Specialty Construction & Environmental Remediation Services

Report of Pre-Renovation Hazardous Materials Assessment – Rocky Mountain Research Station Shed 7

Subject Property:
Rocky Mountain Research Station
5775 U.S. Hwy 10 W.
Missoula, MT 59808

Contract: AG-82FT-P-15-0058

Prepared For:

United States Department of Agriculture U.S. Forest Service
Rocky Mountain Research Station
240 W Prospect Street
Fort Collins, CO 80526

Prepared By:

Abatement Contractors of Montana, LLC
208 Commerce St
Missoula, MT 59807
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www.acm-contracting.com

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APPENDICIES

December 15, 2015

USDA Forest Service
Attn: Corrie Kegel, PE
5775 U.S. Hwy 10 W.
Missoula, MT 59808

RE: Pre-renovation Inspection report for Asbestos, Lead & PCB Identification for Shed 7 of the Rocky Mountain Research Station Located at 5775 U.S. Hwy 10 W, Missoula, MT 59808-9361

Attn: Corrie Kegel,

Abatement Contractors of Montana, LLC (ACM) is pleased to provide the findings of the asbestos and lead-based paint inspection completed at the Rocky Mountain Research Station (RMRS), in Missoula, Montana. The inspection was performed from October through December, 2015 by Mr. Christopher Casas and Mr. Mike Foust; Montana Department of Environmental Quality (DEQ) accredited asbestos inspectors (MTA-4459) (MTA-2741) and Environmental Protection Agency (EPA) accredited lead based paint inspectors (MT-I-I148223-1) (MT-S-28404-2). Credentials are attached.

1.0 INTRODUCTION

The pre-renovation hazardous material assessment for the above referenced project was completed to confirm or deny the presence of asbestos. ACM collected a total of 4 bulk samples representing 2 homogeneous areas (HAs) of suspected asbestos-containing building materials (ACBM). Floor plan drawings with bulk sample locations are presented in Appendix A. Samples listed in **Table 1** tested positive for asbestos.

Identification of regulated hazardous materials at the Shed 7 Wing was accomplished through physical inspection, bulk sampling, and collection of X-Ray Fluorescence (XRF) screening data of building materials within the site.

The inspection for asbestos-containing material (ACM) was conducted using the protocol developed for schools under the Asbestos Hazard Emergency Response Act (AHERA), as promulgated in Title 40, Code of Federal Regulations, Part 763 (40 CFR, Part 763.354). Classification of the identified asbestos-containing materials was performed under the guidelines for National Emission Standards for Hazardous Air Pollutants (NESHAP).

The lead-based paint inspection was conducted using the protocols developed by the United States Department of Housing and Urban Development (HUD). ACM used a field XRF analyzer to determine the presence or absence of LBP. HUD recognizes the XRF analyzer as the recommended method to determine lead in paint (HUD 1995, revised 1997 and 2000).

ACM completed an inspection for Polychlorinated Biphenyls (PCBs) within Shed 7 by an observational investigation to assess the quantity of PCBs.

ACM completed an inspection for mercury-containing equipment within the Shed 7 by an observational investigation to assess the quantity of mercury-containing equipment.

Our methods and findings for the Inspection and overall hazard assessment are presented in the following sections of this report.

A total of 3 separate HAs of suspect lead-containing surface coatings were identified at the site during the assessment. Three (3) HAs were determined through on-site XRF analysis to be NON-Lead-Based Paint and NON-LCP and therefore contain no amount of detectable lead.

Prior to initiating renovation activities at the site, an abatement plan should be prepared to address the containment, packaging handling, transport, and disposal of the regulated asbestos-containing materials, PCBs containing materials, and mercury-containing equipment identified at the site in order to satisfy regulatory requirements, as described in this report.

2.0 Scope of Work

The scope of work for this project included a hazardous materials assessment of building components throughout the accessible interior and exterior spaces of Shed 7. This work included visual assessment, sampling, and documentation of suspect and confirmed/assumed asbestos containing-building materials, lead-containing surface coatings, PCB's, Mercury light tubes, thermostats as defined by the Environmental Protection Agency and State & local codes for Montana. This work also included recording the locations of the materials, estimated quantities +/- 10% of hazardous materials and recommendations for abatement of asbestos containing material and other hazardous materials. The scope of work included visual inspection for, but no sample collection of potential mercury-containing materials and potential PCB-containing equipment and materials. The purpose for conducting the inspection is to ensure all local, state and federal regulations related to hazardous waste are complied with during the upcoming renovation of Shed 7. ACM's scope of work for this project did not include preparation of abatement plans or specification documents.

