



**SIERRA** ENVIRONMENTAL GROUP, INC.

November 29, 2022

Mr. Devin Huff  
Maintenance Supervisor  
**Ross Local Schools**  
3371 Hamilton-Cleves Road  
Hamilton, Ohio 45013  
(513) 633-4833

**RE: Summary of Clearance Inspection and Clearance Air Monitoring  
Administration Building – 1<sup>st</sup> Floor South Wing, Restroom  
3371 Hamilton-Cleves Road  
Hamilton, Ohio 45013  
Sierra Project Number: Ross.011**

Dear Mr. Huff:

On November 23, 2022, Mr. Chuck Callahan (Ohio Environmental Protection Agency Certified Asbestos Hazard Evaluation Specialist # ES31960) of Sierra Environmental Group, Inc., (Sierra) performed a clearance inspection and final clearance air monitoring services relating to the removal of asbestos-containing acoustical ceiling plaster at the above referenced location.

Before clearance air samples were collected, Sierra's on-site representative performed a comprehensive visual inspection to determine if all specified asbestos-containing materials had been removed and if the regulated work area had been satisfactorily decontaminated so as to be free of any visible dust. After it was determined that these materials were removed and the regulated work area decontaminated, clearance air samples were collected.

Five aggressive clearance samples were collected from the contained work area in the specified area where the work was performed and analyzed in accordance with the 40 CFR Part 763 (AHERA) by Transmission Electron Microscopy (TEM). The results of these samples were reported as below 70 Structures/mm<sup>2</sup> of air level required for clearance by this method. Sierra notified Ross Local Schools that the work area passed air clearance and that the regulated areas are clear for re-occupancy.

Enclosed are the following Sierra documents: 1) Air Sampling Record; 2) Pre-Clearance Visual Inspection form; 3) Laboratory Report and 4) Inspector's Certification.

Sierra appreciates this opportunity to provide Ross Local Schools with asbestos management services. If you have any questions about this report, or if Sierra can be of additional services, please call us at (513) 542-5323.

Sincerely

**SIERRA ENVIRONMENTAL GROUP, INC.**

Chuck Callahan, #ES31960  
Vice President

Attachments

# SIERRA ENVIRONMENTAL GROUP, INC. DAILY AIR SAMPLING RECORD

(Please Print Neatly)

| Client: Ross Local Schools   |       | Project Contact: Devin Huff                |           | Location: Administration Building, 3371 Hamilton-Cleves Road, Hamilton, Ohio 45013 |      | Sierra Representative: Chuck Callahan<br>TEM Analyst: ALS Environmental |                     |
|------------------------------|-------|--------------------------------------------|-----------|------------------------------------------------------------------------------------|------|-------------------------------------------------------------------------|---------------------|
| Project #: Ross.011          |       |                                            |           |                                                                                    |      |                                                                         |                     |
| Date: 11/23/2022             |       | Means of Pump Calibration: 3H              |           | Microscope Field Area: 0.00785 sq mm<br>other sq mm                                |      | PCM Filter: 0.8µm 25mm Mft. 0.8µm 37 mm Lot#                            |                     |
|                              |       |                                            |           | TEM Filter: X MCE X PC                                                             |      | X <0.45µm 25mm Mft. X <0.45µm 37mm Lot#                                 |                     |
| Sample #                     | Type  | Sample Description                         | Activity  | Time (24 Hour Clock)                                                               |      | Flow Rate (L/Min)                                                       |                     |
| Pump #                       |       | Location                                   |           | Start                                                                              | Stop | Average                                                                 | Air Volume (Liters) |
| 1                            | Blank | Field Blank                                | FB        | ***                                                                                | ***  | ***                                                                     | ***                 |
| 2                            | Blank | Field Blank                                | FB        | ***                                                                                | ***  | ***                                                                     | ***                 |
| 3                            | Blank | Field Blank                                | FB        | ***                                                                                | ***  | ***                                                                     | ***                 |
| 4                            | IWA   | 1 <sup>st</sup> floor, south wing restroom | Clearance | 11:10                                                                              | 1:20 | 9.45                                                                    | 1229                |
| 5                            | IWA   | 1 <sup>st</sup> floor, south wing restroom | Clearance | 11:10                                                                              | 1:20 | 9.45                                                                    | 1229                |
| 6                            | IWA   | 1 <sup>st</sup> floor, south wing restroom | Clearance | 11:11                                                                              | 1:21 | 9.45                                                                    | 1229                |
| 7                            | IWA   | 1 <sup>st</sup> floor, south wing restroom | Clearance | 11:11                                                                              | 1:21 | 9.45                                                                    | 1229                |
| 8                            | IWA   | 1 <sup>st</sup> floor, south wing restroom | Clearance | 11:12                                                                              | 1:22 | 9.45                                                                    | 1229                |
| <b>Blind Recount</b>         |       |                                            |           |                                                                                    |      |                                                                         |                     |
| Collected by: Chuck Callahan |       | Date: 11/23/2022<br>Time: 2:00 PM          |           | Relinquished by:                                                                   |      | Date: _____<br>Time: _____                                              |                     |
| Received by:                 |       | Date: _____<br>Time: _____                 |           | Analyzed by: ALS                                                                   |      | Date: 11/28/2022<br>Time: _____                                         |                     |

