

February 6th, 2018
Project Number: MA-109-18

Mr. James Teahan
Manager, Design, Construction and Renovation
Grand Rapids Public Schools
Facilities Management & Planning
900 Union NE
Grand Rapids, MI 49503

Re: Report for Asbestos Inspection
North Park Montessori in Grand Rapids, MI



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Mr. Teahan,

MicroAir Consulting, LLC (MicroAir) is pleased to present this letter report to Grand Rapids Public Schools which summarizes the results of the asbestos inspection performed at North Park Montessori located at 3375 Cheney NE, Grand Rapids, Michigan. Mr. Chris Decker performed the inspection on January 25th, 2018.

The purpose of this inspection is to identify the presence and extent of suspect asbestos inside the building renovation area. This report includes the certifications of the inspector, a description of the testing methods and procedures, and the results of the testing.

EXECUTIVE SUMMARY OF ASBESTOS-CONTAINING MATERIALS INSPECTION

The table below describes the asbestos-containing materials that are located inside North Park:

HSA NO.	HSA MATERIAL DESCRIPTION	ASBESTOS?	LOCATION
NP-5	Exterior metal window glazing	Yes	Exterior metal frame windows
NP-6	Textured plaster	Yes	Interior walls and ceilings
NP-7	Straight Pipe insulation	Yes	Boiler room, Coal bunker, crawl space north of Boiler room and above ceiling in hallway 16. (450 LF) 1LF of damage in Room 2
NP-8	Mudded fittings	Yes	Boiler room, Coal bunker, crawl space north of Boiler room and above ceiling in hallway 16
NP-9	9"x9" Floor tile w/mastic	Tile-Yes Mastic-Assumed	Rooms 100, 102, 105, 122, 123, 124, 125, 126, 16, 135, 15 and stairway 15

CERTIFICATION

Mr. Chris Decker is a State of Michigan accredited Asbestos Building Inspector and Management Planner, Accreditation No. A26683. Apex Research, Inc. conducted the sample analysis. Apex Research is an independent accredited environmental laboratory. Apex Research is an independent accredited environmental laboratories.

TESTING PROCEDURES AND SAMPLING METHODOLOGY

Asbestos Bulk Sampling

The bulk sampling was performed based on the requirements outlined in the Occupational Safety and Health Administration (OSHA) Asbestos in Construction Standard 29 CFR 1926.1101 and state and local rules and regulations.

The regulated limit for an asbestos-containing material is a suspect asbestos-containing material (ACM) having a concentration of 1% or greater. Sample locations were randomly selected by the inspector and submitted to the accredited laboratory. All layers of the submitted samples were analyzed. The bulk samples were analyzed by Polarized Light Microscopy (PLM) using EPA Method 600/R-93/116.

SUSPECT ASBESTOS-CONTAINING MATERIALS BULK SAMPLES

The following suspect asbestos-containing materials were observed at North Park Montessori during the asbestos inspection and the bulk sampling. Materials in **bold** were found to be greater than 1% ACM.

- 1"x1" Slotted Ceiling tile w/glue pod
- 1"x1" Random holes Ceiling tile w/glue pod
- 1"x1" Fissures Ceiling tile w/glue pod
- 1"x1" Pattern holes Ceiling tile w/glue pod
- **Exterior metal window glazing**
- **Textured plaster**
- **Straight Pipe insulation**
- **Mudded fittings**
- **9"x9" Floor tile** w/mastic
- Green 12"x12" Floor tile w/mastic
- White 12"x12" Floor tile w/mastic
- Rolled flooring w/mastic
- Wood floor underlayment
- Sink undercoating
- Exterior masonry caulk
- Boiler materials
- Ceramic grout
- Fire doors
- Roofing materials

RESULTS AND CONCLUSIONS

MicroAir conducted an asbestos inspection at North Park Montessori located at 3375 Cheney NE, Grand Rapids, Michigan. MicroAir completed the inspection on January 25th, 2018.

The laboratory results of the asbestos bulk sampling identified 5 of the suspect materials **DO** contain asbestos content. See Table 1 for additional information.

RECOMMENDATIONS

Friable ACM

MicroAir identified friable ACMs during this inspection, including pipe fittings, roof drains. When friable ACM is disturbed, such as during renovation or demolition, the asbestos fibers could be released into the environment. The identified friable ACM must be properly removed and disposed prior to the renovation activities that will disturb the ACM. Abatement of friable ACMs may require a ten working day written notification, depending on the quantity of the friable ACM, to the Michigan Department of Environmental Quality (MDEQ) and/or the MDLARA prior to the removal of friable ACM.

Category I, Non-Friable ACM

ACMs such as roofing and vinyl floor tile found in buildings are considered "Category I, non-friable ACM. These materials were found to be in good condition and therefore not subject to AHERA provided that these materials remain non-friable. However, if these materials are likely to become friable due to activities such as scraping, sanding, or grinding by equipment or these materials need to be removed, then proper work practices and engineering controls need to be utilized during such activities.

