos abatement workers during the clean-up. All abatement personnel had completed a minimum of 32 hours of training in the health and safety aspects of asbestos, as required, and were accredited under Michigan Public Act 135 (1986). In addition, Abate-Pro personnel were reported to have been medically examined, as specified in Occupational Safety and Health Administration regulation 29 CFR 1926.1101, which includes a chest X-ray within the past five years and a pulmonary function test. The Abate-Pro foremen had received approved 40-hour Asbestos Contractor Supervisor training, an 8-hour refresher course within the past year, and were accredited as a "Competent Person" in the State of Michigan. This documentation was provided as requested by Insulation Services.

### **Engineering Controls and Work Practices**

The methods of asbestos activities complied with relevant state and federal regulations. Work areas were isolated prior to asbestos activities. Vacuums and wet wiping were used to clean the work areas were equipped with HEPA filters. Following the asbestos removal and clean-up activities, MicroAir conducted a visual inspection of the regulated areas and air clearance sampling was conducted.

### **Air Monitoring and Inspection Procedures**

Air samples were collected in accordance with EPA NIOSH 7400 method (Issue 2 of August 15, 1994) as described in Appendix A of 29 CFR 1926.1101. PCM air clearances were collected in accordance with 40 CFR Part 763 (AHERA). Clearance samples were collected by MicroAir inside the abatement areas using calibrated Gast high volume air sampling pumps.

All pumps were calibrated to ensure accuracy in the sample volume. All samples were collected using 25 millimeter diameter, 0.8 micrometer, open faced filter cassettes equipped with non-static 50 millimeter extension cowls. The filter media were mixed cellulose ester membranes. All samples were analyzed onsite by MicroAir analysts using phase contrast microscopy. The air sampling and visual inspection was performed by Mr. Chris Decker.

### **Air Monitoring Sample Results**

PCM air samples were collected inside the boiler room and the tunnel areas. Pipe insulation was removed from piping running inside the boiler room and in the tunnels. The PCM air clearance sampling results for the areas sampled after removal **were less than 0.01 f/cc.**

MicroAir is pleased to be of service to you. If you have any questions or require additional information, please contact me at 616-302-0819 or [microairconsulting@gmail.com](mailto:microairconsulting@gmail.com). Thank you.



Sincerely,

**MicroAir Consulting, LLC**

*Christian T. Decker*

Christian T. Decker  
Owner

October 30, 2018  
Project No.: MA-109-18

Mr. Marc Bennett  
Grand Rapids Public Schools  
Facilities Management & Planning  
900 Union, NE  
Grand Rapids, MI 49503

RE: Asbestos Air Quality TEM Clearance Sampling  
North Park Montessori Academy – Boiler Room and Tunnel Area  
3375 Cheney Avenue, NE, Grand Rapids, Michigan



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Dear Mr. Bennett:

This letter presents the results of asbestos (ACM) TEM air clearance testing conducted by MicroAir Consulting, LLC (MicroAir) inside the tunnel area of North Park Montessori Academy located at 3375 Cheney Avenue NE, in Grand Rapids, Michigan. The asbestos air clearance sampling was conducted on October 25, 2018.

#### **AIR CLEARANCE TESTING RESULTS**

After the asbestos abatement activities were completed, MicroAir provided TEM asbestos air quality testing in the removal area. The air sampling results indicated a fiber concentration within applicable regulatory limits during the removal process and for re-occupancy under the EPA 40 CFR, Part 763 AHERA standard. **All samples had laboratory results showing asbestos structures concentrations were less than the detection limit of the testing method.** See attached lab report.

#### **Sampling and Analytical Methods**

The air samples were collected using high volume pumps. The air sample pumps were calibrated prior to and after air sampling using a rotometer. MicroAir conducted a visual inspection of the removal areas prior to conducting the TEM air clearance testing.

The TEM samples were collected on 0.8-micron pore size, 25-millimeter (mm) diameter, mixed cellulose ester filter membranes. The collection device was a 25 mm diameter cassette with an open-faced 50 mm extension cowl. The samples were analyzed by IATL labs in New Jersey on standard turnaround time.

Any conclusions made are based on limited sampling and visual observations, and were derived in accordance with generally accepted standards of industrial hygiene practice. No other warranty, either expressed or implied, is made. In addition, the conclusions presented in the report were based solely upon the services described, and not on scientific tasks or procedures beyond the intended scope of services.

If you have any questions or require additional information, please contact me at 616-302-0819 or [microairconsulting@gmail.com](mailto:microairconsulting@gmail.com). Thank you.

Sincerely,

**MicroAir Consulting, LLC**

A handwritten signature in black ink that reads "Christian T. Decker".

Christian T. Decker  
Owner

By Email

