Foothills Environmental, Inc.

Industrial Hygiene, Safety & Environmental Services

ASBESTOS ABATEMENT WORK PLAN

DEERFIELD HILLS COMMUNITY CENTER
4920 DEERFIELD HILLS ROAD
COLORADO SPRINGS, COLORADO

PREPARED FOR:

Mr. Steve Bodette
1401 Recreation Way
Colorado Springs, Colorado

October 18, 2015

FEI Project Number: AS15109-1

Prepared By:
Chris Thompson,
Foothills Environmental, Inc.

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1.0 Scope of Work

1.1 General Information

The General Abatement Contractor (GAC) will be performing the removal of all asbestos containing friable interior wall and ceiling textures, nonfriable 12-inch floor tiles. The intent of this project is to remove all asbestos-containing materials from the structure prior to a planned renovation. The scope of work is divided into two phases included in the following tables (see attached drawings for phasing locations). Contractor is to provide a separate cost for each phase of the project.

Table 1 – PHASE I - Asbestos Abatement (South Portion of Community Center)

Homogenous Area	Material Description	Material Location	Analytical Result	Approximate Quantity
DH-TS05	Medium Spatter Pattern Interior Wall Texture on Drywall	Carpeted Game Room Walls South Wall and Entry	3% Chrysotile	1,040 SF
DH-TS06	Heavy Spatter Pattern Interior Wall and Ceiling Texture on Drywall	Main Restrooms, Spray-Ground Restrooms and Office Walls and Ceiling	3-4% Chrysotile	1,576 SF
DH-TS01	Medium Orange Peel Pattern Interior Ceiling and Wall Texture on Drywall	Ceiling and Walls of South Half of Multi-Purpose Room	3% Chrysotile	750 SF
DH-TS02	Light Orange Peel Pattern Interior Wall and Ceiling Texture on Drywall	Boys and Girls Restrooms Walls and Ceilings and Maintenance Closet Walls	3% Chrysotile	550 SF
DH-FT01	12-inch Tan Floor Tile with Black Mastic	Maintenance Closet	Tile -9% Chrysotile Mastic - ND	60 SF

Table 2 – PHASE II - Asbestos Abatement (Remainder of the Building- North Side)

Homogenous Area	Material Description	Material Location	Analytical Result	Approximate Quantity
DH-TS01	Medium Orange Peel Pattern Interior Ceiling and Wall Texture on Drywall	North Ceiling and Walls of Multi-Purpose Room	3% Chrysotile	850 SF
DH-TS02	Light Orange Peel Pattern Interior Wall and Ceiling Texture on Drywall	Kitchen and Pantry Walls and Ceiling	3% Chrysotile	549 SF
DH-TS05	Medium Spatter Pattern Interior Wall Texture on Drywall	Carpeted Game Room Walls of North Offices	3% Chrysotile	950 SF
DH-FT01	12-inch Tan Floor Tile with Black Mastic	Maintenance Closet, Snack Closet and Table and Chair Closet	Tile -9% Chrysotile Mastic - ND	150 SF
DH-FT04	12-inch Brown Floor Tile with Black Mastic	Elementary Closet	Tile - 4% Chrysotile Mastic - ND	80 SF

Quantities are approximate and it is the abatement contractor's responsibility to verify actual amounts prior to bidding. By submitting a bid, the GAC accepts the quantities and site conditions. Variances from the quantities listed or site conditions will not be the basis for change orders.

Regulatory asbestos abatement permit notification with the Colorado Department of Public Health and Environment (CDPHE) will be required for this project.

1.2 Schedule

The project schedule will be coordinated by the City of Colorado Springs. The GAC will be required to coordinate with the General Contractor for scheduling during the project.

1.3 Sequence of Work

The GAC will be required to install a hard-barrier between the occupied areas of the building and the work area on each phase of the project. All asbestos-containing material and asbestos contaminated material considered friable and will be removed from their installed locations under full containments, utilizing wet removal methods and a combination of handheld tools. The GAC shall conduct abatement activities in accordance with CDPHE Regulation No. 8 in the following mandatory sequence:

1) Install critical barriers (pursuant to subsection III.I, Critical Barrier Installation)
2) Establish negative pressure (pursuant to subsection III.J, Air Cleaning and Negative Pressure Requirements)

Note: *The removal of non-ACM building materials and components may only take place after negative air pressure is established in the containment work areas.*

