RPF Environmental
TESTING & CONSULTING SERVICES
Hazardous Materials Inspection & Assessment
Asbestos, Mold, Lead Paint, Radon, PCBs
Air Quality Testing and Investigations
Industrial Hygiene, Safety & Training

September 3, 2014

Mr. Bryan Lamirande
SAU 3, Berlin School District
183 Hillside Avenue
Berlin, NH 03570-1899

Re: Brown Elementary School
Asbestos Abatement Testing
Basement
RPF Project No. 146145

Dear Mr. Lamirande,

Enclosed are the analytical results for the air samples collected by RPF Environmental, Inc. (RPF) during the period of August 4 to August 14, 2014. The samples were collected before, during and after removal of designated sections of asbestos-containing building material (ACBM) at the Brown Elementary School. The scope of work completed by RPF during the project consisted of preparation of the site work plan, spot inspections during removal work and performance of air clearance testing after abatement in the work area. Results of the testing and inspections were reviewed with you or your site representative previously.

The contractor used by the District for this project was EnviroVantage of Epping, NH. EnviroVantage is a New Hampshire licensed asbestos abatement contractor (NH license #AC-098). Appendix A contains the accreditation sheets for the RPF testing and Appendix B contains the air sampling results.

The scope of abatement work performed by the abatement contractor is summarized in Table 1 below:

TABLE 1

Material	Location	Approximate Quantity
ACBM plaster base and skim coat	Basement: Room 201 closet area including wall up to server, Office/Closet 20/Hall area, Vending machine hallway across from room 208, Room 207, Room 206 closet and utility closet. Included demolition of the heating units in the 201, hall and 206 closet area.	1,635 square feet
ACBM pipe insulation	Basement Room 206 closet	10 linear feet

Clearance Testing

All air clearance testing and analysis was performed in accordance with 40 CFR Part 763 (AHERA) and New Hampshire Admn. Rule Env-A 1800. The final air clearance testing results met the clearance criteria set forth in the specification and State and federal regulations.

Based on the quantity of pipe insulation, plaster base and skim coat removed and the conditions of the removal observed by RPF, transmission electron microscopy (TEM) air clearance testing was performed in the containment area in accordance with 40 CFR Part 763.

Summary of Activity

Air monitoring results are included in Appendix B of this report. A copy of the site logs summarizing the work observed and testing by RPF is provided in Appendix C of this report.

The work was completed by the abatement contractor within work areas that were maintained under negative pressure and, for friable ACBM, within full containment barriers. Work methods used by the abatement contractor during the project included use of wet methods, HEPA vacuums, work area demarcation, critical barriers, a negative pressure enclosure, personal decontamination facility, and proper waste packaging at the site. Please reference the abatement specification provided previously to District for further details of work procedures and engineering controls.

Methodology

RPF performed area air sampling for total airborne fiber concentrations in accordance with the abatement specification and current asbestos regulations. Area samples were collected inside the work area, outside critical barriers, and other perimeter locations as indicated on the enclosed results.

High-volume and/or low volume air pumps were used to collect the samples and sampling pumps were calibrated before and after each sampling period utilizing secondary calibration standards. An on-site rotometer, utilized for secondary calibration of pumps, was calibrated against primary standard calibration and a calibration curve was calculated and used in the field to determine sampling flow rates.

PCM air samples were collected on 0.8-micron pore size, 25-millimeter diameter, mixed-cellulose-ester membrane filters in an open-faced orientation. PCM total airborne fiber concentrations were analyzed in accordance with NIOSH Method 7400. TEM air clearance samples were collected 0.45-micron pore size, 25-millimeter diameter, mixed-cellulose-ester membrane filters in an open-faced orientation.

Prior to performance of air clearance testing in each work area, visual inspections were conducted to ensure that adequate cleaning had been performed by the abatement contractor and that the designated ACBM scheduled for removal had been removed. As needed, the contractor was instructed to complete additional cleaning prior to the testing. Air clearance testing in each work area was performed in accordance with the work plan, AHERA clearance testing protocols, and New Hampshire Admn. Rule Env-A 1800 as applicable.

Visual inspections were performed by RPF in an effort to ensure that containment barriers were maintained, adequate wetting was performed, HEPA vacuums were used, proper decontamination procedures were used, waste was packaged and labeled properly and other observations for compliance with applicable asbestos regulations and the abatement work plan, as applicable. In addition, spot checks of the abatement contractor work documentation at the job site was performed in an effort to document that only licensed and trained workers performed that abatement activity. In the event that non-licensed or non-trained (current training) workers were observed, RPF directed the supervisor to restrict activity for those personnel to outside containment, non-abatement support activity only. As needed and for work actually monitored by RPF, recommendations for regulatory and specification compliance, corrective measures, and other issues were provided by RPF to the abatement contractor and Owner based on the conditions observed and progress of the abatement contractor's work efforts. RPF did not observe any off-site waste transportation or disposal activity.

Closing Summary

Final abatement contractor project submittals should be reviewed and filed by the District Asbestos Program Manager in accordance with the work plan and AHERA record keeping requirements. At a minimum, the following abatement records should be submitted by the abatement contractor:

- Site supervisor logs and daily sign-in sheets;
- Notifications and permits;
- Copies of current entity license and worker licenses and training records;
- Copies of OSHA exposure monitoring results; and,
- Signed copies of the asbestos waste shipment records.

Please note that a copy of the signed asbestos waste shipment record must be submitted to the NH Department of Air Resources in accordance with current State of NH regulations. The Contractor should submit this document to the State as part of the submittal package, but ultimately it is the Owner's responsibility to make sure that the State receives the copy of the waste shipment record document.

Results of all testing and recommendations pertaining to the RPF observations and inspections were provided at the job site to the abatement contractors' site supervisors and, as applicable, to you or your site representative.

Remaining ACBM should be managed in accordance with the school Asbestos Management Plan. The test results and information on ACBM that remains in the building, as applicable, should be communicated to employees and other employers at the buildings in accordance with the OSHA hazard communications regulation and other applicable state and federal regulations. In addition, for any renovation or new construction it is important to obtain architect/engineering certifications that no asbestos was specified or used in the new construction or in any newly installed building materials.

If you have any questions, or if you would like assistance reviewing the contractor submittals, please call our office at your convenience.

Sincerely,
RPF ENVIRONMENTAL, INC.

Kara Forsythe
Sr. EH&S Consultant

Enclosures:

Appendix A: Signature Sheets
Appendix B: Air Monitoring Results
Appendix C: Site Logs
Appendix D: Example Photographs
Appendix E: Limitations

R/146145 090314 SAU 3 Brown report

APPENDIX A

ACCREDITATION SIGNATURE SHEET

BROWN ELEMENTARY SCHOOL
Abatement Testing and Inspection

Testing Performed August 4 to August 14, 2014

Project Design

An abatement work plan or specification was prepared for the above mentioned project by RPF Environmental, Inc. (RPF). Specifications were prepared in accordance with the requirements of AHERA. ACBM removed during this work was as specifically designated by the District.

Signature: _____
Roger Francoeur, NH Lic. #AD000025, Exp. 08/13/15

Air Sample Collection

Air samples collected during this project were collected by RPF. Please reference the Project Specification for methods and procedures. RPF staff collecting samples have received training in NIOSH 7400 Method, 40 CFR Part 763 (AHERA), and abatement project monitoring.

Signature: _____
Michael Joyce, EH&S Technician

_____
Robert Fuller, EH&S Technician

Air Sample Analysis

Analysis of air samples collected during this project were completed by laboratories which meet the applicable requirements of 763.90(I) 2(ii). PCM analysis of air samples was completed by RPF Environmental, Inc., 320 First NH Turnpike, Northwood, NH 03261 (AIHA PAT ID #100093). TEM air clearance samples, as applicable, were analyzed by Scientific Analytical Institute of Greensboro, NC (NVLAP Accreditation #200664-0).

