



healthAIR - Industrial Hygiene Services cleanWATER - Consulting & Testing Services safeEARTH - Hazardous Waste & Recycling Services

December 6, 2021

Mr. Bernie Rice Executive Director, Physical Properties Ann Arbor Public Schools 2555 South State Street Ann Arbor, Michigan 48104

RE: Project #AE210780

Asbestos Abatement Report Community High School

Dear Mr. Rice:

Per your request, Arch Environmental Group, Inc. (AEG) conducted project coordination and air monitoring activities for a small-scale, short duration asbestos abatement project at Community High School on December 3-4, 2021. Environmental Maintenance Engineers, a State of Michigan licensed asbestos abatement contractor, installed drywall sheets and unistruts to asbestos ceiling plaster in the 1st Floor Hallway and Main Office. The asbestos ceiling plaster was removed using Class II procedures and wet methods inside of a full negative enclosure. The asbestos ceiling plaster was properly disposed of as asbestos waste.

AEG conducted air monitoring during abatement activities during the abatement activities. The collected air samples have been analyzed utilizing Phase Contrast Microscopy (PCM) in accordance with NIOSH 7400 Methodologies. AEG uses the following nomenclature for referencing different types of air samples:

FB Field Blank
AS Area Sample
PS Personal Sample

PA Clearance (Post-Abatement) Sample

Following a thorough visual inspection of the project area, the PCM clearance samples collected in the 1st Floor Hallway and Main Office at Community High School on December 3-4, 2021, were analyzed below the AHERA PCM Clearance Level of 0.01 fibers per cubic centimeter (f/cc). The project areas shall be considered safe for reoccupancy.

Arch Environmental Group, Inc. looks forward to working with you in the future and helping you to address any concerns regarding environmental health and safety. If you have any questions regarding this report, or if I can be of further assistance please feel free to contact me at (248) 426-0165.

Project #AE210780

Asbestos Abatement Project Report Ann Arbor Public Schools Community High School Page 2

Sincerely,

Arch Environmental Group, Inc. Environmental Services

Gary Bosh

Project Consultant II, healthAIR

Attachments: Asbestos Daily Project Reports

Contractor Documentation

File: AE210780



Attachment

Asbestos Daily Project Reports





AFDs used:

Yes

ASBESTOS DAILY PROJECT REPORTS

On-Site Activity Summary

Client: Ann Arbor Public Schools Date: 12.3.2021 Consultant: Arch Environmental Group, Inc.

Building: Community High School Project Technician: Thinh Nguyen

Location: First floor and Main office Abatement Contractor: Environmental Maintenance Engineers, Inc.

