



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

December 13, 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 10-11, 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 North Hallway. 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 North Hallway at Community High School on December 10-11, 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

Client:

### **ASBESTOS DAILY PROJECT REPORTS On-Site Activity Summary**

Ann Arbor Public Schools Date: 12.10.2021 Consultant: Arch Environmental Group, Inc.

Building: Community High School Project Technician: Thinh Nguyen

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

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)	No		
Abatement procedures conducted:		Corrections necessary:	No	Personal samples (8 hr TWA) (PS)	Ye		
Removal:	Yes	Corrections made:	No	Above/Below PEL:	Belov		
Encapsulation:	No	Enclosure Integrity Check (end of work shift):	Yes	Personal samples (STEL) (PS)	Yes		
Repair:	No	Corrections necessary:	Yes	Above/Below PEL:	Below		
Enclosure:	No	Corrections made:	Yes	Above/Below STEL:	Belov		
Wet methods used:	Yes	Negative air maintained:	Yes	Area samples (AS)	Ye		
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): Patrick O'Boyle			
		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 conduct	ting similar		
Full Enclosure		PPE - Respirators (Consultant):	Yes	activities)			
Non-Friable Project		Type:	HFNPR				
				Required Postings			
Criticals set-up:	Yes	Did Consultant enter enclosure:	No	Notification:	Ye		
Shower set-up:	Yes	Time (A.M.): <##:## a.m ##:	## a.m.>	Supervisor/Competent Person Training:	Yes		
·				and the second s			

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

Required Postings	
Notification:	Yes
Supervisor/Competent Person Training:	Yes
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
Project #: AE210780

Date: 12.10.2021

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**

Name: Shane Niblock Type: Supervisor

Accred #: A43597 Training:

Exp. Date: 12/18/2021 Fit test:

Activity: Supervisor PWO:

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

Name: Patrick O'Boyle Type: Supervisor

Accred #: A50125 Training:

Exp. Date: 3/14/2022 Fit test:

Activity: Removal of misc. NF PWO:

Personal #: PS1

PS1

Personal #:

Name: Dylan Mexicotte Type: Supervisor

Accred #: A57208 Training:

Exp. Date: 5/4/2022 Fit test:

Activity: Removal of misc. NF PWO:

Personal #: PS1

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

#### **Workers / Accreditation Numbers**

Name: Nathan Brown Type: Supervisor

Accred #: A49015 Training:

Exp. Date: 6/2/2022 Fit test:

Activity: Set-up Only PWO:

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

Name: Type:
Accred #: Training:
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
Other Class II	7	First floor north hallway

### **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

Thinh Nguyen

Client:Ann Arbor Public SchoolsSamples Collected By:Building:Community High SchoolSample Collection Date:

Building:Community High SchoolSample Collection Date:12.10.2021Location:First floorSamples Analyzed By:Thinh NguyenProject #:AE210780Sample Analysis Date:12.10.2021

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.						2.55
FB2	Sample prepared on-site.						1.27
AS1	Middle of north hallway	5:00 PM	180	8.580	1544	0.006	24.20
A31		8:00 PM					
AS2	Middle of south hallway	5:00 PM	180	8.436	1518	0.004	16.56
A32		8:00 PM					
AS1R1	Outside Decon	8:00 PM	180	8.580	1544	0.002	8.92
AJIKI		11:00 PM	100			0.002	6.92
AS2R1	At couthwest entrance	8:00 PM	180	8.436	1518	0.002	0.55
ASZK1	At southwest entrance	11:00 PM	100	0.430			9.55

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 12.10.2021 Location: First floor Samples Analyzed By: Thinh Nguyen AE210780 Sample Analysis Date: Project #: 12.10.2021

Sample ID	Sample Location	Start/End	Total Time (min)	Flow Rate (Lpm)	Volume (L)	Concentration (f/cc)	Density (f/mm²)
	I	6:00 PM				0.025	
PS1 Series	Patrick O'Boyle	10:45 PM	285	2.0	570	0.015	*
Activity:	installing unistruts to ceiling						
PS1	Patrick O'Boyle	6:00 PM	120	2.0	240	0.026	17.83
131		8:00 PM				0.020	17.03
PS1R1	Patrick O'Boyle	8:00 PM	30	2.0	60	0.053	10.19
POINT		8:30 PM	30			0.033	10.19
PS1R2	Patrick O'Paylo	8:30 PM	135	2.0	270	0.010	14.65
	Patrick O'Boyle	10:45 PM	135			0.018	14.05

**OSHA Permissible Exposure Limit** = 0.100 f/cc, 8 hr TWA **OSHA STEL Limit** = 1.0 f/cc

<sup>\* = 8</sup> hr Time Weighted Average



AFDs used:

Project #:

### **ASBESTOS DAILY PROJECT REPORTS**

**On-Site Activity Summary** 

Arch Environmental Group, Inc.