Please use reverse side of form for sampling location diagram.

## KEY TO ABBREVIATIONS:

SAMPLE TYPE: P = personal; IWA = inside work area; OWA = outside work area; BG = background;  
 HEX = hepa exhaust; CL = clearance.



# SIERRA ENVIRONMENTAL GROUP, INC. PRE-CLEARANCE VISUAL INSPECTION

(Please Print Neatly)

|                                   |                                    |                                                               |                                           |
|-----------------------------------|------------------------------------|---------------------------------------------------------------|-------------------------------------------|
| Client: <u>Ross Local Schools</u> | Project Contact: <u>Devin Huff</u> | Location: <u>Ross Admin Bldg</u>                              | Sierra Representative: <u>Chuck Cella</u> |
| Project #: <u>Ross.011</u>        | Time: <u>1100</u>                  | Contractor Foreman (Name and Company): <u>Brad Vehr / EDG</u> | Work Area: <u>1<sup>st</sup> swing RC</u> |
| Date: <u>11/23/22</u>             |                                    |                                                               |                                           |

**Inspection:**

First Inspection \_\_\_\_\_ Reinspection \_\_\_\_\_

## Contractor Certification of Visual Inspection

In accordance with the asbestos abatement workplan/specifications, the Contractor hereby certifies that he has visually inspected the Work Area (all surfaces, including pipes, beams, ledges, walls, ceiling and floor, decontamination unit, sheet plastic, etc.), and has found no dust and/or debris.

Contractor's Foreman or Representative: \_\_\_\_\_

Brad Vehr  
(Print Name)

[Signature]  
(Signature)

## Sierra Representative's Certification of Visual Inspection

1. No visible debris on walls and floors.
2. No visible debris between deck and beams.
3. No visible debris behind perimeter columns.
4. No visible debris on top of ducts.
5. No visible debris on hangers, rods, lights.
6. No visible debris on surfaces covered by poly.
7. No visible debris on pipes.
8. All bags of waste removed from work area.
9. All equipment clean, including underside of negative air units.
10. Negative pressure differential  $\geq 0.02$  inches of water.
11. Airless spray equipment used for encapsulation.
12. The area suitable for encapsulation.

**Proceed with encapsulation:** ☒ Yes ☐ No

Comments: \_\_\_\_\_

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Sierra Representative: \_\_\_\_\_

Chuck Cella  
(Print Name)

[Signature]  
(Signature)



Contact: Chuck Callahan  
Company: Sierra Environmental Group, Inc  
Address: 1051 Straight Street,  
Cincinnati, OH 45214

## REFERENCE DATA

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Project / Location: Admin Building; Ross.011

PO Number: NA

ALS Work Order: 22110827

**NARRATIVE:** Analysis performed on FEI Tecnai G2 Spirit Twin TEM at 100keV equipped with EDAX Octane T Plus Silicon Drift Detector System and Z2 Analyzer. Morphology SAED, and EDXA used to determine species. All sample collection is performed outside of ALS and is the sole responsibility of client. If collection or submission deviates from any method requirement, then interpretation of the results via the method cannot be made. The analytical sensitivity (AS) for this method is based on the detection of one confirmed asbestos structure in the total area analyzed and is expressed in str/mm<sup>2</sup> and str/cc(mL)\* dependent upon the air volume (L) provided by the client. As with any measurement statistically derived uncertainty data as it impacts this method should be considered when interpreting results. Measures of individual analyst and laboratory accuracy and precision are routinely tabulated and can be made available upon request. Sample filters are archived for 30 days, and analyzed TEM grids are archived for 3 years. Results apply only to the portions of the samples analyzed. Raw data validated by analyst.