APPENDIX B

Client: SAU 3 - Berlin School District **Site Address:** Brown School, 190 Norway St., Berlin, NH **RPF File #:** 146145 **Date:** 08.04.14

Abatement Contractor: EnviroVantage **RPF Tech:** MJ **Submitted by/date/time:** 08.04.14 **Received by/date/time:** 08.04.14

Date Analyzed: 08.05.14 **Microscopist:** MJ **Verbal Results to:** KF **Scope Constant:** 49.02

Field No.	Sample Description:	Start:		Stop:		Total Time: (min)	Pre Cal (lpm)	Post Cal (lpm)	Pump #	Volume (Liters)	Detection Limit	Fibers	Fields	Blank	Concentration (fiber/CC)
		hr	min	hr	min										
080414 A01	Area Air Sample - Background - First Floor, Room 305, center of room. During work area prep.	09	38	15	30	352	2.7	2.7	303	950.4	0.005	17	100	2.5	0.007
080414 A02	Area Air Sample - Background - First Floor, Room 301, west end of room, at midpoint of west wall. During work area prep.	09	38	15	30	352	2.7	2.7	311	950.4	0.005	21.5	100	2.5	0.010
080414 A03	Area Air Sample - Background - Basement, Room 201, on electrical panels. During work area prep.	10	57	12	25	88	15.6	15.6	202	1372.8	0.004	26	100	2.5	0.008
080414 A04	Area Air Sample - Background - Basement, in hall outside Closet 20. During work area prep.	11	00	12	24	84	15.6	15.6	208	1310.4	0.004	29.5	100	2.5	0.010
080414 A05	Area Air Sample - Background - Basement, in hall outside Room 204. During work area prep.	11	03	12	23	80	15.6	15.6	244	1248.0	0.004	27.5	100	2.5	0.010
080414 A06	Area Air Sample - Background - Basement, Room 206, center of room. During work area prep.	11	05	12	22	77	15.6	15.6	250	1201.2	0.004	41.5	100	2.5	0.016
080414 A07	Area Air Sample - Background - Basement, Room 206, in closet with heating unit. During work area prep.	12	46	14	00	74	15.6	15.6	202	1154.4	0.004	9	100	2.5	<0.004

Notes:

* Detection Limit - Means lower limit of reliable quantitation based on 10 fibers per 100 fields and is volume dependent. Per applicable State rules and regulations, the air clearance criteria for asbestos abatement projects is 0.01 f/cc. The OSHA 8-hour time weighted average is 0.1 f/cc and the 30 minute short term exposure limit is 1.0 f/cc.
* T.D.T.A. indicates the filter was overloaded and analysis was terminated
* Please reference the full report for discussions and additional information and limitations pertaining to these results.

Analyzed By: Michael W. Joyce

Reviewed By: Kara Forsythe

Client:	SAU 3 - Berlin School District	**Site Address:**	Brown School, 190 Norway St., Berlin, NH	**RPF File #:**	146145	**Date:**	08.04.14
Abatement Contractor:	EnviroVantage	**RPF Tech:**	MJ	**Submitted by/date/time:**	08.04.14	**Received by/date/time:**	08.04.14
Date Analyzed:	08.05.14	**Microscopist:**	MJ	**Verbal Results to:**	KF	**Scope Constant:**	49.02

Field No.	Sample Description: Type, Inside or Outside Containment (if applicable), Location (floor, specific area), Activity During Sampling, Other.	Start: hr	Start: min	Stop: hr	Stop: min	Total Time: (min)	Pre Cal (lpm)	Post Cal (lpm)	Pump #	Volume (Liters)	Detection Limit	Fibers	Fields	Blank	Concentration (fiber/CC)
080414 A08	Area Air Sample - Background - Basement, Room 201, in closet with heating unit. During work area prep.	13	00	14	05	65	15.6	15.6	208	1014.0	0.005	TDTA	100	2.5	TDTA
080414 A09	Area Air Sample - Background - First Floor, In hall outside room 304 (bathroom). During work area prep.	13	03	14	06	63	15.6	15.6	244	982.8	0.005	24.5	100	2.5	0.011
080414 A10	Analytical Field Blank	-	-	-	-	-	-	-	-	-	-	2.5	100	2.5	2.5 Fibers

Notes:

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* T.D.T.A. indicates the filter was overloaded and analysis was terminated
* Please reference the full report for discussions and additional information and limitations pertaining to these results.

Analyzed By: Michael W. Joyce

Reviewed By: Kara Forsythe

Client: SAU 3 - Berlin School District **Site Address:** Brown School, 190 Norway St., Berlin, NH **RPF File #:** 146145 **Date:** 08.05.14

Abatement Contractor: EnviroVantage **RPF Tech:** MJ **Submitted by/date/time:** 08.05.14 **Received by/date/time:** 08.05.14

Date Analyzed: 08.06.14 **Microscopist:** MJ **Verbal Results to:** KF **Scope Constant:** 49.02

Field No.	Sample Description:	Start:		Stop:		Total Time: (min)	Pre Cal (lpm)	Post Cal (lpm)	Pump #	Volume (Liters)	Detection Limit	Fibers	Fields	Blank	Concentration (fiber/CC)
		hr	min	hr	min										
080514 A01	Area Air Sample - Outside containment. At HEPA exhaust, located outside north window on east wall of Room 201. During prep and demo of heating units.	07	56	15	47	471	2.7	2.4	303	1201.1	0.004	8.5	100	2	<0.004
080514 A02	Area Air Sample - Outside containment, adjacent occupied space. First floor, Room 301, east side of room near book shelves. During prep and demo of heating units.	07	59	15	48	469	2.7	2.4	311	1196.0	0.004	15	100	2	0.005
080514 A03	Area Air Sample - Inside containment. Basement level, Room 201, on electric panel on west wall. During prep and demo of heating units.	08	07	16	45	518	2.0	2.0	313	1036.0	0.005	12.5	100	2	0.005
080514 A04	Area Air Sample - Outside containment, clean side of decon. Basement level, hall outside Room 207, near fire extinguisher. During prep and demo of heating units. **(Handling and transporting the non-ACBM demo material temporarily stored in Rm 207 generated dust and effected the sample.)**	10	20	15	23	303	5.5	5.5	208	1666.5	0.003	TDTA	100	2	TDTA
080514 B05	Analytical field blank	-	-	-	-	-	-	-	-	-	-	2	100	2	2 fibers

Notes:

* Detection Limit - Means lower limit of reliable quantitation based on 10 fibers per 100 fields and is volume dependent. Per applicable State rules and regulations, the air clearance criteria for asbestos abatement projects is 0.01 f/cc. The OSHA 8-hour time weighted average is 0.1 f/cc and the 30 minute short term exposure limit is 1.0 f/cc.
* T.D.T.A. indicates the filter was overloaded and analysis was terminated
* Please reference the full report for discussions and additional information and limitations pertaining to these results.

Analyzed By: Michael W. Joyce

Reviewed By: Kara Forsythe

Client: SAU 3 - Berlin School District **Site Address:** Brown School, 190 Norway St., Berlin, NH **RPF File #:** 146145 **Date:** 08.06.14

Abatement Contractor: EnviroVantage **RPF Tech:** MJ **Submitted by/date/time:** 08.06.14 **Received by/date/time:** 08.06.14

Date Analyzed: 08.06.14 & 08.07.14 **Microscopist:** MJ **Verbal Results to:** KF **Scope Constant:** 49.02

Field No.	Sample Description:	Start:		Stop:		Total Time: (min)	Pre Cal (lpm)	Post Cal (lpm)	Pump #	Volume (Liters)	Detection Limit	Fibers	Fields	Blank	Concentration (fiber/CC)
		hr	min	hr	min										
080614 A01	Area Air Sample - Inside containment (morning). Basement level, Rm 201, north wall, on electrical pannel near closet. During prep and removal of ACBM plaster.	07	20	12	04	284	3.0	3.0	313	852.0	0.006	27.5	100	3.5	0.014
080614 A02	Area Air Sample - Outside containment. At HEPA exhaust, located outside north window on east wall of Room 201. During prep and removal of ACBM plaster.	07	26	16	03	517	2.7	2.4	303	1318.4	0.004	9	100	3.5	<0.004
080614 A03	Area Air Sample - Outside containment, adjacent occupied space. First floor, Room 301, east side of room near book shelves. During prep and removal of ACBM plaster.	07	28	16	00	512	2.7	2.4	311	1305.6	0.004	12.5	100	3.5	<0.004
080614 A04	Area Air Sample - Outside containment, clean side of decon (morning). Basement level, hall outside Room 207, near fire extinguisher. During prep and removal of ACBM plaster.	07	30	12	09	279	5.5	5.5	208	1534.5	0.003	8	100	3.5	<0.003
080614 A05	Area Air Sample - Outside containment, adjacent occupied space. First Floor, In hall outside room 304 (bathroom). During prep and removal of ACBM plaster.	07	43	16	01	498	5.5	5.5	202	2739.0	0.002	15.5	100	3.5	0.002
080614 A06	Area Air Sample - Additional background - Outside containment, adjacent occupied space. First floor, Room 301, north side of room, near whiiteboard. During prep and removal of ACBM plaster.	09	30	10	15	45	15.6	15.6	244	702.0	0.007	6.5	100	3.5	<0.007
080614 A07	Area Air Sample - Outside containment, clean side of decon (afternoon), in path of bag out. Basement level, hall outside Room 207, near fire extinguisher. During prep and removal of ACBM plaster, and in path of bag out.	12	09	16	04	235	5.5	5.5	208	1292.5	0.004	12.5	100	3.5	<0.004

Notes:

* Detection Limit - Means lower limit of reliable quantitation based on 10 fibers per 100 fields and is volume dependent. Per applicable State rules and regulations, the air clearance criteria for asbestos abatement projects is 0.01 f/cc. The OSHA 8-hour time weighted average is 0.1 f/cc and the 30 minute short term exposure limit is 1.0 f/cc.
* T.D.T.A. indicates the filter was overloaded and analysis was terminated
* Please reference the full report for discussions and additional information and limitations pertaining to these results.