3.0 Site Description

The Rocky Mountain Research Station (RMRS) houses the Fire, Fuel and Smoke science program as well as the Missoula Fire Sciences Laboratory. The RMRS was constructed in 1960 complete with a combustion laboratory, a wet laboratory, maintenance garage spaces, and office spaces. The building is divided into A, B and C Wings. Wing A houses the combustion laboratory, the wet laboratory, the boiler room, the ac/refrigeration room, and the low velocity and high velocity wind tunnel laboratory. Wing B houses the office spaces and Wing C houses the server room, office space, and a printing room. Shed 7 houses the water storage tank, and grounds keeping equipment.

Exterior of the Building:
The foundation is poured concrete; the exterior structural walls of Shed 7 are finished with Sheet metal over concrete/CMU structure. The roof over Shed 7 is comprised of sheet metal.

Interior of the Building:
The interior flooring of Shed 7 consists of bare concrete. The interior walls of Shed 7 are finished with Cement Asbestos board over metal framing. The ceilings of Shed 7 are completed with cement asbestos board (CAB).

4.0 Asbestos Inspection

Samples were obtained by trained and experienced individuals using techniques such as wet slicing, wet boring, and/or similar methods designed to limit contamination of the area during sampling. When applicable, the sampled area was sealed using duct tape or spry encapsulates as appropriate to the material being sampled.

The asbestos inspection was performed in accordance with the Administrative Rules of Montana (ARM), Occupational Health and Safety Administration (OSHA) 29 Code of Federal Regulation (CFR) 1926.1101(k), DEQ and the National Emission Standards for Hazardous Air Pollutants (NESHAP) 40 CFR 61, Subparts A and M.

As required prior to renovation or demolition of building materials, the asbestos inspection consisted of a detailed survey of all materials which will be disturbed during the demolition process. Suspect ACBM were visually identified and touched prior to sampling. The samples were placed into HA groups using a coding method to classify each material by type, texture, and date of application. Components of the inspection included:

- Identification of homogeneous suspect materials on a room-by-room basis
- Collection and analyses of bulk samples to confirm or deny the presence of asbestos
- Bulk samples were not collected from any homogeneous material made of fiberglass, wood, foam, glass, or rubber.

A minimum of three (3) samples were collected from random locations of each HA of suspect material. Samples were collected from existing damaged materials, as applicable. Samples were placed in pre-labeled plastic containers for transport to the laboratory.

Samples were shipped, under chain-of-custody protocol for standard analyses to Sanair Technologies Laboratory, Inc. in Powhatan, Virginia, for bulk asbestos analysis utilizing Polarized Light Microscopy

(PLM). The samples were analyzed in accordance with EPA method 600/R93/116 and EPA 600/m4-82/020.

The DEQ defines ACM as material containing more than 1% asbestos based on laboratory analysis for the material using the EPA method 600/R-93/116 (“Method for the Determination of Asbestos in Bulk Building Materials’) by Polarized Light Microscopy (PLM). Three categories of ACM have been defined in the

National Emissions Standards for Hazardous Air Pollutants (NESHAP) standard, which is established in Title 40, part 61, of the Code of Federal Regulations (40 CFR 61.141) and adopted by the DEQ in Title 17, Chapter 74, Subchapter 3, of the Administrative Rules of Montana (ARM 17.74.351). The NESHAP Category definitions are as follows;

- **Category I Non-friable ACM -** asbestos-containing packings, gaskets, resilient floor coverings, and asphalt roofing products containing more than one (1) percent (%) asbestos as determined using the method specified in appendix E, subpart E, 40 CFR 763, section 1 (PLM)

- **Category II Non-friable ACM** - any material, excluding Category I Non-friable ACM, containing more than 1% asbestos as determined using the method specified in appendix E, subpart E, 40 CFR 763, section 1, PLM that, when dry, cannot be crumbled, pulverized or reduced to powder by hand pressure.

- **Regulated ACM (RACM)** - a) friable asbestos material; b) Category I Non-friable ACM that has become friable; c) Category I Non-friable ACM that will be or has been subjected to sanding, grinding, cutting, or abrading; or d) category II non-friable ACM that has a high probability of becoming or has become crumbled, pulverized, or reduced to powder by the forces expected to act on the material in the course of demolition or renovation operations regulated by the subpart.

ACM collected 4 bulk samples representing 2 HAs of suspected ACBM. **Table 1** summarizes analytical results for the building materials collected within the site. Additional information in Table 1 includes sample ID, building material description, sample location, and recommended response actions.

Table 1: Summary of ACM Shed 7

HA No.	HA Description	Location	% Asbestos	Condition	SQFT/LF	Response Action
TRNST.1	cement asbestos board	Walls of Shed 7	20%	good condition non friable	1000 SQFT	(Intact Removal) prior to renovation

5.0 LEAD-BASED PAINT INSPECTION

The purpose of a lead assessment is to identify lead-containing surface coatings. Identification of Lead Containing Paint (LCP) and/or Lead Based Paint (LBP) is necessary to determine whether renovation/demolition workers may potentially be exposed to airborne lead concentrations exceeding permissible exposure limits (PEL) established by the OSHA. Characterization of leachable lead in the overall potential waste stream is necessary to determine proper handling and disposal of renovation waste materials required by the Resource Conservation and Recovery Act (RCRA).