**METHOD CODE:** "AHERA" refers to samples prepared and analyzed according to EPA AHERA protocol published in 40 CFR Part 763 Appendix A subpart E. Structure sizes measured according to Yamate Level II. When possible, sufficient openings are analyzed to reach AS of <0.005 str/cc. However, samples collected with volumes <1200L may not reach AS. Therefore, a maximum of 10 openings will be analyzed regardless of AS reached. Analysis of clearance samples will be terminated upon completion of the opening containing the structure which causes the projected average concentration to exceed 70 str/mm<sup>2</sup>.

Note: AHERA regulations prohibit shipping or storage of air samples in the same container as bulk samples, analysis of filters exceeding 10% particulate loading, filters exhibiting uneven loading, or indirect preparation of overloaded filters. Samples exhibiting any prohibited conditions shall be rejected for analysis.

*\*In order to provide results in fibers/cc, the sample air volumes in Liters **must** be provided via the COC which accompanies the samples at the time of receipt by the analyzing laboratory. Reports requiring revision as a result of information missing from the original COC will incur an additional administrative fee.*

**ABBREVIATIONS:** NA=Not Applicable, ND=None Detected, AS=Analytical Sensitivity, Str=structures  
**ALS is accredited for the AHERA method through New York ELAP (Lab#11371).**

*Pamela M. Hizar*

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Pamela M. Hizar  
ALS Microscopy Technical Manager



# SAMPLE IDENTIFICATION

|                                       |              |              |              |              |              |
|---------------------------------------|--------------|--------------|--------------|--------------|--------------|
| Client Sample ID:                     | 4            | 5            | 6            | 7            | 8            |
| ALS Sample ID:                        | 22110827-04A | 22110827-05A | 22110827-06A | 22110827-07A | 22110827-08A |
| Method Code:                          | AHERA        | AHERA        | AHERA        | AHERA        | AHERA        |
| Analyst:                              | Pamela Hizar | Pamela Hizar | Pamela Hizar | Pamela Hizar | Pamela Hizar |
| Date Analyzed:                        | 11/28/2022   | 11/28/2022   | 11/28/2022   | 11/28/2022   | 11/28/2022   |
| Air Volume (L):                       | 1229         | 1229         | 1229         | 1229         | 1229         |
| Openings Analyzed:                    | 7            | 7            | 7            | 7            | 7            |
| Avg. Opening Area (mm <sup>2</sup> ): | 0.0102       | 0.0102       | 0.0102       | 0.0102       | 0.0102       |
| AS: str/mm <sup>2</sup> :             | 14.01        | 14.01        | 14.01        | 14.01        | 14.01        |
| AS: str/cc (mL):                      | 0.0044       | 0.0044       | 0.0044       | 0.0044       | 0.0044       |

## ASBESTOS <5µm

|                                      |     |     |        |     |        |
|--------------------------------------|-----|-----|--------|-----|--------|
| Chrysotile:                          | 0   | 0   | 1      | 0   | 1      |
| Amosite:                             | 0   | 0   | 0      | 0   | 0      |
| Crocidolite:                         | 0   | 0   | 0      | 0   | 0      |
| Actinolite:                          | 0   | 0   | 0      | 0   | 0      |
| Tremolite:                           | 0   | 0   | 0      | 0   | 0      |
| Anthophyllite:                       | 0   | 0   | 0      | 0   | 0      |
| Total Asbestos <5µm:                 | 0   | 0   | 1      | 0   | 1      |
| Concentration: str/mm <sup>2</sup> : | <AS | <AS | 14.01  | <AS | 14.01  |
| Concentration: str/cc(mL):           | <AS | <AS | 0.0044 | <AS | 0.0044 |