Analyzed By: Michael W. Joyce

Reviewed By: Kara Forsythe

Client:	SAU 3 - Berlin School District	**Site Address:**	Brown School, 190 Norway St., Berlin, NH	**RPF File #:**	146145	**Date:**	08.06.14
Abatement Contractor:	EnviroVantage	**RPF Tech:**	MJ	**Submitted by/date/time:**	08.06.14	**Received by/date/time:**	08.06.14
Date Analyzed:	08.06.14 & 08.07.14	**Microscopist:**	MJ	**Verbal Results to:**	KF	**Scope Constant:**	49.02

Field No.	Sample Description: Type, Inside or Outside Containment (if applicable), Location (floor, specific area), Activity During Sampling, Other.	Start: hr	Start: min	Stop: hr	Stop: min	Total Time: (min)	Pre Cal (lpm)	Post Cal (lpm)	Pump #	Volume (Liters)	Detection Limit	Fibers	Fields	Blank	Concentration (fiber/CC)
080614 A08	Area Air Sample - Inside containment (afternoon). Basement level, Rm 201, north wall, on electrical pannel near closet. During prep and removal of ACBM plaster.	12	04	16	15	251	3.0	3.0	313	753.0	0.007	35	100	3.5	0.021
080614 B09	Analytical field blank.	-	-	-	-	-	-	-	-	-	-	3.5	100	3.5	3.5 fibers

Notes:

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* T.D.T.A. indicates the filter was overloaded and analysis was terminated
* Please reference the full report for discussions and additional information and limitations pertaining to these results.

Analyzed By: Michael W. Joyce

Reviewed By: Kara Forsythe

Client:	SAU 3 - Berlin School District	**Site Address:**	Brown School, 190 Norway St., Berlin, NH	**RPF File #:**	146145	**Date:**	08.07.24
Abatement Contractor:	EnviroVantage	**RPF Tech:**	MJ	**Submitted by/date/time:**	08.07.24	**Received by/date/time:**	08.07.24
Date Analyzed:	08.07.24	**Microscopist:**	MJ	**Verbal Results to:**	KF	**Scope Constant:**	49.02

Field No.	Sample Description:	Start:		Stop:		Total Time: (min)	Pre Cal (lpm)	Post Cal (lpm)	Pump #	Volume (Liters)	Detection Limit	Fibers	Fields	Blank	Concentration (fiber/CC)
		hr	min	hr	min										
080714 A01	Area Air Sample - Outside containment, adjacent occupied space. First floor, Room 301, east side of room near book shelves. During bag out and final cleaning of ACBM plaster.	07	06	15	05	479	2.7	2.4	311	1221.5	0.004	9	100	2.5	<0.004
080714 A02	Area Air Sample - Outside containment, adjacent occupied space. First Floor, In hall outside room 304 (bathroom). During bag out and final cleaning of ACBM plaster.	07	06	15	04	478	4.4	4.4	202	2103.2	0.002	16.5	100	2.5	0.003
080714 A03	Area Air Sample - Outside containment, clean side of decon. Basement level, hall outside Room 207, near fire extinguisher. During bag out and final cleaning of ACBM plaster.	07	08	15	06	478	4.4	4.4	208	2103.2	0.002	14	100	2.5	0.003
080714 A04	Area Air Sample - Outside containment. At HEPA exhaust, located outside north window on east wall of Room 201. During bag out and final cleaning of ACBM plaster.	07	11	14	45	454	2.7	2.4	303	1157.7	0.004	2.5	100	2.5	<0.004
080714 A05	Area Air Sample - Inside containment. Basement level, east wall of hallway outside storage closets. During bag out and final cleaning of ACBM plaster.	07	25	14	31	426	3.0	3.0	313	1278.0	0.004	22.5	100	2.5	0.008
080714 B06	Analytical field blank	-	-	-	-	-	-	-	-	-	-	2.5	100	2.5	2.5 fibers

Notes:

* Detection Limit - Means lower limit of reliable quantitation based on 10 fibers per 100 fields and is volume dependent. Per applicable State rules and regulations, the air clearance criteria for asbestos abatement projects is 0.01 f/cc. The OSHA 8-hour time weighted average is 0.1 f/cc and the 30 minute short term exposure limit is 1.0 f/cc.
* T.D.T.A. indicates the filter was overloaded and analysis was terminated
* Please reference the full report for discussions and additional information and limitations pertaining to these results.

Analyzed By: Michael W. Joyce

Reviewed By: Kara Forsythe

Client:	SAU 3	**Site Address:**	Brown Elementary School	**RPF File #:**	146145	**Date:**	8/11/2014
Abatement Contractor:	Envirovantage	**RPF Tech:**	BF	**Submitted by/date/time:**	8/11/14	**Received by/date/time:**	8/11/14
Date Analyzed:	8/14/14	**Microscopist:**	BF	**Verbal Results to:**	-	**Scope Constant:**	49.02

Field No.	Sample Description:	Start:		Stop:		Total Time: (min)	Pre Cal (lpm)	Post Cal (lpm)	Pump #	Volume (Liters)	Detection Limit	Fibers	Fields	Blank	Concentration (fiber/CC)
		hr	min	hr	min										
081114 A01	Area Air Sample, outside work area, South Side of the room, off Entrance B near the teachers desk, during prep.	07	40	08	51	71	10.4	10.4	237	738.4	0.007	6	100	1	<0.007
081114 A02	Area Air Sample, Outside containment, classroom East of entrance B stair case, during prep	07	45	08	52	67	10.4	10.4	210	696.8	0.007	9	100	1	<0.007
081114 A03	Area Air Sample, inside work area, East of Door B in the stairwell on radiator, during prep	09	30	13	44	254	2.8	2.2	326	635.0	0.008	9	100	1	<0.008
081114 A04	Area Air Sample,Inside work area, Room 206 on windowsill, during prep	09	33	15	56	383	2.6	2.2	328	919.2	0.005	12	100	1	0.006
081114 A05	Area Air Sample, outside work area, stairwell, north of work area, during prep and tear down of previous containment.	09	35	15	52	377	2.8	2.6	319	1017.9	0.005	10	100	1	<0.005
081114 A06	Area Air Sample, outside containment, infront of Entrance B near the teachers desk, during prep	16	00	16	52	52	10.4	10.4	237	540.8	0.009	8	100	1	<0.009
081114 B07	Analytical Field Blank	-	-	-	-	-	-	-	-	-	-	1	100	1	1 Fiber

Notes:

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* T.D.T.A. indicates the filter was overloaded and analysis was terminated
* Please reference the full report for discussions and additional information and limitations pertaining to these results.

Analyzed By: Robert Fuller

Reviewed By: Kara Forsythe

Client: SAU 3 **Site Address:** Brown Elementary School **RPF File #:** 146145 **Date:** 08/12/114

Abatement Contractor: Envirovantage **RPF Tech:** BF **Submitted by/date/time:** 8/12/14 **Received by/date/time:** 8/12/14

Date Analyzed: 8/14/14 **Microscopist:** BF **Verbal Results to:** - **Scope Constant:** 49.02

Field No.	Sample Description:	Start:		Stop:		Total Time: (min)	Pre Cal (lpm)	Post Cal (lpm)	Pump #	Volume (Liters)	Detection Limit	Fibers	Fields	Blank	Concentration (fiber/CC)
		hr	min	hr	min										
081214-A01	Area Air Sample- outside of containment, south side of building, at HEPA, during removal of ACBM plaster	07	26	13	23	357	2.8	2.2	328	892.5	0.005	7	100	1	<0.005
081214 A02	Area Air Sample- inside containment, basement hallway, during removal of ACBM plaster	07	34	14	38	424	2.8	2.2	326	1060.0	0.005	31	100	1	0.014
081214 A03	Area Air Sample- outside containment, on the North side of the work area on the door that enters the boiler room, during removal of ACBM plaster	07	45	14	01	376	2.8	2.6	319	1015.2	0.005	11	100	1	0.005
081214 A04	Area Air Sample-inside containment, basement, room 207, during removal of ACBM plaster	11	02	14	40	218	4.5	4.5	237	981.0	0.005	26	100	1	0.012
081414 A05	Area Air Sample, outside containment, 1st floor, classroom, during removal of ACBM plaster	11	22	15	53	271	2.2	2.2	302	596.2	0.008	7	100	1	<0.008
081414 B06	Analytical Field Blank	-	-	-	-	-	-	-	-	-	-	1	100	1	1 Fiber

Notes:

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* T.D.T.A. indicates the filter was overloaded and analysis was terminated
* Please reference the full report for discussions and additional information and limitations pertaining to these results.