Project #: AE210780 Competent Person: Shane Niblock

| Abatement Information | | Regulated Area Information | Regulated Area Information | | |
|---------------------------------|-----|---|----------------------------|--|----------------|
| OSHA Work Class | II | Enclosure Integrity Check (start of work shift): | Yes | Air samples collected: | Yes |
| | | Corrections necessary: | No | Calibrated pumps: | Yes |
| Contractor Activities | | Corrections made: | No | Baseline samples (BL) | no |
| Set-up procedures conducted: | Yes | Enclosure Integrity Check (middle of work shift): | Yes | Set-up samples (SS) | Yes |
| Abatement procedures conducted: | | Corrections necessary: | No | Personal samples (8 hr TWA) (PS) | Yes |
| Removal: | Yes | Corrections made: | No | Above/Below PEL: | Below |
| Encapsulation: | No | Enclosure Integrity Check (end of work shift): | Yes | Personal samples (STEL) (PS) | Yes |
| Repair: | No | Corrections necessary: | No | Above/Below PEL: | Below |
| Enclosure: | No | Corrections made: | No | Above/Below STEL: | Below |
| Wet methods used: | Yes | Negative air maintained: | Yes | Area samples (AS) | Yes |
| Clean up procedures: | Yes | Manometer reading: <#> | | PCM Clearance samples (PA) | No |
| Waste bags checked: | Yes | Smoke testing conducted: | Yes | Passed: | N/A |
| Conducted by: <x></x> | | Conducted by: <x></x> | | Aggressive: | N/A |
| # of Waste Bags: <#> | | Asbestos signs in place: | Yes | TEM Clearance samples (PA) | No |
| Final cleaning procedures: | Yes | Asbestos banner tape in place: | Yes | Passed: | N/A |
| Visual inspection: | Yes | Shower operational: | Yes | Aggressive: | N/A |
| Conducted by: <x></x> | | Dumpster secure at end of day: | Yes | | |
| Lock-down activities: | Yes | PPE - Disposable coveralls (Contractor): | Yes | Personal Samples Collected On: | |
| Tear-down procedures: | Yes | PPE - Respirators (Contractor): | Yes | Name(s): Jacob Starr | |
| | | Type: | HFNPR | A worker/workers who is/are representative | of all workers |
| Abatement Method(s) | | PPE - Disposable coveralls (Consultant): | Yes | within the work area (all workers are conduc | cting similar |
| Full Enclosure | | PPE - Respirators (Consultant): | Yes | activities) | |
| Non-Friable Project | | Type: | HFNPR | | |
| Glovebag | | | | Required Postings | |
| Criticals set-up: | Yes | Did Consultant enter enclosure: | No | Notification: | Yes |
| Shower set-up: | Yes | Time (A.M.): <##:## a.m ##:# | ## a.m.> | Supervisor/Competent Person Training: | Yes |
| | | | | | |

Time (P.M.): <##:## p.m. - ##:## p.m.>

OSHA Personal Sampling Posting:

Yes



ASBESTOS DAILY PROJECT REPORTS Contractor and Materials Information

Client: Ann Arbor Public Schools

Building: Community High School
Location: First floor and Main office

Project #: AE210780

Date: 12.3.2021 Consultant:

ultant: Arch Environmental Group, Inc.

Project Technician: Thinh Nguyen

Abatement Contractor: Environmental Maintenance Engineers, Inc.

Competent Person: Shane Niblock

Abatement Personnel Information

Abatement Personnel Information

Materials Abated - Quantity & Location

| Workers / Accreditation Numbers | | | | | |
|---------------------------------|---------------|--|--|--|--|
| Name: | Shane Niblock | | | | |

Name:Shane NiblockType: SupervisorAccred #:A43597Training:Exp. Date:12/18/2021Fit test:Activity:SupervisorPWO:

Personal #: N/A (No abate. activities)

Name: Jacob Starr Type: Supervisor
Accred #: A57207 Training:
Exp. Date: 5/4/2022 Fit test:
Activity: Removal of misc. NF PWO:

Personal #: PS1

Name: Erik Richardson Type: Supervisor

Accred #: A52387 Training:

Exp. Date: 6/5/2022 Fit test:

Activity: Removal of misc. NF PWO:

Personal #:

Personal #:

Name: Dylan Mexicotte Type: Supervisor
Accred #: A57208 Training:
Exp. Date: 5/4/2022 Fit test:
Activity: Removal of misc. NF PWO:
Personal #:

Workers / Accreditation Numbers

Name: Type: Accred #: Training: Exp. Date: Fit test: PWO: Activity: Personal #: Name: Type: Training: Accred #: Exp. Date: Fit test: Activity: PWO: Personal #: Name: Type: Accred #: Training: Exp. Date: Fit test: Activity: PWO: Personal #: Name: Type: Accred #: Training: Exp. Date: Fit test: Activity: PWO:

Personal #:

| Material | sf/lf/# | Locations |
|---------------------|---------|-------------------------------------|
| Drywall w/ Mud/Tape | 2 | 1st floor hallway, main office |
| Other Class II | 2 | 1st floor hall, main office Plaster |

Additional Work Activities

Were work activities conducted that were not included in original scopeof-work or that need to be tracked on a T&M basis?