## ASBESTOS ≥5µm

|                                      |     |     |     |     |     |
|--------------------------------------|-----|-----|-----|-----|-----|
| Chrysotile:                          | 0   | 0   | 0   | 0   | 0   |
| Amosite:                             | 0   | 0   | 0   | 0   | 0   |
| Crocidolite:                         | 0   | 0   | 0   | 0   | 0   |
| Actinolite:                          | 0   | 0   | 0   | 0   | 0   |
| Tremolite:                           | 0   | 0   | 0   | 0   | 0   |
| Anthophyllite:                       | 0   | 0   | 0   | 0   | 0   |
| Total Asbestos ≥5µm:                 | 0   | 0   | 0   | 0   | 0   |
| Concentration: str/mm <sup>2</sup> : | <AS | <AS | <AS | <AS | <AS |
| Concentration: str/cc(mL):           | <AS | <AS | <AS | <AS | <AS |

## TOTAL ASBESTOS

|                                      |     |     |        |     |        |
|--------------------------------------|-----|-----|--------|-----|--------|
| Total Asbestos Count:                | 0   | 0   | 1      | 0   | 1      |
| Concentration: str/mm <sup>2</sup> : | <AS | <AS | 14.01  | <AS | 14.01  |
| Concentration: str/cc(mL):           | <AS | <AS | 0.0044 | <AS | 0.0044 |
| Sample Comments:                     | NA  | NA  | NA     | NA  | NA     |

## AVERAGE ASBESTOS CONCENTRATION\*

Concentration: str/mm<sup>2</sup>: 5.60

Concentration: str/cc(mL): 0.0018

\*Average asbestos concentration applies ONLY to TEM AHERA clearance sets of 5 inside samples.

## NOTES

Three blanks submitted were not analyzed per client instructions.

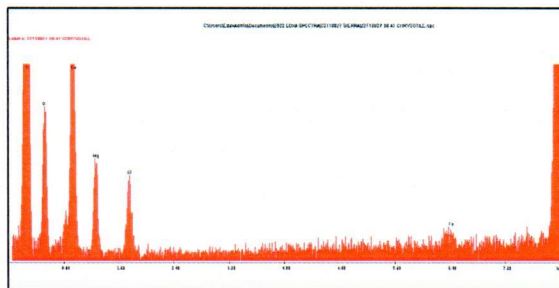
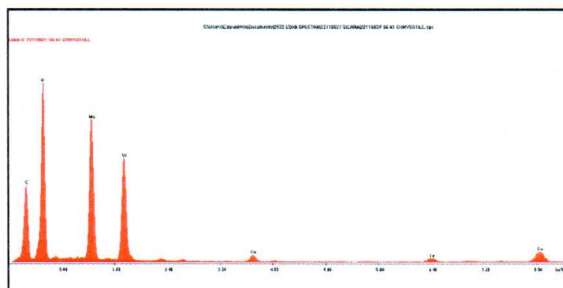
## PHOTOMICROGRAPHS

Collected using Gatan Digital Micrograph, OMAX Digital Camera, and/or iPhone/Smartphone and adapters.



## EDXA SPECTRA

Resolution <170eV. Spurious peaks may originate from holder, pole pieces, grids, solutions or matrices.









Mike DeWine, Governor  
Jon Husted, Lt. Governor  
Laurie A. Stevenson, Director

10/17/2022

Chuck Callahan  
Sierra Environmental Group  
1041 Straight Street  
Cincinnati, OH 45214

RE: Evaluation Specialist  
Certification Number: ES31960  
Expiration Date: 11/13/2023

Dear Chuck Callahan:

This letter and enclosed certification card approves your request to be certified as an asbestos Evaluation Specialist. You must present your card upon request at any project site while performing duties. Copies of cards are not acceptable as proof of certification.

This certification may be revoked by the Director of the Ohio Environmental Protection Agency (EPA) for violation of any of the requirements of 3745-22 or 3745-20 of the Ohio Administrative Code.

If you have any questions, please contact the Asbestos Program at 614-644-0226 or by email at [asbestoslicensing@epa.ohio.gov](mailto:asbestoslicensing@epa.ohio.gov).

Sincerely,

Joshua S. Koch  
Manager, Business Operations Support Section  
Ohio EPA - Division of Air Pollution Control

State of Ohio  
Environmental Protection Agency  
Asbestos Program

**Asbestos Hazard Abatement Specialist**

Chuck F  
Callahan

Sierra Environmental Group  
1041 Straight Street  
Cincinnati OH 45214

Certification Number **AS23558** Expiration Date **11.26.23**



DOB: 11/7/69  
Card not Valid if Altered