Analyzed By: Robert Fuller

Reviewed By: Kara Forsythe

Client: SAU 3 **Site Address:** Brown Elementary School **RPF File #:** 146145 **Date:** 08/13/114

Abatement Contractor: Envirovantage **RPF Tech:** BF **Submitted by/date/time:** 8/13/14 **Received by/date/time:** 8/13/14

Date Analyzed: 8/14/14 **Microscopist:** BF **Verbal Results to:** - **Scope Constant:** 49.02

Field No.	Sample Description:	Start:		Stop:		Total Time: (min)	Pre Cal (lpm)	Post Cal (lpm)	Pump #	Volume (Liters)	Detection Limit	Fibers	Fields	Blank	Concentration (fiber/CC)
		hr	min	hr	min										
081314-A01	Area Air Sample, outside containment, south side of building, at HEPA exhuast, during removal of ACBM plaster.	07	46	12	23	277	2.8	2.6	319	747.9	0.007	6	100	1	<0.007
081314 A02	Area Air Sample, outside containment, basement, at decon entrance, during removal of ACBM plaster	07	45	14	14	389	2.8	2.2	302	972.5	0.005	11.5	100	1	0.005
081314 A03	Area Air Sample, outside containment, basement, outside boiler room, during removal of ACBM plaster. -	07	42	12	28	286	2.8	2.2	328	715.0	0.007	9	100	1	<0.007
081314 A04	Area Air Sample- Inside Containment, basement, In Room 207 , during removal of ACBM plaster	07	37	12	20	283	2.8	2.6	326	764.1	0.006	19	100	1	0.012
081314 A05	Area Air Sample, outside containment, first floor classroom, during removal of ACBM plaster.	12	38	15	59	201	2.6	2.4	326	502.5	0.010	7	100	1	<0.01
081314 B06	Analytical Field Blank											1	100	1	1 Fiber

Notes:

* Detection Limit - Means lower limit of reliable quantitation based on 10 fibers per 100 fields and is volume dependent. Per applicable State rules and regulations, the air clearance criteria for asbestos abatement projects is 0.01 f/cc. The OSHA 8-hour time weighted average is 0.1 f/cc and the 30 minute short term exposure limit is 1.0 f/cc.
* T.D.T.A. indicates the filter was overloaded and analysis was terminated
* Please reference the full report for discussions and additional information and limitations pertaining to these results.

Analyzed By: Robert Fuller

Reviewed By: Kara Forsythe

SAU 3 - BERLIN
Brown School

SUMMARY OF TEM AHERA ANALYSIS

Samples Collected: August 8, 2014

Sample ID	Sample Description	s/mm^2
080814-C01	Clearance sample – Inside containment – Basement, Room 201, northeast corner, after removal of ACBM plaster	<14.8
080814-C02	Clearance sample – Inside containment – Basement, Room 201, southeast corner, after removal of ACBM plaster	<14.8
080814-C03	Clearance sample – Inside containment – Basement, west of door to Room 201, after removal of ACBM plaster	<14.8
080814-C04	Clearance sample – Inside containment – Center of storage space, after removal of ACBM plaster	<14.8
080814-C05	Clearance sample – Inside containment – Basement, hall outside Office 204, after removal of ACBM plaster	<14.8
080814-C06	Clearance sample – Inside containment – Basement, hall outside utility closet, after removal of ACBM plaster	DNA
080814-C07	Clearance sample – Outside containment – At decon, in hall outside Room 207, after removal of ACBM plaster	DNA
080814-C08	Clearance sample – Outside containment – At decon, in hall outside Room 207, after removal of ACBM plaster	DNA
080814-C09	Clearance sample – Outside containment – At decon, in hall outside Room 207, after removal of ACBM plaster	DNA
080814-C10	Clearance sample – Outside containment – At decon, in hall outside Room 207, after removal of ACBM plaster	DNA
080814-C11	Clearance sample – Outside containment – At decon, in hall outside Room 207, after removal of ACBM plaster	DNA
080814-C12	Clearance sample – Outside containment – At decon, in hall outside Room 207, after removal of ACBM plaster	DNA
080814-B13	Analytical Field Blank – Inside containment – open 30 seconds at door to Room 201	DNA
080814-B14	Analytical Field Blank – Outside containment, open 30 seconds at decon, in hall outside Room 207	DNA
080814-B15	Analytical Field Blank – Closed blank	DNA

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Note: NSD indicates no structures were detected; DNA: Did not analyze per 40CFR 763. The average concentration of the 5 inside containment samples were less than the filter background level of 70 s/mm^2
s/mm^2 - indicates asbestos structures per square millimeter.

SAU 3 - BERLIN
Brown School

SUMMARY OF TEM AHERA ANALYSIS

Samples Collected: August 14, 2014

Sample ID	Sample Description	s/mm^2
081414-C01	Clearance air sample, inside containment, basement, room 207, after removal of ACBM plaster.	<14.8
081414-C02	Clearance air sample, inside containment, basement, west of window in 206, after removal of ACBM plaster.	<14.8
081414-C03	Clearance air sample, inside containment, basement, door B staircase, after removal of ACBM plaster.	<14.8
081414-C04	Clearance air sample, inside containment, basement, hallway near dirty side of decon, after removal of ACBM plaster.	<14.8
081414-C05	Clearance air sample, inside containment, basement, center of room 207, after removal of ACBM plaster.	<14.8
081414-B06	Analytical Field Blank-opened for 30 seconds in containment	DNA
081414-C07	Clearance Air Sample- Outside Containment, In classroom on the West side of containment.	DNA
081414-C08	Clearance Air Sample- Outside Containment, In classroom on the West side of containment.	DNA
081414-C09	Clearance Air Sample- Outside Containment, In classroom on the West side of containment.	DNA
081414-C10	Clearance Air Sample- Outside Containment, In classroom on the West side of containment.	DNA
081414-C11	Clearance Air Sample- Outside Containment, In classroom on the West side of containment.	DNA
081414-FB12	Analytical Field Blank-Opened outside containment for 30 seconds	DNA
081414-FB13	Analytical Field Blank	DNA

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Note: NSD indicates no structures were detected; DNA: Did not analyze per 40CFR 763. The average concentration of the 5 inside containment samples were less than the filter background level of 70 s/mm^2
s/mm^2 - indicates asbestos structures per square millimeter.

APPENDIX C

RPF ENVIRONMENTAL, INC. ABATEMENT SITE LOG 0511

Client: SAU 3 - Berlin School District	Project No. 146145	Date: 08.04.14
Client Contact: Bryan Lamirande	Building/Site Name: Brown School	
Contractor: EnviroVantage	RPF PM: KF	RPF Tech: MJ
Contractor Project Manager:	Contractor Supervisor: Starlin Herrera	
Shift Hours: 7-5	All Current Licenses and Posted? ☒ Yes ☐ No	All Current Training? ☒ Yes ☐ No
RPF Arrival time(s): 9:00	RPF Departure time(s): 3:30	

Work Area Location: Briefly describe work area, location and work being performed this shift.

Basement – Rm 201 wall, Rm 201 closet; Closet 20, hall, desk, utility closet; Rm 206, Rm 206 closet, Rm 207, vending hall. Prep for abatement, set up containment.

Notes: (*list time of work area entry, brief progress notes, problems, and other notes*)
9:00 – MJ arrive. Meet w/ Pete and Starlin (EnviroVantage). Briefly review work area and planned activity. Meet with Gino (school custodian), establish work space. Set up PCM background air sampling.
9:40 – MJ check in with KF. Review prep procedures.
10:00 – MJ verify supervisor and workers paperwork, entity license, and notification. All licenses, training certificates and notifications current. The same crew and supervisor will be here all week.
11:00 – General demo of non-ACBM material that are in the work area. Demo of wood trim, doors, gypsum board, and various material not in contact with ACBM plaster. Material temporarily stored in room 207.
1:30 – MJ check in w/ KF re ceilings and heater units.
3:30 – MJ depart.