**OSHA Personal Sampling Posting:** 

Yes

Client: Ann Arbor Public Schools Date: 12.11.2021 Consultant:

Yes

**Building:** Community High School Project Technician: Thinh Nguyen

Location: First floor Abatement Contractor: Environmental Maintenance Engineers, Inc. Competent Person: AE210780 Shane Niblock

Abatement Information		Regulated Area Information	Air Sample 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)	No	
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:	Yes	Above/Below PEL:	Below	
Enclosure:	No	Corrections made:	Yes	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:	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): Patrick O'Boyle, Bradley Alt	herr	
		Type:	HFNPR	A worker/workers who is/are representative	e of all workers	
Abatement Method(s)		PPE - Disposable coveralls (Consultant):	Yes	within the work area (all workers are conduction	cting similar	
Full Enclosure		PPE - Respirators (Consultant):	Yes	activities)		
Non-Friable Project		Type:	HFNPR			
				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.>



### **ASBESTOS DAILY PROJECT REPORTS Contractor and Materials Information**

Client: Ann Arbor Public Schools

**Building:** Community High School

Location: First floor AE210780 Project #:

Date: 12.11.2021

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

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

Patrick O'Boyle Type: Supervisor Name: A50125 Accred #: Training: 3/14/2022 Exp. Date: Fit test: Removal of misc. NF Activity: PWO:

PS1 Personal #:

**Bradley Altherr** Type: Worker Name: A45730 Accred #: Training: 6/4/2022 Fit test: Exp. Date: Removal of misc. NF PWO: Activity: PS2 Personal #:

PWO:

Jacob Starr Type: Supervisor Name: A57207 Accred #: Training: 5/4/2022 Exp. Date: Fit test:

Removal of misc. NF

PS1 Personal #:

Activity:

**Workers / Accreditation Numbers** Name:

Erik Richardson

A52387 Accred #: 6/5/2022 Exp. Date:

Removal of misc. NF Activity:

PS1 Personal #:

Anthony Barbour Name:

A55397 Accred #: 9/30/2021 Exp. Date: Removal of misc. NF

Activity: PS2 Personal #:

Name:

Accred #: Exp. Date: Activity: Personal #:

Name:

Accred #: Exp. Date: Activity:

Personal #:

Type: Supervisor

Training: Fit test: PWO:

Type: Supervisor

Training: Fit test: PWO:

Type: Training: Fit test: PWO:

Type: Training: Fit test: PWO: Material sf/lf/# Locations Other Class II 25 First floor north hallway

### **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:** Community High School Sample Collection Date: 12.11.2021 Location: Samples Analyzed By: Thinh Nguyen First floor Project #: Sample Analysis Date: 12.11.2021 AE210780

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.						2.55
FB2	Sample prepared on-site.						1.27
***	Outside Decem	8:30 AM	450	0.500	1207	2 222	10.10
AS1	Outside Decon	11:00 AM	150	8.580	1287	0.002	10.19
462	At Southwest entrance	8:30 AM	150	8.436	1265	0.007	24.20
AS2	At Southwest entrance	11:00 AM	150	6.430	1205		24.20
AS1R1	Outside Decon	11:00 AM	150	8.580	1287	0.004	14.01
ASIKI	Tourside Decom	1:30 PM					14.01
AS2R1	At Southwest entrance	11:00 AM	150	8.436	1265	0.004	15.92
AJZKI	At southwest entrance	1:30 PM	150				13.92
AS1R2	Outside Decon	1:30 PM	120	8.580	1030	0.003	8.92
ASINZ		3:30 PM	120				0.92
AS2R2	At Southwest entrance	1:30 PM	120	8.436	1012	0.003	6.37
ASZINZ	At southwest entrance	3:30 PM	120	0.430	1012	0.003	0.37
PA1	Middle of north hallway	1:30 PM	135	14.62	1974	0.003	16.56
1.04	Tribule of Horar Hunway	3:45 PM	155	11.02		0.003	10.50
PA2	middle of south hallway	1:30 PM	135	14.56	1966	0.003	19.75
172	innatic of South Hanway	3:45 PM	155	14.50	1500	0.003	19./5

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: Community High School Sample Collection Date: 12.11.2021 Location: Samples Analyzed By: First floor Thinh Nguyen Project #: AE210780 Sample Analysis Date: 12.11.2021

Sample ID	Sample Location	Start/End	Total Time (min)	Flow Rate (Lpm)	Volume (L)	Concentration (f/cc)	Density (f/mm²)
PS1 Series	Patrick O'Boyle	9:00 AM	315	2.0	630	0.020	
r 31 Series		2:15 PM	313	2.0	030	0.013	*
Activity:	installing unistruts to ceiling						
PS1	Patrick O'Boyle	9:00 AM	120	2.0	240	0.013	10.19
P31		11:00 AM					10.19
PS1R1	Patrick O'Boyle	11:00 AM	30	2.0	60	0.049	0.55
POIKI		11:30 AM	30				9.55
20122	Patrick O'Boyle	11:30 AM	405	2.0	210	0.018	44.46
PS1R2		1:15 PM	105				11.46
PS1R3	Datrick Older de	1:15 PM	60	2.0	120	0.022	6.27
	Patrick O'Boyle	2:15 PM	60				6.37

OSHA Permissible Exposure Limit = 0.100 f/cc, 8 hr TWA
OSHA STEL Limit = 1.0 f/cc

<sup>\* = 8</sup> hr Time Weighted Average

PS2 Series	Bradley Altherr	9:00 AM	245	2.0	630	0.027	
		2:15 PM	315	2.0	630	0.018	*
Activity:	Removing plaster from ceiling/walls						
PS2	Bradley Altherr	9:00 AM	120	2.0	240	0.019	14.01
P32		11:00 AM					
PS2R1	Bradley Altherr	11:00 AM	- 30	2.0	60	0.102	17.83
FJZILI		11:30 AM					
PS2R2	Bradley Altherr	11:30 AM	105	2.0	210	0.014	9.55
PSZKZ		1:15 PM	103	2.0	210	0.014	9.55
PS2R3	Bradley Altherr	1:15 PM	60	2.0	120	0.027	10.19
	Bradiey Aitherr	2:15 PM	] 60				10.19

OSHA Permissible Exposure Limit = 0.100 f/cc, 8 hr TWA OSHA STEL Limit = 1.0 f/cc

<sup>\* = 8</sup> hr Time Weighted Average

### Attachment

**Contractor Documentation** 