HUD defines LBP as a surface coating containing lead in concentration greater than 1.00 (mg/cm^2). The presence of LBP on surfaces scheduled to be impacted during the renovation activities increases the potential for workers to be exposed to airborne lead in concentrations greater than the OSHA PEL of 50 micrograms per cubic meter (µg/m3), which is established in 29 CFR 1926.62. However, it is important to note that the presence of LCP's (i.e. coatings which contain lead at concentrations less than the HUD criterion of 1.00 mg/cm^2) may also present a potential exposure hazard for renovation workers.

As a result of the lead-based paint assessment conducted at the site, lead-based surface coatings (paints) were confirmed on the subject property as of the date of the assessment. The analytical results from this assessment effort identified the following lead-based paint (LBP) as defined by the EPA and/ or HUD standards

5.1 Introduction

A LBP assessment was conducted at Shed 7 of the RMRS for the client. The inspection was conducted by Mr. Christopher Casas, a certified Lead-Based Paint Inspector. The purpose for the inspection was to confirm or deny the presence of lead-based paint. As part of the inspection, a visual survey of the property and structure was conducted and all painted surfaces were inventoried.

The comprehensive LBP testing, conformed to HUD guide lines 24 CFR 35 section 35.930 (c), (d). LBP is defined by EPA regulations under Title X (Residential Lead-Based Paint Hazard Reduction Act of 1992) as containing lead concentrations above 1.0 mg/cm² when measured by a portable XRF instrument or 0.5% by weight (5,000 parts per million) when measured by laboratory analysis.

Since this project is non-HUD target housing, **HUD Rules & regulations do not apply**.

Explanations of regulations are detailed for workers that will be on the site as follows:

The Occupational Safety and Health Administration (OSHA) 29 CFR 1926.62 - Lead in Construction Standard does not define lead based coatings or materials but does establish safe airborne exposure limits for employees working with lead containing materials by permissible exposure limit (PEL). In summary; if any material or coating contains lead above 100 ppm then abatement, renovation, or demolition contractors must demonstrate worker health and safety due diligence.

This includes: lead awareness training for all affected employees, establishment of proper personal protective equipment (PPE), proper demarcation of effected work area(s), and performance of negative exposure assessment (NEA) lead air monitoring prior to downgrading any established PPE.

Relating to disposal of lead-containing waste, RCRA regulatory criteria for “total” lead in a waste stream is established in 40 CFR 261, Subpart C. The regulatory criteria are listed in milligrams per liter (mg/l) of dissolved lead in a solution (“wet basis”), as determined using the Toxicity Characteristic Leaching Procedure (TCLP) by EPA Method 1311.

5.2 Methods

ACM identified HAs of suspect LBP on interior and exterior surfaces for each of the site buildings, as described above, in general accordance with American Standards for Testing and Materials (ASTM) Method E 1729-05. ACM’s inspector distinguished HAs of suspect LBP visually and through field review of analytical data obtained using a Innov-X-Systems alpha-4000 XRF analyzer. As deemed appropriate by the inspector, multiple tests were taken within a given HA; in such instances, the highest observed concentration for tests representing a respective HA were reported.

The XRF utilizes an ionizing electrical source and internal calculations to provide direct-read lead data. Analytical data obtained from a field-calibrated XRF are accepted as accurate by the EPA.

It should be noted that this instrument performs its own detector calibration upon startup, and it's accuracy was checked against known standards set forth by the National Institute of Standards and Technology (NIST) prior to, during (at a four (4) hour interval), and following testing. The Performance Characteristic Sheet (PCS) is included in Appendix E.

5.3 Findings

ACM collected a total of Fourteen (14) XRF suspect lead coating assays & calibration readings for the lead based inspection of Shed 7. Any paint films with lead concentrations of 1.0 or greater were classified as Regulated Lead Containing Materials. In addition, the substrate condition was visually assessed at each assay test site. Additional paint or glaze coatings on the interior of the buildings were bulk sampled using destructive methods to verify the lead content in parts per million (ppm), summarized in **Table 2**. Results from ACM's LBP assessment are summarized in the following sections for the site buildings.