Is there accessible ACBM unaffected or scheduled to remain in work area at the end of this project? ☐ Yes ☒ No

Describe:

Any change to specification scope of work: ☐ Yes ☒ No

Describe:

Any new suspect or confirmed ACBM identified: ☐ Yes ☒ No Client notified: ☐ Yes ☐ No ☒N/A

Describe:

State/EPA notification start/end dates: 8/4/14 - 8/15/14	Notifications Posted at Site: ☒ Yes ☐ No
Emergency contact info posted: ☒ Yes ☐ No	Contractor has regs & specs on site: ☒ Yes ☐ No

Containment Method: ☒*Full* ☒*Criticals* ☒*Neg Press Enclosure* ☐*Glovebag* ☐*Demarcation Only* ☐*Other (describe)*:

Work progressing per schedule: ☒ Yes ☐ No	Did you notify Client and contractor of schedule concerns: ☐ Yes ☐ No ☒ N/A
Client approved schedule changes: ☐ Yes ☐ No	Describe Client approved schedule changes:

HEPA vacuums used:	☐ Y ☐ N ☒ N/A	Adequate Wetting:	☐ Y ☐ N ☒ N/A
GFCI Protection in Area:	☒ Y ☐ N ☐ N/A	Any water leaks observed:	☐ Y ☐ N ☒ N/A
Sufficient ongoing cleaning performed:	☐ Y ☐ N ☒ N/A	Any dry Sweeping Observed:	☐ Y ☐ N ☒ N/A
Adequate Pressure Differential:	☐ Y ☐ N ☒ N/A	Proper OSHA warning signs:	☐ Y ☐ N ☒ N/A
HVAC in work area sealed off/shut down:	☐ Y ☐ N ☒ N/A	Waste packaged continuously:	☐ Y ☐ N ☒ N/A
Any Breeches in Containment Observed:	☐ Y ☐ N ☒ N/A	Deficiencies, if any, addressed w/ contractor:	☐ Y ☐ N ☒ N/A
Any Visible Emissions Observed:	☐ Y ☐ N ☒ N/A	Did contractor remedy deficiencies:	☐ Y ☐ N ☒ N/A
Decon Unit provided contiguous to work area:	☐ Y ☐ N ☒ N/A	Proper use of Decon Unit:	☐ Y ☐ N ☒ N/A
Remote Decon Unit:	☐ Y ☐ N ☒ N/A	Decon Unit area kept clean:	☐ Y ☐ N ☒ N/A
Decon Unit have a dedicated source of water:	☐ Y ☐ N ☒ N/A	Decon water ☐ contained or ☐ filtered:	☐ Y ☐ N ☒ N/A

If deficiencies noted above, list corrective measures taken in the Notes section on page 1 of this log.

Type of Respiratory Protection Used by Contractor in Work Area: ☒None ☐Negative Pressure ☐PAPR ☐Supplied Air

RPF Inspection Performed This Period: ☒Pre-Removal ☐Progress ☐Prelim Final ☐ Final ☐ Post Tear Down

Clearance Testing Performed: ☐PCM ☐TEM | Results Due Date/Approx. Time:

Who is to receive verbal results: Contact #:

Is final visual inspection after containment tear down part of RPF SOW (check w/PM): ☐ Yes ☐ No

All surfaces visually clean: ☐ Yes ☐ No * If dust or debris found after teardown, did contractor re-clean: ☐ Yes ☐ No

If final post remediation walk-through, list any punch list work or damages observed:

List person(s) conducting site walk:

Total linear/square feet of each type of ACBM removed this shift: 0 - prep only

Quantity of packaged ACM removed <u>from this work area</u> during this shift (# bags): 0 bags

Proper Waste Package Labels (OSHA, EPA waste generator, DOT) : ☐ Yes ☐ No

Temporary Storage of waste containers on site? ☐ Yes ☒ No Describe:

Quantity waste transported <u>off site</u> for disposal this period: 0 - prep only

Name of Transporter: | Copy of WSR Received: ☐ Yes ☒ No

RPF ENVIRONMENTAL, INC. ABATEMENT SITE LOG 0511

Client: SAU 3 - Berlin School District	Project No. 146145	Date: 08.05.14
Client Contact: Bryan Lamirande	Building/Site Name: Brown School	
Contractor: EnviroVantage	RPF PM: KF	RPF Tech: MJ
Contractor Project Manager:	Contractor Supervisor: Starlin Herrera	
Shift Hours: 7-5	All Current Licenses and Posted? ☒ Yes ☐ No	All Current Training? ☒ Yes ☐ No
RPF Arrival time(s): 8:00	RPF Departure time(s): 5:00	

Work Area Location: Briefly describe work area, location and work being performed this shift.

Basement level, north work area, Rm 201, Rm 201 closet, Closet 20, hall, desk utility closet – Demo non-ACBM portion of heating units

Notes: (*list time of work area entry, brief progress notes, problems, and other notes*)

8:00 – MJ arrive. Meet w/ Starlin, review work area and planned activity. Work area prep continued most of the morning. Set up PCM air sampling.

9:00 – Meet w/ Starlin. He informed RPF that he plans to remove the internal non-ACBM portion of the heating units prior to starting abatement of the ACBM plaster. MJ review proposed work and inspect internal metal fins for ACBM. No ACBM or suspect material was observed. Call KF to inform her of planned activity. OK to proceed with removal of non-ACBM metal components.

9:45 - The abatement prep in the northern work area is substantially complete. A three stage decon is in place, all critical barriers are covered, negative air units are installed and operating, and full containment was installed on walls and suspended ceilings. The concrete ceilings in the Room 201 closet will be wiped clean following abatement. Abatement prep will be inspected again following demo of the heating units.

10:00 – Begin demo of non-ACBM internal components of heating unit in Room 201 closet. The internal fins were removed to expose the outer sheet metal. Where the sheet metal cover was not in contact with the ACBM plaster it was demoed and removed. This activity generated dust from general demo and rust on the internal components. There was also a rusty/blackish liquid inside the metal fins. No ACBM plaster was removed or disturbed.

11:30 - All non-ACBM metal components were removed to a lined dumpster in the parking area south west of the school. The non-ACBM general demo materials removed yesterday also removed from work area. Handling this material generated some dust and likely effected the air sample located near the decon entrance.

1:00 - Begin demo of non-ACBM internal components of heating unit and associated duct work located in hall outside Closet 20. The internal fins were removed to expose the outer sheet metal. Where the sheet metal cover was not in contact with the ACBM plaster it was demoed and removed. This activity generated dust from general demo and rust on the internal components. There was also dust and black soot inside the duct work. No ACBM plaster was removed or disturbed.

3:30 All non-ACBM metal components were removed to a lined and labeled dumpster in the parking area south west of the school.

2:30 – Background air sampling reads from 08.04.14 complete. MJ observed high fiber count during prep, prior to any ACBM removal or disturbance. Call KF to notify her of fiber counts, email air tables.

5:00 – MJ depart.

-Is there accessible ACBM unaffected or scheduled to remain in work area at the end of this project? ☐ Yes ☒ No

Describe:

Any change to specification scope of work: ☐ Yes ☐ No

Describe:

Any new suspect or confirmed ACBM identified: ☐ Yes ☒ No Client notified: ☐ Yes ☐ No ☒N/A

Describe:

State/EPA notification start/end dates: 8/4/14 - 8/15/14	Notifications Posted at Site: ☒ Yes ☐ No
Emergency contact info posted: ☒ Yes ☐ No	Contractor has regs & specs on site: ☒ Yes ☐ No

Containment Method: ☒*Full* ☐*Criticals* ☒*Neg Press Enclosure* ☐*Glovebag* ☐*Demarcation Only* ☐*Other (describe)*:

Work progressing per schedule: ☐ Yes ☐ No	Did you notify Client and contractor of schedule concerns: ☐ Yes ☐ No ☐ N/A
Client approved schedule changes: ☐ Yes ☐ No	Describe Client approved schedule changes:

HEPA vacuums used:	☐ Y ☒ N ☐ N/A	Adequate Wetting:	☒ Y ☐ N ☐ N/A
GFCI Protection in Area:	☒ Y ☐ N ☐ N/A	Any water leaks observed:	☐ Y ☒ N ☐ N/A
Sufficient ongoing cleaning performed:	☒ Y ☐ N ☐ N/A	Any dry Sweeping Observed:	☐ Y ☒ N ☐ N/A
Adequate Pressure Differential:	☒ Y ☐ N ☐ N/A	Proper OSHA warning signs:	☐ Y ☐ N ☒ N/A
HVAC in work area sealed off/shut down:	☒ Y ☐ N ☐ N/A	Waste packaged continuously:	☒ Y ☐ N ☐ N/A
Any Breeches in Containment Observed:	☐ Y ☒ N ☐ N/A	Deficiencies, if any, addressed w/ contractor:	☐ Y ☐ N ☒ N/A
Any Visible Emissions Observed:	☐ Y ☒ N ☐ N/A	Did contractor remedy deficiencies:	☐ Y ☐ N ☒ N/A
Decon Unit provided contiguous to work area:	☒ Y ☐ N ☐ N/A	Proper use of Decon Unit:	☒ Y ☐ N ☐ N/A
Remote Decon Unit:	☐ Y ☐ N ☒ N/A	Decon Unit area kept clean:	☒ Y ☐ N ☐ N/A
Decon Unit have a dedicated source of water:	☒ Y ☐ N ☐ N/A	Decon water ☒ contained or ☐ filtered:	☒ Y ☐ N ☐ N/A

If deficiencies noted above, list corrective measures taken in the Notes section on page 1 of this log.