No



ASBESTOS DAILY PROJECT REPORTS Air Sample Analysis Information

Client: Ann Arbor Public Schools Samples Collected By: Thinh Nguyen Building: Sample Collection Date: 12.3.2021 Community High School Location: First floor and Main office Samples Analyzed By: Thinh Nguyen Sample Analysis Date: Project #: AE210780 12.3.2021

| Sample ID | Sample Location | Start/End | Total Time (min) | Flow Rate (Lpm) | Volume (L) | Concentration (f/cc) | Density (f/mm²) |
|-----------|--|-----------|---------------------|--------------------|---------------|-------------------------|--------------------|
| I | | | | | | , | |
| FB1 | Sample prepared on-site. | | | | | | 3.82 |
| FB2 | Sample prepared on-site. | | | | | | 2.55 |
| AS1 | First Floor hallway outside Rm | 6:40 PM | 215 | 8.580 | 1845 | 0.002 | 14.01 |
| A51 | | 10:15 PM | | | | | |
| AS2 | Second Floor hallway outside main office | 6:45 PM | 210 | 8.436 | 1772 | 0.002 | 12.10 |
| | | 10:15 PM | 210 | | | | 12.10 |

AHERA PCM Clearance Level = 0.010 f/cc
AHERA TEM Clearance Level = 70 AS/mm2
State of Michigan PCM Clearance Level = 0.050 f/cc

Project Area Clearance Information

N/A



ASBESTOS DAILY PROJECT REPORTS OSHA Personal Air Sample Analysis

Client: Ann Arbor Public Schools Samples Collected By: Thinh Nguyen Building: Sample Collection Date: Community High School 12.3.2021 Location: First floor and Main office Samples Analyzed By: Thinh Nguyen Sample Analysis Date: Project #: AE210780 12.3.2021

| Sample ID | Sample Location | Start/End | Total Time (min) | Flow Rate (Lpm) | Volume (L) | Concentration (f/cc) | Density (f/mm²) |
|------------|---|-----------|---------------------|--------------------|---------------|-------------------------|--------------------|
| PS1 Series | Jacob Starr | 6:45 PM | 195 | 2.0 | 390 | 0.015 | |
| | | 10:00 PM | 155 | 2.0 | 330 | 0.006 | * |
| Activity: | removing drywall/plaster from hallway wall | 1 | | · | 1 | | |
| PS1 | Jacob Starr | 6:45 PM | 30 | 2.0 | 60 | 0.053 | 11.46 |
| 131 | | 7:15 PM | | | | 0.033 | 11.40 |
| PS1R1 | Jacob Starr removing plaster from main office | 7:15 PM | 165 | 2.0 | 330 | 0.008 | 9.55 |
| | | 10:00 PM | 103 | 2.0 | 330 | 0.008 | |

OSHA Permissible Exposure Limit = 0.100 f/cc, 8 hr TWA

OSHA STEL Limit = 1.0 f/cc

^{* = 8} hr Time Weighted Average



Ann Arbor Public Schools

Community High School

AE210780

Shower set-up:

AFDs used:

First floor and Main office

N/A (≤25 lf/10 sf/Intact)

Yes

Client:

Building:

Location:

Project #:

ASBESTOS DAILY PROJECT REPORTS On-Site Activity Summary

Date: 12.4.2021 Arch Environmental Group, Inc. Consultant:

Time (A.M.): <##:## a.m. - ##:## a.m.>

Time (P.M.): <##:## p.m. - ##:## p.m.>

Project Technician: Thinh Nguyen

> Abatement Contractor: Environmental Maintenance Engineers, Inc.