ACM identified No HAs of suspect LBP, the HA was determined to be LBP as summarized below:

Table 2: Summary of LBP from XRF Analysis Shed 7

Component	Location	Material Description	Quantity	XRF Results
None	Shed 7	N/A	0	0.00

% = Percentage < = Less Than **Bold** = LBP 0.5% by weight = HUD definition of lead-based paint

6.0 Mercury

A total of 4 suspected mercury-containing pieces of equipment were identified through visual observation associated with the site and were identified as being mercury-containing equipment during the assessment that include fluorescent light tubes, CFL's, thermostats, thermometers in mechanical rooms, hallways, offices throughout the building.

Due to the age of the structure, a visual inspection for potential mercury-containing equipment such as mercury switches, thermostats and thermometers was conducted at the site. Mercury-containing equipment is listed in the universal waste regulated under the Resource Conservation and Recovery Act (RCRA) hazardous waste regulations. EPA's universal waste regulations streamline hazardous waste management standards for designated "universal waste" which includes mercury-containing equipment to prevent the item from entering municipal trash; instead it can be collected and disposed of at a hazardous facility. The federal universal waste regulations are set forth in 40 CFR (273.9).

Mercury-containing equipment is a device or part of a device (including thermostats, temperature and pressure gauges. Universal waste regulations apply to mercury-containing equipment. Personal handling of this type of waste (i.e. disposed fluorescent light bulbs) must be trained regarding the proper handling and emergency response actions for the waste (mercury). It is recommended that the facility where the mercury-containing equipment is present participates in a management plan for the proper disposal and recycling of the hazardous waste. The hazardous waste must be containerized to protect it from damage and/or leakage, and the containers must be properly labeled to identify the type of universal waste (e.g. “Universal Waste – Mercury Thermostats” or ‘Waste-Mercury thermostat(s)’or “Used Mercury Thermostats”).

The transport of universal waste must include adequate packing materials to prevent breakage during storage, and handling in accordance with EPA and DOT regulations. Universal wastes may only be transported to other universal waste handlers, destinations facilities (e.g. disposal or recycling facilities). Handling and transport of small quantities of universal waste do not need to be reported to the EPA; however it is prudent to collect and document all receipts generated by the destination facilities.

ACM recommends the abatement design specification document be prepared to include requirements for removal, handling, and disposal of these materials. These tasks should be completed by the abatement contractor or other trained personnel.

7.0 Assumed PCBs

No suspected PCB-Containing Equipment was found or identified during the visual observation to be associated with Wing C and was not identified as being PCB-Containing Equipment during the assessment.

Current PCB regulations can be referenced in CFR 40 761. PCB-Containing equipment is currently listed under as a chemical substance under the Toxic substances Control Act (TSCA). The TSCA was established to control any substance determined to cause unreasonable risk to public health or the environment. PCB-Containing Fluorescent light ballasts identified in the assessment must be considered to be “PCB Bulk Product Waste”. During the visual assessment of the Ballasts within Shed 7, it was observed that all Ballasts are marked as non-PCB-containing.

8.0 Quality Control & Quality Assurance

ACM utilized a unique sample ID number to each bulk sample to help with elimination of microscopist’s potential bias. For example, if a numbering system indicates that seven samples are from the same room, a microposist may not be objective with each individual sample. Bulk samples obtained during the site inspection were identified and entered on sample summary sheets.

8.1 Chain-of-Custody Forms

In order to ensure that the samples are properly identified and tracked from the point of sample collection through receipt by the analytical laboratory, EPA requires that a chain-of-custody (COC) form be completed and accompany the samples. The COC contains essential items such as identification number, date, name of sampler and signature of recipient. Some laboratories request that COC forms they supply be used. These forms must be completed in the field and accompany the samples when

they leave possession of the inspector. Inspectors should fill in a new COC form if mistakes have been made (i.e. incorrect information transferred from sample containers to COC form).

8.2 Quality Control (QC) Samples

Collections of side-by-side duplicates are recommended at the rate of 1 QC sample/building or 1 QC sample/20 samples, whichever is larger. The laboratory should analyze duplicates without knowing which the QC samples are. The results of duplicates are compared to determine sampling analytical precision.

8.3 Accredited Laboratories

To diminish the likelihood of challenges to the accuracy of laboratory results ACM utilized an accredited laboratories for the analysis of bulk samples (per AHERA 40 CFR Part 763, Subpart E). A listing of accredited laboratories published by the EPA twice a year is available through the EPA regional Asbestos Coordinator or the TSCA hotline (202)-554-1404.

9.0 XRF

The XRF instrument was calibrated to the manufacturer's standards prior to collecting field measurements and was checked periodically throughout the testing period against known NIST standards. All checks performed throughout the assessment were within 5% of one another. Overall, the precision, accuracy, method compliance, and completeness of the data set were determined to be acceptable based on the data submitted and reported. The XRF Performance Characteristic Sheet for the XRF used by ACM specifies the ranges where XRF results are positive, negative, or inconclusive. The Performance Characteristic Sheet for this instrument is attached in **Appendix D**.