Type of Respiratory Protection Used by Contractor in Work Area: ☐None ☒Negative Pressure ☐PAPR ☐Supplied Air

RPF Inspection Performed This Period: ☒Pre-Removal ☐Progress ☐Prelim Final ☐ Final ☐ Post Tear Down

Clearance Testing Performed: ☐PCM ☐TEM | Results Due Date/Approx. Time:

Who is to receive verbal results: Contact #:

Is final visual inspection after containment tear down part of RPF SOW (check w/PM): ☐ Yes ☐ No

All surfaces visually clean: ☐ Yes ☐ No * If dust or debris found after teardown, did contractor re-clean: ☐ Yes ☐ No

If final post remediation walk-through, list any punch list work or damages observed:

List person(s) conducting site walk:

Total linear/square feet of each type of ACBM removed this shift: 0 feet ACBM –demo only

Quantity of packaged ACM removed from this work area during this shift (# bags): 0 bags

Proper Waste Package Labels (OSHA, EPA waste generator, DOT) : ☐ Yes ☐ No

Temporary Storage of waste containers on site? ☒ Yes ☐ No Describe: Lined and labeled dumpster

Quantity waste transported off site for disposal this period: 0 bags

Name of Transporter: | Copy of WSR Received: ☐ Yes ☒ No

RPF ENVIRONMENTAL, INC. ABATEMENT SITE LOG 0511

Client: SAU 3 - Berlin School District	Project No. 146145	Date: 8/6/14
Client Contact: Bryan Lamirande	Building/Site Name: Brown School	
Contractor: EnviroVantage	RPF PM: KF	RPF Tech: MJ
Contractor Project Manager:	Contractor Supervisor: Starlin Herrera	
Shift Hours: 7-5	All Current Licenses and Posted? ☒ Yes ☐ No	All Current Training? ☒ Yes ☐ No
RPF Arrival time(s): 7:00	RPF Departure time(s): 5:00	

Work Area Location: Briefly describe work area, location and work being performed this shift.

Basement level, north work area - Rm 201, Rm 201 closet, Closet 20, hall, and desk. Prep and removal of ACBM plaster.

Notes: (*list time of work area entry, brief progress notes, problems, and other notes*)
7:00 – MJ arrive. Meet w/ Starlin. Review planned activity and work procedures.
7:15 – MJ enter containment for visual inspection of abatement prep. A small punch list was generated for completion of final prep.
8:00 - A three stage decon is in place, all critical barriers are covered, negative air units are installed and operating, and full containment was installed on walls and suspended ceilings. The concrete ceilings in the Room 201 closet will be wiped clean following abatement. Signs are in place, water is available in the decon, and in the work area.
Begin removal of ACBM plaster in the north work area.
8:30 – MJ enter containment for a visual progress inspection. Workers began in the two storage closets. The ACBM plaster was removed with hammers, pry bars, and various hand tools. A paint sprayer was used to provide a fine mist over the removal area. Both sides of the wall were misted to prevent visible emissions. The plaster and lathe was removed is whole sheets where possible, but some incidental breakage and crumbling occurred. All waste was packaged in white bags as the material was removed. It will be placed in disposal bags as work progresses.
10:00 – MJ enter containment for a visual progress inspection. The two closet areas were complete. Working on the desk area. Cleaning debris and bagging ACBM waste.
11:45 – MJ enter containment for a visual progress inspection. Desk area complete, cleaning and bagging waste ongoing. Moving to walls in room 201 after lunch. MJ change PCM cassettes inside containment and at decon.
2:00 - MJ enter containment for a visual progress inspection. The majority of the plaster has been removed in the north work area. Workers are starting initial clean up and bag out of ACBM waste. All waste is properly bagged and labeled.
4:00 – MJ enter containment for a visual progress inspection. Abatement work complete for the day. Workers continuing to wrap and bag the ACBM waste. PCM sampling complete, samples will be read onsite.
5:00 – MJ depart.

Is there accessible ACBM unaffected or scheduled to remain in work area at the end of this project? ☒ Yes ☐ No

Describe: Only one side of plaster wall removed in Closet 20 and hall. Rear face of opposing wall is suspect ACBM plaster.

Any change to specification scope of work: ☐ Yes ☒ No

Describe:

Any new suspect or confirmed ACBM identified: ☐ Yes ☒ No Client notified: ☐ Yes ☐ No ☒N/A

Describe:

State/EPA notification start/end dates: 8/4/14 - 8/15/14	Notifications Posted at Site: ☒ Yes ☐ No
Emergency contact info posted: ☒ Yes ☐ No	Contractor has regs & specs on site: ☒ Yes ☐ No

Containment Method: ☒*Full* ☒*Criticals* ☒*Neg Press Enclosure* ☐*Glovebag* ☐*Demarcation Only* ☐*Other (describe)*:

Work progressing per schedule: ☒ Yes ☐ No	Did you notify Client and contractor of schedule concerns: ☐ Yes ☐ No ☒ N/A
Client approved schedule changes: ☐ Yes ☐ No	Describe Client approved schedule changes:

HEPA vacuums used:	☐ Y ☒ N ☐ N/A	Adequate Wetting:	☒ Y ☐ N ☐ N/A
GFCI Protection in Area:	☒ Y ☐ N ☐ N/A	Any water leaks observed:	☐ Y ☒ N ☐ N/A
Sufficient ongoing cleaning performed:	☒ Y ☐ N ☐ N/A	Any dry Sweeping Observed:	☐ Y ☒ N ☐ N/A
Adequate Pressure Differential:	☒ Y ☐ N ☐ N/A	Proper OSHA warning signs:	☒ Y ☐ N ☐ N/A
HVAC in work area sealed off/shut down:	☒ Y ☐ N ☐ N/A	Waste packaged continuously:	☒ Y ☐ N ☐ N/A
Any Breeches in Containment Observed:	☐ Y ☒ N ☐ N/A	Deficiencies, if any, addressed w/ contractor:	☒ Y ☐ N ☐ N/A
Any Visible Emissions Observed:	☒ Y ☐ N ☐ N/A	Did contractor remedy deficiencies:	☒ Y ☐ N ☐ N/A
Decon Unit provided contiguous to work area:	☒ Y ☐ N ☐ N/A	Proper use of Decon Unit:	☒ Y ☐ N ☐ N/A
Remote Decon Unit:	☐ Y ☐ N ☒ N/A	Decon Unit area kept clean:	☒ Y ☐ N ☐ N/A
Decon Unit have a dedicated source of water:	☒ Y ☐ N ☐ N/A	Decon water ☒ contained or ☐ filtered:	☒ Y ☐ N ☐ N/A

If deficiencies noted above, list corrective measures taken in the Notes section on page 1 of this log.

Type of Respiratory Protection Used by Contractor in Work Area: ☐None ☒Negative Pressure ☐PAPR ☐Supplied Air

RPF Inspection Performed This Period: ☒Pre-Removal ☒Progress ☐Prelim Final ☐ Final ☐ Post Tear Down

Clearance Testing Performed: ☐PCM ☐TEM | Results Due Date/Approx. Time:

Who is to receive verbal results: Contact #:

Is final visual inspection after containment tear down part of RPF SOW (check w/PM): ☐ Yes ☒ No

All surfaces visually clean: ☐ Yes ☐ No * If dust or debris found after teardown, did contractor re-clean: ☐ Yes ☐ No

If final post remediation walk-through, list any punch list work or damages observed:

List person(s) conducting site walk:

Total linear/square feet of each type of ACBM removed this shift: approximately 850 square feet – north work area

Quantity of packaged ACM removed <u>from this work area</u> during this shift (# bags): 60 bags

Proper Waste Package Labels (OSHA, EPA waste generator, DOT) : ☒ Yes ☐ No

Temporary Storage of waste containers on site? ☒ Yes ☐ No Describe: Lined and labeled dumpster

Quantity waste transported <u>off site</u> for disposal this period: 0 bags

Name of Transporter: | Copy of WSR Received: ☐ Yes ☒ No

RPF ENVIRONMENTAL, INC. ABATEMENT SITE LOG 0511

Client: SAU 3 - Berlin School District	Project No. 146145	Date: 8/7/14
Client Contact: Bryan Lamirande	Building/Site Name: Brown School	
Contractor: EnviroVantage	RPF PM: KF	RPF Tech: MJ
Contractor Project Manager:	Contractor Supervisor: Starlin Herrera	
Shift Hours: 7-5	All Current Licenses and Posted? ☒ Yes ☐ No	All Current Training? ☒ Yes ☐ No
RPF Arrival time(s): 7:00 am	RPF Departure time(s): 5:00	

Work Area Location: Briefly describe work area, location and work being performed this shift.

Basement level, north work area - Rm 201, Rm 201 closet, Closet 20, hall, and desk. Bag out and final cleaning.