> > Supervisor/Competent Person Training:

OSHA Personal Sampling Posting:

Yes

Yes

Competent Person: Shane Niblock

| Abatement Information | | Regulated Area Information | | | Air Sample Information | | | |
|---------------------------------|-----|------------------------------------|--------------------|----------|---|------------------|--|--|
| OSHA Work Class | II | Enclosure Integrity Check (start o | of work shift): | Yes | Air samples collected: | Yes | | |
| | | Corrections necessary: | | No | Calibrated pumps: | Yes | | |
| Contractor Activities | | Corrections made: | | No | Baseline samples (BL) | no | | |
| Set-up procedures conducted: | Yes | Enclosure Integrity Check (middle | e of work shift): | Yes | Set-up samples (SS) | Yes | | |
| Abatement procedures conducted: | | Corrections necessary: | | No | Personal samples (8 hr TWA) (PS) | Yes | | |
| Removal: | Yes | Corrections made: | | No | Above/Below PEL: | Below | | |
| Encapsulation: | No | Enclosure Integrity Check (end of | f work shift): | Yes | Personal samples (STEL) (PS) | Yes | | |
| Repair: | No | Corrections necessary: | | No | Above/Below PEL: | Below | | |
| Enclosure: | No | Corrections made: | | No | Above/Below STEL: | Below | | |
| Wet methods used: | Yes | Negative air maintained: | | Yes | Area samples (AS) | Yes | | |
| Clean up procedures: | Yes | Manometer reading: | <#> | | PCM Clearance samples (PA) | Yes | | |
| Waste bags checked: | Yes | Smoke testing conducted: | | Yes | Passed: | Yes | | |
| Conducted by: <x></x> | | Conducted by: | <x></x> | | Aggressive: | Yes | | |
| # of Waste Bags: <#> | | Asbestos signs in place: | | Yes | TEM Clearance samples (PA) | No | | |
| Final cleaning procedures: | Yes | Asbestos banner tape in place: | | Yes | Passed: | N/A | | |
| Visual inspection: | Yes | Shower operational: | N/A (≤25 lf/10 sf/ | /Intact) | Aggressive: | N/A | | |
| Conducted by: <x></x> | | Dumpster secure at end of day: | | Yes | | | | |
| Lock-down activities: | Yes | PPE - Disposable coveralls (Contr | actor): | Yes | Personal Samples Collected On: | | | |
| Tear-down procedures: | Yes | PPE - Respirators (Contractor): | | Yes | Name(s): Jacob Starr | | | |
| | | Туре: | | HFNPR | A worker/workers who is/are representative | e of all workers | | |
| Abatement Method(s) | | PPE - Disposable coveralls (Consu | ultant): | Yes | within the work area (all workers are condu | cting similar | | |
| Full Enclosure | | PPE - Respirators (Consultant): | | Yes | activities) | | | |
| Non-Friable Project | | Туре: | | HFNPR | | | | |
| Glovebag | | | | | Required Postings | | | |
| Criticals set-up: | Yes | Did Consultant enter enclosure: | | No | Notification: | Yes | | |



ASBESTOS DAILY PROJECT REPORTS Contractor and Materials Information

Client: Ann Arbor Public Schools

Building: Community High School

Location: First floor and Main office

Project #: AE210780 Date: 12.4.2021

Consultant:

Arch Environmental Group, Inc.

Project Technician: Thinh Nguyen

Abatement Contractor: Environmental Maintenance Engineers, Inc.

Competent Person: Shane Niblock

Abatement Personnel Information

Abatement Personnel Information

Materials Abated - Quantity & Location

Workers / Accreditation Numbers

Shane Niblock Type: Supervisor Name: Accred #: A43597 Training: 12/18/2021 Exp. Date: Fit test: Supervisor PWO: Activity:

N/A (No abate. activities) Personal #:

Jacob Starr Type: Supervisor Name: A57207 Training: Accred #: 5/4/2022 Exp. Date: Fit test: Removal of misc. NF Activity: PWO: PS1 Personal #:

Erik Richardson Name: Type: Supervisor A52387 Accred #: Training: 6/5/2022 Exp. Date: Fit test:

Removal of misc. NF Activity: Personal #:

Dylan Mexicotte Name: A57208 Accred #: 5/4/2022 Exp. Date: Removal of misc. NF Activity: Personal #:

Personal #:

Personal #:

Personal #:

PWO:

Type: Supervisor Training: Fit test: PWO:

Workers / Accreditation Numbers

Name: Type: Accred #: Training: Exp. Date: Fit test: PWO: Activity:

Name: Type: Accred #: Training: Exp. Date: Fit test: Activity: PWO:

Name: Type: Accred #: Training: Exp. Date: Fit test: Activity: PWO:

Name: Type: Accred #: Training: Exp. Date: Fit test: Activity: PWO: Personal #:

sf/lf/# Material Locations

Drywall w/ Mud/Tape 2 First floor hallway, Rm 116

Additional Work Activities

Were work activities conducted that were not included in original scope-of-work or that need to be tracked on a T&M basis?

No



ASBESTOS DAILY PROJECT REPORTS Air Sample Analysis Information

Client: Ann Arbor Public Schools Samples Collected By: Thinh Nguyen Building: Sample Collection Date: 12.4.2021 Community High School Location: Samples Analyzed By: Thinh Nguyen First floor and Main office Sample Analysis Date: Project #: AE210780 12.4.2021

| Sample ID | Sample Location | Start/End | Total Time (min) | Flow Rate (Lpm) | Volume (L) | Concentration (f/cc) | Density (f/mm²) |
|-----------|--------------------------|-----------|---------------------|--------------------|---------------|-------------------------|--------------------|
| - | | | | | | | |
| FB1 | Sample prepared on-site. | | -1 | - | | | 3.82 |
| FB2 | Sample prepared on-site. | | | | | | 2.55 |
| PA1 | 2nd Floor Main office | 9:15 AM | 135 | 14.56 | 1966 | 0.002 | 14.01 |
| PAI | | 11:30 AM | | | | | |
| PA2 | First floor hallway | 11:00 AM | 135 | 14.2 | 1917 | 0.001 | 6.37 |
| PAZ | | 1:15 PM | | | | | |
| PA3 | Rm 116 | 11:15 AM | 135 | 14.62 | 1974 | 0.001 | 6.37 |
| | | 1:30 PM | 133 | | | | 0.37 |

AHERA PCM Clearance Level = 0.010 f/cc
AHERA TEM Clearance Level = 70 AS/mm2
State of Michigan PCM Clearance Level = 0.050 f/cc

Project Area Clearance Information

Passed



ASBESTOS DAILY PROJECT REPORTS OSHA Personal Air Sample Analysis

Client: Ann Arbor Public Schools Samples Collected By: Thinh Nguyen Building: Sample Collection Date: Community High School 12.4.2021 Location: First floor and Main office Samples Analyzed By: Thinh Nguyen Sample Analysis Date: Project #: AE210780 12.4.2021

| Sample ID | Sample Location | Start/End | Total Time (min) | Flow Rate (Lpm) | Volume (L) | Concentration (f/cc) | Density (f/mm²) |
|------------|--|-----------|---------------------|--------------------|---------------|-------------------------|--------------------|
| PS1 Series | Erik Richardson | 10:00 AM | 90 | 2.0 | 180 | 0.030 | |
| | | 11:30 AM | 30 | 2.0 | 180 | 0.006 | * |
| Activity: | removing drywall/plaster from hallway wall and ceiling plaster | | | | | | |
| PS1 | Erik Richardson | 10:00 AM | 30 | 2.0 | 60 | 0.045 | 10.19 |
| 131 | | 10:30 AM | | | | 0.043 | 10.13 |
| PS1R1 | Erik Richardson | 10:30 AM | 60 | 2.0 | 120 | 0.022 | 5.73 |
| | | 11:30 AM | 00 | | | | |

OSHA Permissible Exposure Limit = 0.100 f/cc, 8 hr TWA

OSHA STEL Limit = 1.0 f/cc

^{* = 8} hr Time Weighted Average

Attachment

Contractor Documentation