10.0 Summary of Findings:

10.1 Asbestos

- Two (2) building materials suspected of containing asbestos were confirmed to not contain asbestos. If future renovation or demolition activities are planned these non-ACBM materials may remain in-place and be demolished with the reminder of the building.

- One (1) building materials suspected of containing asbestos were confirmed to contain greater than one percent (>1%) asbestos and are considered Asbestos Containing Building Materials. These materials will require special abatement considerations prior to commencing renovation/selective demolition activates. Several options for asbestos abatement, in conjunction with demolition operations, may be considered for this project. The owner's representative should work with the owner to develop a cost effective abatement/renovation/demolition plan, with considerations for the health and safety of the

abatement workers, the demolition personnel, and residents within the immediate vicinity of the demolition project.

- If abatement or renovation/selective demolition of the property is completed in accordance with current EPA and MDEQ-ACP guidelines, the services completed throughout the project will require asbestos qualified contractors and consultants to complete the work.

10.2 Lead Based Paint

- *No Lead-Based Paint was Found within Shed 7*

10.3 PCB-Containing Equipment

- *No PCB-Containing Equipment was found within Shed 7*

10.4 Mercury -Containing Equipment

- Confirmed mercury-containing equipment is listed per a room on the PCB and Mercury containing equipment drawing, and a complete summary of all identified PCBs are listed in Appendix G. Identified mercury-containing-equipment shall be disposed of at a hazardous facility, as stipulated in 40 CFR (273.9). The Mercury-Containing Equipment must be containerized to protect it from damage and/or leakage, and the containers must be properly labeled to identify the type of universal waste. The transport of Mercury-Containing Equipment must include adequate packing materials to prevent breakage during storage, and handling. Handling and transport of small quantities of Mercury-Containing Equipment do not need to be reported to the EPA; however it is prudent to collect and document all receipts generated by the destination facilities.

11.0 Limitations

This asbestos and lead inspection summary was prepared based on information gathered during our site visits, phone conversations with the client and interpretations of laboratory results of bulk samples collected during the inspection. The inspection was comprehensive to the referenced building. Supplemental inspection and sampling may be required if additional asbestos HAs are exposed during excavation, demolition, or if the scope of work is expanded to include additional buildings or buried/underground piping that have not been inspected or analyzed for asbestos or lead content.

If you have any questions regarding this report, please call me at 406.549.8489. We look forward to working with you in the future.

Sincerely,

Christopher Casas
Environmental Technician

Mike Foust
Project Manager

CHRISTOPHER E CASAS
has met the requirements of Montana Administrative Rule 17.74.362 and/or 17.74.363 for accreditation in the following asbestos occupation(s) through the specified expiration date(s).

MTA-4459

Asbestos Inspector	07/01/2016
Management Planner	10/17/2015
Project Contractor/Supervisor	04/24/2016

MT DEQ Asbestos Control Program

MIKE A FOUST
has met the requirements of Montana Administrative Rule 17.74.362 and/or 17.74.363 for accreditation in the following asbestos occupation(s) through the specified expiration date(s).

MTA-2741

Asbestos Inspector	04/10/2016
Project Contractor/Supervisor	04/10/2016
Project Designer	11/18/2015