Notes: (*list time of work area entry, brief progress notes, problems, and other notes*)
7:00 – MJ arrive. Meet w/ Starlin. Review planned activity and work procedures. Set up PCM air sampling.
7:15 – MJ enter containment for visual inspection. All previously installed abatement preparations are in place and in good working order. Bag out in progress. Approximately 90 properly packaged and labeled bags removed from the work area. MJ asked the supervisor to have workers remove any remaining pieces of metal lathe from the wall studs.
9:45 - MJ enter containment for a visual progress inspection. Cleaning was in progress. A paint sprayer was used to mist the area and rinse off all accessible wipeable surfaces. Any debris on the floors was sprayed with water and wet-swept into piles for disposal. Shovels were used to transfer the piles of wet debris to disposal bags. A HEPA vacuum was used on the walls, floors, cracks, remaining wood wall studs, exposed pipe, and all accessible surfaces. No water leaks or breaches in containment were observed.
10:30 - MJ enter containment for a visual progress inspection. Cleaning was ongoing using the methods described above. MJ reminded the supervisor to have workers remove any remaining pieces of metal lathe from the wall studs.
12:00 - MJ enter containment for a visual progress inspection. Workers removed poly on the floor and wiped down the work area. Final cleanup and wipe down in progress.
2:00 – MJ and Starlin enter containment for final visual inspection. All surfaces were clean of dust and debris. There was no ACBM remaining in the work area. All metal lath was removed from the wall studs. Only one side of the plaster wall was removed in Closet 20 and the hallway. The rear face of the opposing wall consists of suspect ACBM plaster. The contractor cleaned the surface and all remaining wood wall studs with a HEPA vacuum, encapsulant was then sprayed on the accessible face (back side) of the opposing wall. The entire wall was then seal with a poly sheet and duct tape.
2:45 – Final visual inspection passed. Begin application of encapsulant on all parts of the work area. End PCM air monitoring. Sample will be read onsite. Contractor cleaned areas outside of the decon.
4:15 – Second application of encapsulant applied.
5:00 – MJ depart. TEM clearance testing to be complete tomorrow morning.

Is there accessible ACBM unaffected or scheduled to remain in work area at the end of this project? ☒ Yes ☐ No

Describe: Only one side of plaster wall removed in Closet 20 and hall. Rear face of opposing wall is suspect ACBM plaster.

Any change to specification scope of work: ☐ Yes ☒ No

Describe:

Any new suspect or confirmed ACBM identified: ☐ Yes ☒ No Client notified: ☐ Yes ☐ No ☒N/A

Describe:

State/EPA notification start/end dates: 8/4/14 - 8/15/14	Notifications Posted at Site: ☒ Yes ☐ No
Emergency contact info posted: ☒ Yes ☐ No	Contractor has regs & specs on site: ☒ Yes ☐ No

Containment Method: ☒*Full* ☒*Criticals* ☒*Neg Press Enclosure* ☐*Glovebag* ☐*Demarcation Only* ☐*Other (describe)*:

Work progressing per schedule: ☒ Yes ☐ No	Did you notify Client and contractor of schedule concerns: ☐ Yes ☐ No ☒ N/A
Client approved schedule changes: ☐ Yes ☐ No	Describe Client approved schedule changes:

HEPA vacuums used:	☒ Y ☐ N ☐ N/A	Adequate Wetting:	☒ Y ☐ N ☐ N/A
GFCI Protection in Area:	☒ Y ☐ N ☐ N/A	Any water leaks observed:	☐ Y ☒ N ☐ N/A
Sufficient ongoing cleaning performed:	☒ Y ☐ N ☐ N/A	Any dry Sweeping Observed:	☐ Y ☒ N ☐ N/A
Adequate Pressure Differential:	☒ Y ☐ N ☐ N/A	Proper OSHA warning signs:	☒ Y ☐ N ☐ N/A
HVAC in work area sealed off/shut down:	☒ Y ☐ N ☐ N/A	Waste packaged continuously:	☒ Y ☐ N ☐ N/A
Any Breeches in Containment Observed:	☐ Y ☒ N ☐ N/A	Deficiencies, if any, addressed w/ contractor:	☒ Y ☐ N ☐ N/A
Any Visible Emissions Observed:	☐ Y ☒ N ☐ N/A	Did contractor remedy deficiencies:	☒ Y ☐ N ☐ N/A
Decon Unit provided contiguous to work area:	☒ Y ☐ N ☐ N/A	Proper use of Decon Unit:	☒ Y ☐ N ☐ N/A
Remote Decon Unit:	☐ Y ☐ N ☒ N/A	Decon Unit area kept clean:	☒ Y ☐ N ☐ N/A
Decon Unit have a dedicated source of water:	☒ Y ☐ N ☐ N/A	Decon water ☒ contained or ☐ filtered:	☒ Y ☐ N ☐ N/A

If deficiencies noted above, list corrective measures taken in the Notes section on page 1 of this log.

Type of Respiratory Protection Used by Contractor in Work Area: ☐None ☒Negative Pressure ☐PAPR ☐Supplied Air

RPF Inspection Performed This Period: ☐Pre-Removal ☒Progress ☒Prelim Final ☒ Final ☐ Post Tear Down

Clearance Testing Performed: ☐PCM ☐TEM | Results Due Date/Approx. Time:

Who is to receive verbal results: Contact #:

Is final visual inspection after containment tear down part of RPF SOW (check w/PM): ☐ Yes ☒ No

All surfaces visually clean: ☐ Yes ☐ No * If dust or debris found after teardown, did contractor re-clean: ☐ Yes ☐ No

If final post remediation walk-through, list any punch list work or damages observed:

List person(s) conducting site walk:

Total linear/square feet of each type of ACBM removed this shift: Final clean, debris and dust HEPA vacuumed

Quantity of packaged ACM removed from this work area during this shift (# bags): 90 bags

Proper Waste Package Labels (OSHA, EPA waste generator, DOT) : ☒ Yes ☐ No

Temporary Storage of waste containers on site? ☒ Yes ☐ No Describe: Lined and labeled dumpster

Quantity waste transported off site for disposal this period: 0 bags

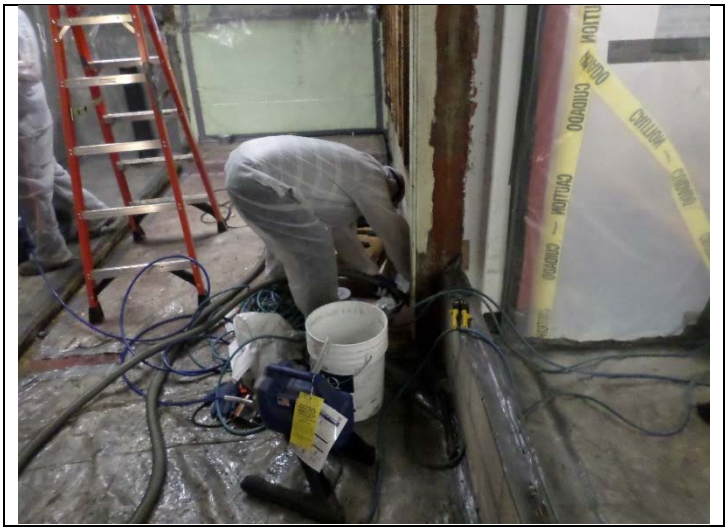
Name of Transporter: | Copy of WSR Received: ☐ Yes ☒ No

APPENDIX D

1. Brown School

2. Example View during prep

3 .Example during removal and final clean



4. Example during removal and final clean

5. Example of removal and final cleaning

6. Example area after removal of ACBM plaster

APPENDIX D: SITE PHOTOGRAPHS		RPF Environmental TESTING & CONSULTING SERVICES
Site Address:		www.airpf.com **603-942-5432**
S.A.U. 3 Brown School		**Project No. 146145**

APPENDIX E

LIMITATIONS

1. The observations and conclusions presented in the Report were based solely upon the services described herein, and not on scientific tasks or procedures beyond the RPF Environmental, Inc. Scope of Work (SOW) as discussed in the proposal and/or agreement. The conclusions and recommendations are based on visual observations and testing, limited as indicated in the Report, and were arrived at in accordance with generally accepted standards of industrial hygiene practice and asbestos professionals. The nature of this survey or monitoring service was limited as indicated herein and in the report or letter of findings. Further testing, survey, and analysis is required to provide more definitive results and findings.

2. For site survey work, observations were made of the designated accessible areas of the site as indicated in the Report. While it was the intent of RPF to conduct a survey to the degree indicated, it is important to note that not all suspect ACBM material in the designated areas were specifically assessed and visibility was limited, as indicated, due to the presence of furnishings, equipment, solid walls and solid or suspended ceilings throughout the facility and/or other site conditions. Asbestos or hazardous material may have been used and may be present in areas where detection and assessment is difficult until renovation and/or demolition proceeds. Access and observations relating to electrical and mechanical systems within the building were restricted or not feasible to prevent damage to the systems and minimize safety hazards to the survey team.