3) Construct the decontamination area (pursuant to subsection III.K, Decontamination Area)
4) Pre-clean surfaces (pursuant to subsection III.L, Pre-cleaning of Surfaces)
5) Cover fixed objects (pursuant to subsection III.M, Covering Fixed Objects)
6) Construct the containment (pursuant to subsection III.N, Containment Components)
7) Conduct abatement (pursuant to subsection III.O, Abatement Methods)
8) Conduct final visual inspection (pursuant to paragraph III.P.1., Final Visual Inspection)
9) Conduct final clearance air monitoring (pursuant to paragraph III.P.3., Final Clearance Air Monitoring)
10) Conduct the tear-down (pursuant to subsection III.Q., Tear-down)

All waste from the containment will be packaged in approved containers and transferred to an approved landfill for disposal. After successful air clearance of the containment the containment can be removed and all non-reusable containment materials will be packaged in approved containers and transferred the landfill for disposal.

1.4 Discussion of Abatement Procedures

Without disturbing existing ACM the GAC may remove any existing non-ACM material such as doors wood trim, etc. in order to more easily access the ACM to be removed.

Asbestos abatement shall be performed within a full containment. Removal will be accomplished by utilizing hand held tools. All surfaces to be abated will be wetted before and during removal to control dust and fiber emissions. Waste generated during removal will be gathered and wrapped in 2 layers of 6mil polyethylene sheeting or placed into 2 6ml thick properly labeled disposal bags while wet. Work must be accomplished using CDPHE certified supervisors and workers.

Work completion includes preparation of the work area, pre-clean activities, removal and disposal of all specified ACM from the premises, final cleaning of the work area, final visual inspection, lockdown, final clearance monitoring and disposal.

2.0 Special Conditions

2.1 Regulatory Notification and Variances

The General Abatement Contractor, (GAC) will make any required notifications to Federal and State entities regulating their work as required by applicable rules, regulations, and standards. This includes, but is not limited, to the National Emission Standards for Hazardous Air Pollutants (NESHAP) notification [notice provided to the Colorado Department of Public Health and Environment with permit application. **The abatement contractor is responsible for quantifying amounts of ACM necessary to properly complete the project.**

2.2 Facility Occupancy Status

During abatement activities the building will be occupied. It is the contractor's responsibility to secure the building at the end of each shift and to keep the grounds free of debris.

2.3 Site Security

Entry to the regulated asbestos work area is by permission only to authorized personnel. The perimeter of the work area may be monitored during abatement by a certified air monitoring specialist (AMS). Only asbestos certified/licensed personnel employed by the Contractor or federal or state regulatory agency personnel and the APM/AMS will be allowed access to the work area. Everyone who enters the work area must record name, affiliation, time in and time out for each entry on a log.

2.4 Field Changes

Minor modifications to the project design are allowed. Minor changes include but are not limited to, relocation of negative air machines, decontamination facility and waste load-out. Any modifications to the project design must be approved by the Project Designer before the changes are made.

3.0 Project Design

The GAC will be required to prepare a Site Specific Project Design for the project. The project design must be submitted to the project manager

3.1 Standards and Primacy of Rules

The following standards will be adopted as they pertain to asbestos abatement. In any instance where adopted standards are in conflict with each other, the most stringent shall apply.

1) Colorado Department of Public Health and Environment Regulation #8
2) 5CCR 1000-10 Part B asbestos handling, transportation, and storage
3) 29 CFR 1926.1101, the OSHA Construction Industry Asbestos Standard
4) 40 CFR 61 Subpart M, EPA's NESHAP Asbestos Standard
5) NIOSH/OSHA/EPA –"Occupational; Safety & Health Guidance Manual for Hazardous Waste Site Activities", Section 8-20; Heat Stress and Other Physiological Factors.
6) All other applicable laws, rules, and regulations, including but not limited to those relating to:

7 Workers' Compensation Insurance;
8 Liability Insurance
9 All contract specifications and documentation

3.2 Site Access

The GAC has access to the facility for the purpose of abatement from 7:00AM to 5:00PM until project completion. Restrooms will not be provided by the owner.

3.3 Utilities Service

Access to electrical power water and sanitary sewer will be made available. Any temporary utility lines running to the regulated asbestos work area shall be adequately protected from damage and abrasion from vehicle traffic.

The GAC shall provide temporary portable chemical toilets. A minimum of one portable chemical toilet shall be provided per 10 workers. The location of the temporary portable chemical toilets shall be coordinated and approved by the City of Colorado Springs.

3.4 Decontamination Facilities & Load-Out Facilities

Personnel decontamination facilities shall consist of an Equipment (Dirty) Room, Shower, and a clean room constructed in accordance with Regulation #8 III.K Decontamination Unit. The Waste Load Out shall consist of two separate chambers constructed in accordance with Regulation #8 - III.N.3.