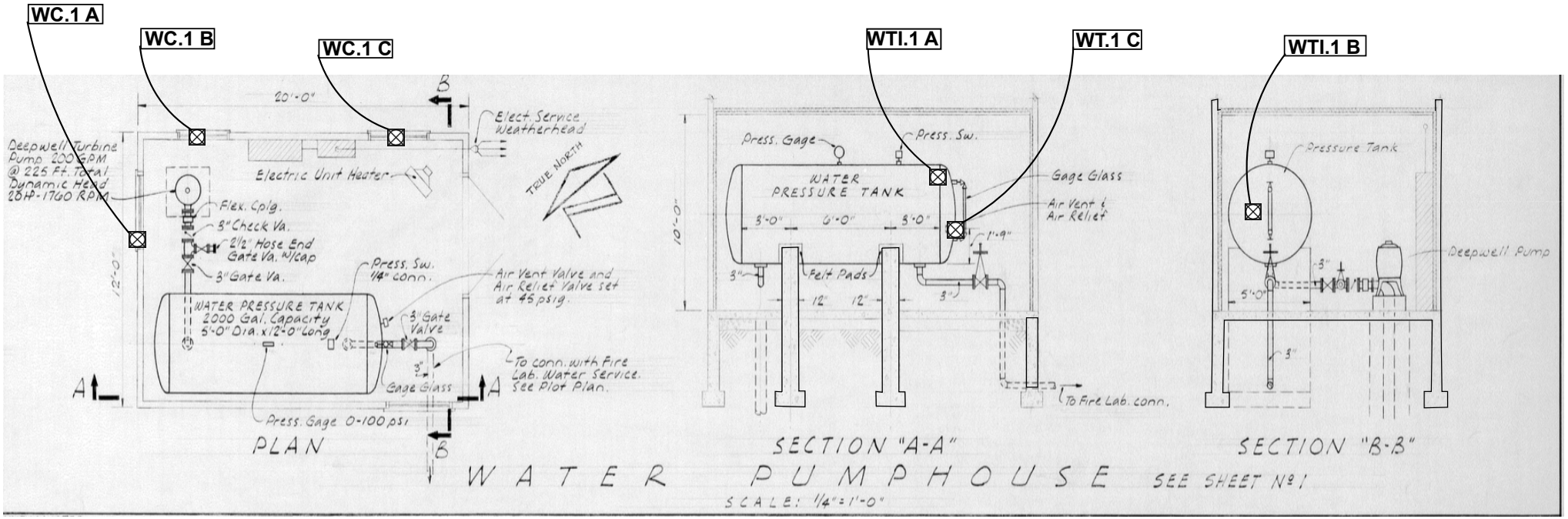
MT DEQ Asbestos Control Program

APPENDIX A

Sample Location Drawings

Bulk Sample Location of Suspect Asbestos Containing Material- SHED 7

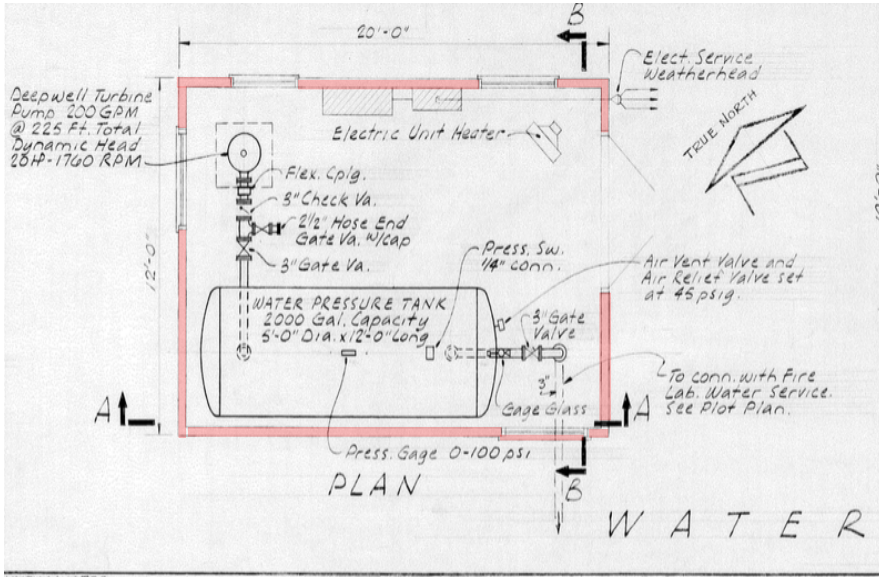
⊠ — **Bulk Sample Location**



APPENDIX B

ACBM, LBP & Mercury PCB Location Drawings

Asbestos Containing Material Location - SHED 7



Cement Asbestos Board

APPENDIX C

Documentation of Accreditation

APPENDIX D

XRF Performance characteristic sheet

United States Environmental Protection Agency

This is to certify that

Christopher Errol Casas

has fulfilled the requirements of the Toxic Substances Control Act (TSCA) Section 402, and has received certification to conduct lead-based paint activities pursuant to 40 CFR Part 745.226 as:

Inspector

In the Jurisdiction of:

Montana

This certification is valid from the date of issuance and expires February 23, 2018

MT-I-I148223-1
Certification #

February 09, 2015
Issued On

Adrienne Priselac, Manager, Toxics Office
Land Division

United States Environmental Protection Agency

This is to certify that

Mike A Foust

has fulfilled the requirements of the Toxic Substances Control Act (TSCA) Section 402, and has received certification to conduct lead-based paint activities pursuant to 40 CFR Part 745.226 as:

Risk Assessor

In the Jurisdiction of:

Montana

This certification is valid from the date of issuance and expires December 03, 2018