3. Although assumptions may have been stated regarding the potential presence of inaccessible or concealed asbestos and other hazardous material, full inspection findings for all asbestos and other hazardous material requires the use of full destructive survey methods to identify possible inaccessible suspect material and this level of survey was not included in the SOW for this project. For preliminary survey work, sampling and analysis as applicable was limited and a full survey throughout the site was not performed. Only the specific areas and /or materials indicated in the report were included in the SOW. This inspection did not include a full hazard assessment survey, full testing or bulk material, or testing to determine current dust concentrations of asbestos in and around the building. Inspection results should not be used for compliance with current EPA and State asbestos in renovation/demolition requirements unless specifically stated as intended for this use in the RPF report and considering the limitations as stated therein and within this limitations document.

4. Where access to portions of the surveyed area was unavailable or limited, RPF renders no opinion of the condition and assessment of these areas. The survey results only apply to areas specifically accessed by RPF during the survey. Interiors of mechanical equipment and other building or process equipment may also have asbestos and other hazardous material present and were not included in this inspection. For renovation and demolition work, further inspection by qualified personnel will be required during the course of construction activity to identify suspect material not previously documented at the site or in this survey report. Bordering properties were not investigated and comprehensive file review and research was not performed.

5. For lead in paint, observations were made of the designated accessible areas of the site as indicated in the Report. Limited testing may have been performed to the extent indicated in the text of the report. In order to conduct thorough hazard assessments for lead exposures, representative surface dust testing, air monitoring and other related testing throughout the building, should be completed. This type of in depth testing and analysis was beyond the scope of services for the initial inspection. For lead surveys with XRF readings, it is recommended that surfaces found to have LBP or trace amount of lead detected with readings of less than 4 mg/cm^2 be confirmed using laboratory analysis if more definitive results are required. Substrate corrections involving destructive sampling or damage to existing surfaces (to minimize XRF read-through) were not completed. In some instances, destructive testing may be required for more accurate results. In addition, depending on the specific thickness of the paint films on different areas of a building component, differing amounts of wear, and other factors, XRF readings can vary slightly, even on the same building component. Unless otherwise specifically stated in the scope of services and final report, lead testing performed is not intended to comply with other state and federal regulations pertaining to childhood lead poisoning regulations.

6. Air testing is to be considered a "snap shot" of conditions present on the day of the survey with the understanding that conditions may differ at other times or dates or operational conditions for the facility. Results are also limited based on the specific analytical methods utilized. For phase contrast microscopy (PCM) total airborne fiber testing, more sensitive asbestos-specific analysis using transmission electron microscopy (TEM) can be performed upon request.

7. For asbestos bulk and dust testing, although polarize light microscopy (PLM) is the method currently recognized in State and federal regulations for asbestos identification in bulk samples, some industry studies have found that PLM may not be sensitive enough to detect all of the asbestos fibers in certain nonfriable material, vermiculate type insulation, soils, surface dust, and other materials requiring more sensitive analysis to identify possible asbestos fibers. In the event that more definitive results are requested, RPF recommends that confirmation testing be completed using TEM methods or other analytical methods as may be applicable to the material. Detection of possible asbestos fibers may be made more difficult by the presence of other non-asbestos fibrous components such as cellulose, fiber glass, etc., by binder/matrix materials which may mask or obscure fibrous components, and/or by exposure to conditions capable of altering or transforming asbestos. PLM can show significant bias leading to false negatives and false positives for certain types of materials. PLM is limited by the visibility of the asbestos fibers. In some samples the fibers may be reduced to a diameter so small or masked by coatings to such an extent that they cannot be reliably observed or identified using PLM.

8. For hazardous building material inspection or survey work, RPF followed applicable industry standards; however, RPF does not warrant or certify that all asbestos or other hazardous materials in or on the building has been identified and included in this report. Various assumptions and limitations of the methods can result in missed materials or misidentification of materials due to several factors including but not limited to: inaccessible space due to physical or safety constraints, space that is difficult to reach to fully inspect, assumptions regarding the determination of homogenous groups of suspect material, assumptions regarding attempts to conduct representative sampling, and potential for varying mixtures and layers of material sampled not being representative of all areas of similar material.

9. Full assessments often requires multiple rounds of sampling over a period of time for air, bulk material, surface dust and water. Such comprehensive testing was beyond the scope of RPF services. In addition clearance testing for abatement, as applicable, was based on the visual observations and limited ambient area air testing as indicated in the report and in accordance with applicable state and federal regulations. The potential exists that microscopic surface dust remains with contaminant present even in the event that the clearance testing meets the state and federal requirements. Likewise for building surveys, visual observations are not sufficient alone to detect possible contaminant in settled dust. Unless otherwise specifically indicated in the report, surface dust testing was not included in the scope of the RPF services.

10. For abatement or remediation monitoring services: RPF is not responsible for observations and test for specific periods of work that RPF did not perform full shift monitoring of construction, abatement or remediation activity. In the event that problems occurred or concerns arouse regarding contamination, safety or health hazards during periods RPF was not onsite, RPF is not responsible to provide documentation or assurances regarding conditions, safety, air testing results and other compliance issues. RPF may have provided recommendations to the Client, as needed, pertaining to the Client's Contractor compliance with the technical specifications, schedules, and other project related issues as agreed and based on results of RPF monitoring work. However, actual enforcement, or waiving of, contract provisions and requirements as well as regulatory liabilities shall be the responsibility of Client and Client's Contractor(s). Off-site abatement activities, such as waste transportation and disposal, were not monitored or inspected by RPF.

11. For services limited to clearance testing following abatement or remediation work by other parties: The testing was limited to clearance testing only and as indicated in the report and a site assessment for possible environmental health and safety hazards was not performed as part of the scope of this testing. Client, or Client's abatement contractor as applicable, was responsible for performing visual inspections

of the work area to determine completeness of work prior to air clearance testing by RPF.

12. For site work, including but not limited to air clearance testing services, in which RPF did not provide full site safety and health oversight, abatement design, full shift monitoring of all site activity, RPF expresses no warranties, guarantees or certifications of the abatement work conducted by the Client or other employers at the job site(s), conditions during the work, or regulatory compliance, with the exception of the specific airborne concentrations as indicated by the air clearance test performed by RPF during the conditions present for the clearance testing. Unless otherwise specifically noted in the RPF Report, visual inspections and air clearance testing results apply only to the specific work area and conditions present during the testing. RPF did not perform visual inspections of surfaces not accessible in the work area due to the presence of containment barriers or other obstructions. In these instances, some contamination may be present following RPF clearance testing and such contamination may be exposed during and after removal of the containment barriers or other obstructions following RPF testing services. Client or Client's Contractor is responsible for using appropriate care and inspection to identify potential hazards and to remediate such hazards as necessary to ensure compliance and a safe environment.

13. The survey was limited to the material and/or areas as specifically designated in the report and a site assessment for other possible environmental health and safety hazards or subsurface pollution was not performed as part of the scope of this site inspection. Typically, hazardous building materials such as asbestos, lead paint, PCBs, mercury, refrigerants, hydraulic fluids and other hazardous product and materials may be present in buildings. The survey performed by RPF only addresses the specific items as indicated in the Report.

14. For mold and moisture survey services, RPF services did not include design or remediation of moisture intrusion. Some level of mold will remain at the site regardless of RPF testing and Contractor or Client cleaning efforts. RPF testing associated with mold remediation and assessments is limited and may or may not be representative of other surfaces and locations at the site. Mold growth will occur if moisture intrusion deficiencies have not been fully remedied and if the site or work areas are not maintained in a sufficiently dry state. Porous surfaces in mold contaminated areas which are not removed and disposed of will likely result in future spore release, allergen sources, or mold contamination.

15. Existing reports, drawings, and analytical results provided by the Client to RPF, as applicable, were not verified and, as such, RPF has relied upon the data provided as indicated, and has not conducted an independent evaluation of the reliability of these data.

16. Where sample analyses were conducted by an outside laboratory, RPF has relied upon the data provided, and has not conducted an independent evaluation of the reliability of this data.

17. All hazard communication and notification requirements, as required by U.S. OSHA regulation 29 CFR Part 1926, 29 CFR Part 1910, and other applicable rules and regulations, by and between the Client, general contractors, subcontractors, building occupants, employees and other affected persons were the responsibility of the Client and are not part of the RPF SOW.

18. The applicability of the observations and recommendations presented in this report to other portions of the site was not determined. Many accidents, injuries and exposures and environmental conditions are a result of individual employee/employer actions and behaviors, which will vary from day to day, and with operations being conducted. Changes to the site and work conditions that occur subsequent to the RPF inspection may result in conditions which differ from those present during the survey and presented in the findings of the report.