All load-out and disposal procedures shall be in accordance with applicable federal, state, and local regulations and project specifications.

3.5 Critical Barriers

All critical barriers will consist of 1 layer of 6mil poly critical barrier on all, openings, windows and vents.

3.6 Negative Pressure Ventilation

The GAC shall maintain a negative pressure differential of -0.02 inches of water in the regulated penthouse work areas in accordance with Regulation #8 III.J Air cleaning and Negative Pressure Requirements, until final visual and clearance air monitoring complete.

3.7 Air Exchange Calculations

AIR CHANGE CALCULATIONS ***for a 2000 cfm negative air machine (NAM)***

$$\textit{AIR CHANGES} = \frac{A}{B \times C}$$

Where: A = Room volume in cubic feet (l x w x h)
B = 15 minutes
C = Estimated rated capacity of NAM (1,500 cfm)

Main House work area containment

A	=	59	x	40	x	8	=	18880	cubic feet
B	x	C	=		7,500				
	18880		/		7,500		=	2.5	

So 3 NAMs are required

3.8 Containment Construction

Containments for the asbestos removal shall be constructed in accordance with CDPHE Regulation 8 and project specifications. Danger signs will be posted at locations, and approaches to locations, where airborne concentrations of asbestos exceed or can reasonably be expected to exceed the PEL. Signs will be posted at a distance sufficiently far from the work area to permit an employee to read the sign and take the necessary protective measures to avoid exposure. Additional signs may need to be posted following construction of workplace containment barriers.

Danger signs will include the following wording:

DANGER
ASBESTOS
CANCER AND LUNG DISEASE HAZARD
AUTHORIZED PERSONNEL ONLY
RESPIRATORS AND PROTECTIVE CLOTHING ARE REQUIRED IN THIS AREA

3.9 Set up of work areas

Regulated work area containment construction will consist of 1 layer of 6mil polyethylene sheeting (critical barriers on openings, and vents). The negative air machines shall be directly vented to the outside. A minimum of two (2) 1,200 CFM negative air machines are required for the containment. A static negative air pressure of 0.02 inches of water column shall be maintained at all times in the work area during abatement activities. Air flow testing utilizing smoke tubes will be performed to validate air flow direction and air exchanges.

Pre-Cleaning Activities

Pre-cleaning activities will be performed in accordance with CDPHE Regulation 8. All workers performing pre-cleaning must utilize HEPA equipped vacuums and wet methods. Any prepping activities that will contact non-friable ACM, or be within arms' reach of friable ACM must be accomplished by workers utilizing PPE.

3.10 Asbestos Removal

Removal of materials containing asbestos and contaminated with asbestos shall be performed in accordance with the Colorado Department of Public Health and Environment Regulation 8 III, Abatement, Renovation and Demolition Projects.

3.11 Asbestos Spill Response

In the event of a spill or a breach of the regulated work area containment, the area outside the regulated work area with visible debris shall be cleaned utilizing HEPA vacuuming and wet

wiping plus an additional 10 horizontal feet beyond the visible debris. All filters, mop heads, and cloths utilized during clean-up activities shall disposed of as asbestos contaminated waste in leak tight containers.

The GAC shall have available, equipment and supplies (HEPA filtered vacuum, airless sprayer with amended water, mops, rags, polyethylene sheeting, duct tape, caution tape…) for spill response in the event of accidental spill of materials containing asbestos.

In the event of an asbestos spill outside the work area containment the GAC shall:

Immediately wet the spilled material and surrounding area with the airless sprayer.

Restrict access to the spill area and post warning signs to prevent entry to the area by persons other than those necessary to respond to the incident.

Seal all openings between the contaminated and uncontaminated areas as directed by the Fluor asbestos consultant. This is to be accomplished by using polyethylene sheeting and tape.

HEPA vacuum and wet clean all surfaces in the contaminated area.

Following completion of the above, the on sight Air Monitoring Specialist shall conduct a visual assessment of the spill area to confirm adequate cleaning has been accomplished by the GAC.

3.12 Asbestos Waste Transportation, Storage, and Disposal

All ACM waste must be wrapped in two layers of 6 mil polyethylene sheeting or double-bagged in 6 mil polyethylene bags labeled with the appropriate OSHA label for asbestos and must also bear the generator label as required by EPA's 40 CFR 61 Subpart M NESHAP Standard. Containerizing and transport of asbestos wastes shall be in accordance with applicable regulations. All asbestos generated waste will be transported from the work areas to a secured area (dumpster or truck).