MT-R-28404-1

Certification #

November 19, 2015

Issued On

Adrienne Priselac, Manager, Toxics Office

Land Division

APPENDIX E

XRF Data Summary Tables

Summary of XRF Field Data-Rocky Mountain Research Station - Shed 7
Missoula, MT

Shot	Pass Fail Standard	Date	Pb	Pb +/-	Side	Quadrant	Componen	Substrate	Color	Condition	Notes	Time
1	PASS	16-Dec-15		0.06								9:50:31
	NIST STD Pass	16-Dec-15	1	0.01	NIST Standard - Red SRM 2573						NIST-STND CAL	9:52:49
2	Negative	16-Dec-15	0.16	0.03	North	Middle	Pipes	Metal	Grey	Intact	RMRS-Shed 7	9:53:11
3	Negative	16-Dec-15	0.07	0.01	North	Middle	Pipes	Metal	Grey	Intact	RMRS-Shed 7	9:54:09
4	Negative	16-Dec-15	0.05	0.02	North	Middle	Pipes	Metal	Grey	Intact	RMRS-Shed 7	9:54:54
5	Negative	16-Dec-15	0	0.01	North	Middle	Wall	Metal	Green	Intact	RMRS-Shed 7	9:55:33
6	Negative	16-Dec-15	0	0.01	East	Middle	Wall	Metal	Green	Intact	RMRS-Shed 7	9:55:56
7	Negative	16-Dec-15	0	0	West	Middle	Wall	Metal	Green	Intact	RMRS-Shed 7	9:56:28
8	Negative	16-Dec-15	0	0.02	South	Middle	Wall	Metal	Green	Intact	RMRS-Shed 7	9:58:02
9	Negative	16-Dec-15	0	0	South	Middle	Door	Metal	Pink	Intact	RMRS-Shed 7	9:58:41
10	PASS	16-Dec-15		0.02								10:35:33
11	Negative	16-Dec-15	0	0.02	North	Middle	Wall	Transite	N/a	Intact	RMRS-Shed 7	10:55:16
12	Negative	16-Dec-15	0	0	North	Middle	WAll	Transite	N/a	Intact	RMRS-Shed 7	10:57:26
13	Negative	16-Dec-15	0	0.01	North	Middle	Wall	Metal	Green	Intact	RMRS-Shed 7	10:57:54
14	Negative	16-Dec-15	0.05	0	South	Middle	Wall	Metal	Green	Intact	RMRS-Shed 7	10:58:58

Indicates that the lead concentration of the HA is below the HUD definition of LBP (1.00 mg/cm^2). It is important to note that if this material is disturbed during the renovation process potential lead containnig dust may be created.

APPENDIX F

Analytical Reports

SanAir Technologies Laboratory

Analysis Report

Prepared for

Abatement Contractors of Montana, LLC

Report Date: 12/16/2015
Project Name: Rocky Mtn Station
Project #: IH 15-101
SanAir ID#: 15039540

NVLAP LAB CODE 200870-0

Virginia SBE Certification # 652931

Texas Licensed Mold Analysis Laboratory License # LAB0166

SanAir Technologies Laboratory

804.897.1177 www.sanair.com

SanAir Technologies Laboratory, Inc.

1551 Oakbridge Drive, Suite B, Powhatan, VA 23139
804.897.1177 Toll Free: 888.895.1177 Fax: 804.897.0070
Web: http://www.sanair.com E-mail: iaq@sanair.com

Abatement Contractors of Montana, LLC
PO Box 8747
Missoula, MT 59807

December 16, 2015

SanAir ID # 15039540
Project Name: Rocky Mtn Station
Project Number: IH 15-101

Dear Christopher Casas,

We at SanAir would like to thank you for the work you recently submitted. The 4 sample(s) were received on Wednesday, December 16, 2015 via FedEx. The final report(s) is enclosed for the following sample(s): WTI.1A, WTI.1B, WTI.1C, WG.1

These results only pertain to this job and should not be used in the interpretation of any other job. This report is only complete in its entirety. Refer to the listing below of the pages included in a complete final report.

Sincerely,

Sandra Sobrino

Sandra Sobrino
Asbestos & Materials Laboratory Manager
SanAir Technologies Laboratory

Final Report Includes:
- Cover Letter
- Analysis Pages
- Disclaimers and Additional Information

sample conditions:
4 sample(s) in Good condition

SanAir Technologies Laboratory, Inc.

1551 Oakbridge Drive, Suite B, Powhatan, VA 23139
804.897.1177 Toll Free: 888.895.1177 Fax: 804.897.0070
Web: http://www.sanair.com E-mail: iaq@sanair.com

SanAir ID Number

15039540

FINAL REPORT

Name: Abatement Contractors of Montana, LLC
Address: PO Box 8747
Missoula, MT 59807

Project Number: IH 15-101
P.O. Number:
Project Name: Rocky Mtn Station

Collected Date: 11/24/2015
Received Date: 12/16/2015 11:25:00 AM
Report Date: 12/16/2015 5:46:35 PM
Analyst: Vaughan, Nathaniel

Asbestos Bulk PLM EPA 600/R-93/116

SanAir ID / Description	Stereoscopic Appearance	Components % Fibrous	Components % Non-Fibrous	Asbestos Fibers
WTI.1A / 15039540-009 Water Tank Insulation. Shed	White Non-Fibrous Heterogeneou	25% Cellulose	35%	None