When "mechanical chipping" or "aggressive" removal methods are used or when the flooring material is to be removed in a non-intact state, then a negative pressure enclosure is required. Floor tile removal machines do not typically remove floor tile in an intact state. Contractors utilizing these machines for floor tile removal must perform this activity within a negative pressure enclosure.

If floor materials are removed substantially intact without "mechanical chipping" no negative pressure enclosure is required. The owner/contractor is not required to provide written notification to the MDEQ and/or the LARA. However, good industrial hygiene practices may warrant the use of respiratory protection

by the workers.

A licensed asbestos abatement contractor, as required by current federal, state, and local laws and regulations, should perform any necessary removal and disposal of the identified ACM.



Category II, Non-Friable ACM

MicroAir identified 1 non-friable ACMs during the inspection, the black lab counter backsplash. This materials is considered "Category II, non-friable ACM. However, these materials were found to be in damaged condition and are likely to become friable during demolition activities and need to be removed prior to demolition. Proper work practices and engineering controls need to be utilized during such activities.

Asbestos Abatement Contractor and Asbestos Air Quality Monitoring

A licensed asbestos abatement contractor, as required by current federal, state, and local laws and regulations, should perform any necessary removal and disposal of the identified ACM. MicroAir notes that if suspect ACM other than those identified during the course of this limited inspection are encountered during any renovation or demolition, such materials should be sampled and analyzed using PLM to verify the absence of presence of asbestos.

We also recommend that visual observations, verification of removal and cleanup, and PCM and/or TEM asbestos air quality monitoring for asbestos fibers be performed by a third party retained by the owner to demonstrate compliance with applicable regulations, and to confirm the suitability of the area for re-entry. (MicroAir Consulting can provide this service).

LIMITATIONS

In conducting the ACM there are a number of obstacles and limitations that can affect the final outcome of the report. These limitations include but are not limited to the following factors: access concerns, materials that cannot be intrusively sampled or damaged, materials that have been replaced by renovation activities, materials with conflicting laboratory results, and materials that are located in inaccessible and/or concealed areas which limits its quantification. Due to these limitations, the results of this investigation cannot be construed as a certification of the presence or absence of ACM, beyond the materials identified, but rather a diligent and prudent review of available data within an established work scope, and time and budgetary constraints. If additional quantities of material are located in the renovation area, work should stop until materials are properly disposed of.

If you have any questions or require additional information, please contact me at 616-302-0819 or 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

**TABLE 1
TESTED SUSPECT ASBESTOS-CONTAINING MATERIALS
NORTH PARK MONTESSORI
GRAND RAPIDS, MICHIGAN**

INSPECTION DATES: January 25th, 2018



HSA NO.	HSA MATERIAL DESCRIPTION	ASBESTOS CONTAINING?	MATERIAL LOCATION(S)
NP-1	1"x1" Slotted Ceiling tile w/glue pod	Both- No	Ceilings on drywall
NP-2	1"x1" Random holes Ceiling tile w/glue pod	Both- No	Ceilings on drywall
NP-3	1"x1" Fissures Ceiling tile w/glue pod	Both- No	Ceilings on drywall
NP-4	1"x1" Pattern holes Ceiling tile w/glue pod	Both- No	Ceilings on drywall
NP-5	Exterior metal window glazing	Yes	Exterior metal frame windows
NP-6	Textured plaster	Yes	Interior walls and ceilings
NP-7	Straight Pipe insulation	Yes	Boiler room, Coal bunker, crawl space north of Boiler room and above ceiling in hallway 16. (450 LF) 1LF of damage in Room 2
NP-8	Mudded fittings	Yes	Boiler room, Coal bunker, crawl space north of Boiler room and above ceiling in hallway 16
NP-9	9"x9" Floor tile w/mastic	Tile- Yes Mastic-Assumed	Rooms 100, 102, 105, 122, 123, 124, 125, 126, 16, 135, 15 and stairway 15
NP-10	Green 12"x12" Floor tile w/mastic	Both- Assumed	Interior floors
NP-11	White 12"x12" Floor tile w/mastic	Both- Assumed	Interior floors
NP-12	Rolled flooring w/mastic	Both- Assumed	Gym floor
NP-13	Wood floor underlayment	Assumed	Classrooms
NP-14	Sink undercoating	Assumed	Metal sinks
NP-15	Exterior masonry caulk	Assumed	Masonry seams
NP-16	Boiler materials	Assumed	Inside Boiler
NP-17	Ceramic grout	Assumed	Ceramic tiled areas
NP-18	Fire doors	Assumed	Boiler room and other tagged fire doors
NP-19	Roofing materials	Assumed	Exterior flat roof

FRIABILITY:

F: Friable
NF-I: Non-friable Category I
NF-II: Non-friable Category II

MATERIAL TYPE:

TSI: Thermal System Insulation
SM: Surfacing Material
MM: Miscellaneous Material

CONDITION:

Good: Little or no damage
Damaged: Less than 10% damage of total surface area, or less than 25% damage in a localized area
Significantly Damaged: Greater than 10% damage of total surface area, or greater than 25% damage in a localized area

SF: Square feet LF: Linear feet FT: Fittings NQ: Not Quantified