SanAir ID / Description	Stereoscopic Appearance	Components % Fibrous	Components % Non-Fibrous	Asbestos Fibers
WTI.1B / 15039540-010 Water Tank Insulation. Shed	White Non-Fibrous Heterogeneou	25% Cellulose	35%	None

SanAir ID / Description	Stereoscopic Appearance	Components % Fibrous	Components % Non-Fibrous	Asbestos Fibers
WTI.1C / 15039540-011 Water Tank Insulation. Shed	White Non-Fibrous Heterogeneou	25% Cellulose	35%	None

SanAir ID / Description	Stereoscopic Appearance	Components % Fibrous	Components % Non-Fibrous	Asbestos Fibers
WG.1 / 15039540-012 Window Glazing Shed 7	Grey Non-Fibrous Heterogeneous		100% Other	None Detected

Certification

Analyst: Nathan Vaughan Approved Signatory: Sandra Sobrino

Analysis Date: 12/16/2015 Date: 12/16/2015

APPENDIX G

PCB & Mercury Material List

PCB & MERCURY MATERIAL LIST

Client: USFS Research Station Building Name: Shed 7

Location	**Quantity**	**Quantity**	**Quantity**	**Quantity**	**Quantity**	**Quantity**
Shed 7	Fluorescent Light fixtures:	CFL's	1x1 sq. light	Assumed PCB's transformers	Mercury T-stats-Thermostats	Emergency lighting/exit
	0	2	0	1	0	0
TOTAL	0	2	0	1	0	0

APPENDIX F

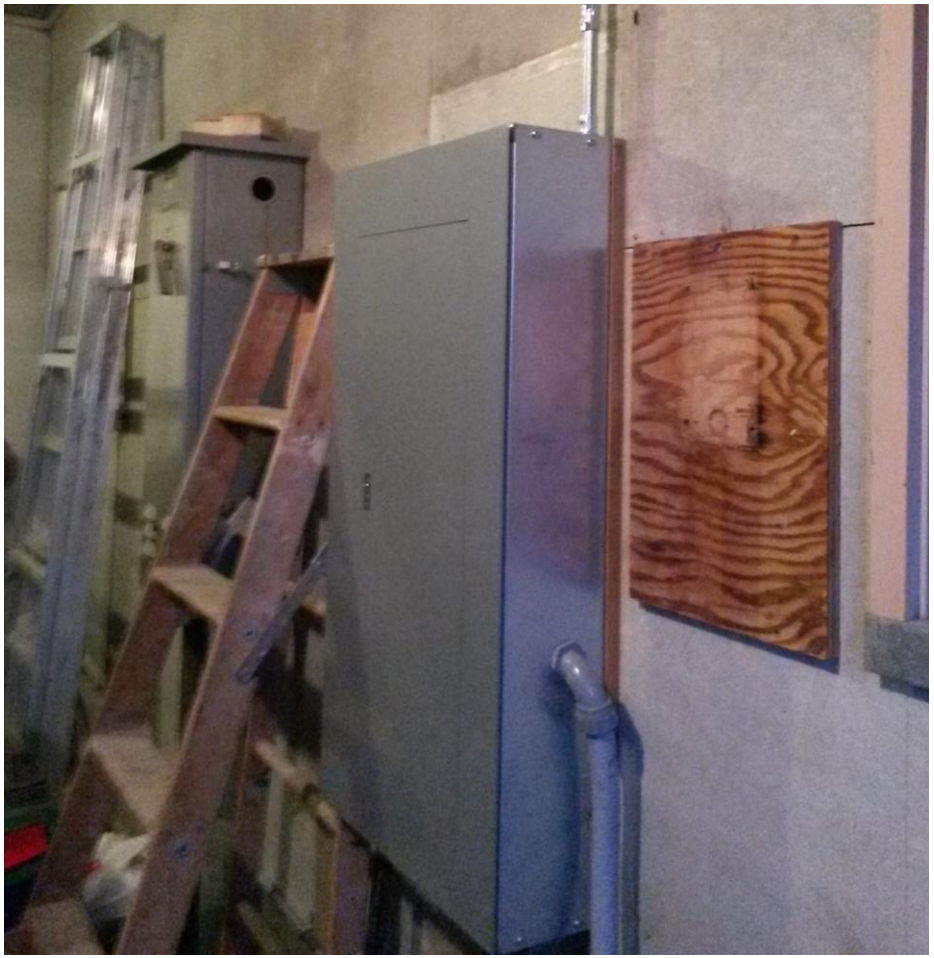
Photo Log of ACM, LBP & Mercury-PCB

Shed 7 asbestos & mercury pictures

Asbestos Identification

Cement asbestos board (transite) is located on the walls and ceiling

Small transformer on wall in shed 7



CFL lights contain mercury