Any asbestos waste that is not directly loaded into a dumpster may be temporally stored in the building provided it is protected to prevent leakage. When asbestos waste in the storage area is taken to the landfill (must be a CSU/CS-approved landfill), it will be transported in accordance with all applicable federal, state and local regulations.

3.13 Final Clean/ Final Visual Inspection Criteria

All interior surfaces of the work area will be free of visible dust and debris. The work area must pass a final visual inspection by a CDPHE Certified Air Monitoring Specialist (AMS) leaving only critical barriers in place.

3.14 Final Air Clearance Monitoring

Clearance criteria for this containment shall be in accordance with CDPHE Regulation #8, Section III.P and shall use Phase Contrast Microscopy (PCM). A minimum of five (5) air samples will be collected from the work area with only critical barriers in place. Upon notification that clearance monitoring levels are acceptable, the Contractor may remove critical barriers and demobilize from the work area. If any samples collected for the final air test exceeds 0.01 f/cc the entire work area shall be re-cleaned immediately upon receipt of air test results. The abatement work area shall be re-tested and the costs

associated for additional Final Clearance Air Monitoring shall be borne by the GAC at no additional cost to the building owner.

3.15 Personal Exposure Air Monitoring

The GAC shall be responsible for conducting personal exposure air-monitoring as applicable in accordance with OSHA 29 CFR 1926.1101 Asbestos Construction Standard. Contractor to supply results to Foothills Environmental, Inc. and will post results.

3.16 Electrical Hazards Control

All electrical power utilized during the project will be on ground fault circuit interrupters (GFCI) whose power source is located outside the work area.

3.17 Emergency Egress and Fire Protection

The abatement contractor shall prepare and make available emergency egress for the facility. All contractor personnel shall receive emergency procedure orientation specific to the facility prior to initiation of abatement activities.

3.18 Fire Protection Plan:

1. No items capable of initiating or sustaining combustion (lighters, matches, torches, etc.) will be allowed in containment.
2. The use of flammable liquids is not permitted.
3. Any electricity utilized must be on Ground Fault Circuit Interrupters (GFCI).
4. A minimum of one, 2A: 20B: C rated fire extinguishers will be maintained on-site. There must be available at least one 2A: 20B: C rated fire extinguisher within a maximum travel distance of 50 feet from any point in the work area.
5. Workers will be trained in the use of fire extinguishers, emergency egress plans, basic fire safety, and emergency reporting procedures prior to work beginning.
6. All emergency exits will be labeled as such with tools available for breaching poly and keys in door locks where necessary.
7. The Contractor must implement an emergency action and fire prevention plan in accordance with 29 CFR 1910.38 Employee emergency plans and fire prevention plans.

3.19 Fall Protection

If GAC is working above the ground for any reason, the GAC shall provide proper fall protection and training for their employees in accordance with Occupational Safety and Health Administration 29 CFR Part 1910 and 1926, Safety Standards for Fall Protection in the Construction Industry.

3.20 Respiratory Protection / PPE

The GAC shall provide proper respiratory protection for their employees with NIOSH approved HEPA filters during all pre-clean, abatement removal, waste load out procedures and during waste lift operations for effected employees. The GAC shall

provide proof of medical fitness to wear respiratory protection and current fit testing documentation for all employees.

3.21 Work Area Protection

The GAC shall repair or replace, to the City's satisfaction, any damage caused by the GAC or GAC subcontractors, to existing finishes, landscaping, or other building components.

3.22 Additional PPE:

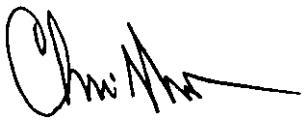
- Hooded Tyvek suits
- Safety Glasses with side shields (exception – not required when wearing a full face respirator).
- Leather Gloves
- Safety toe boots
- Fall Protection as required.
- PPE per MSDS / SDS requirements.

3.23 Document Submittal

The GAC shall provide the following submittals to the City's representative:

- ✓ Copies of all worker AHERA / STATE certifications.
- ✓ Copies of all worker asbestos medical evaluations.
- ✓ Copies of all worker respirator fit tests.
- ✓ Copies of MSDS for all chemicals (spray-glue, encapsulant, surfactant etc.) that will be used
- ✓ Copy of Employee Safety Training Matrix
- ✓ Copy of Job Safety Analysis (JSA).
- ✓ Asbestos waste receipt / total.

Prepared by:



Chris Thompson

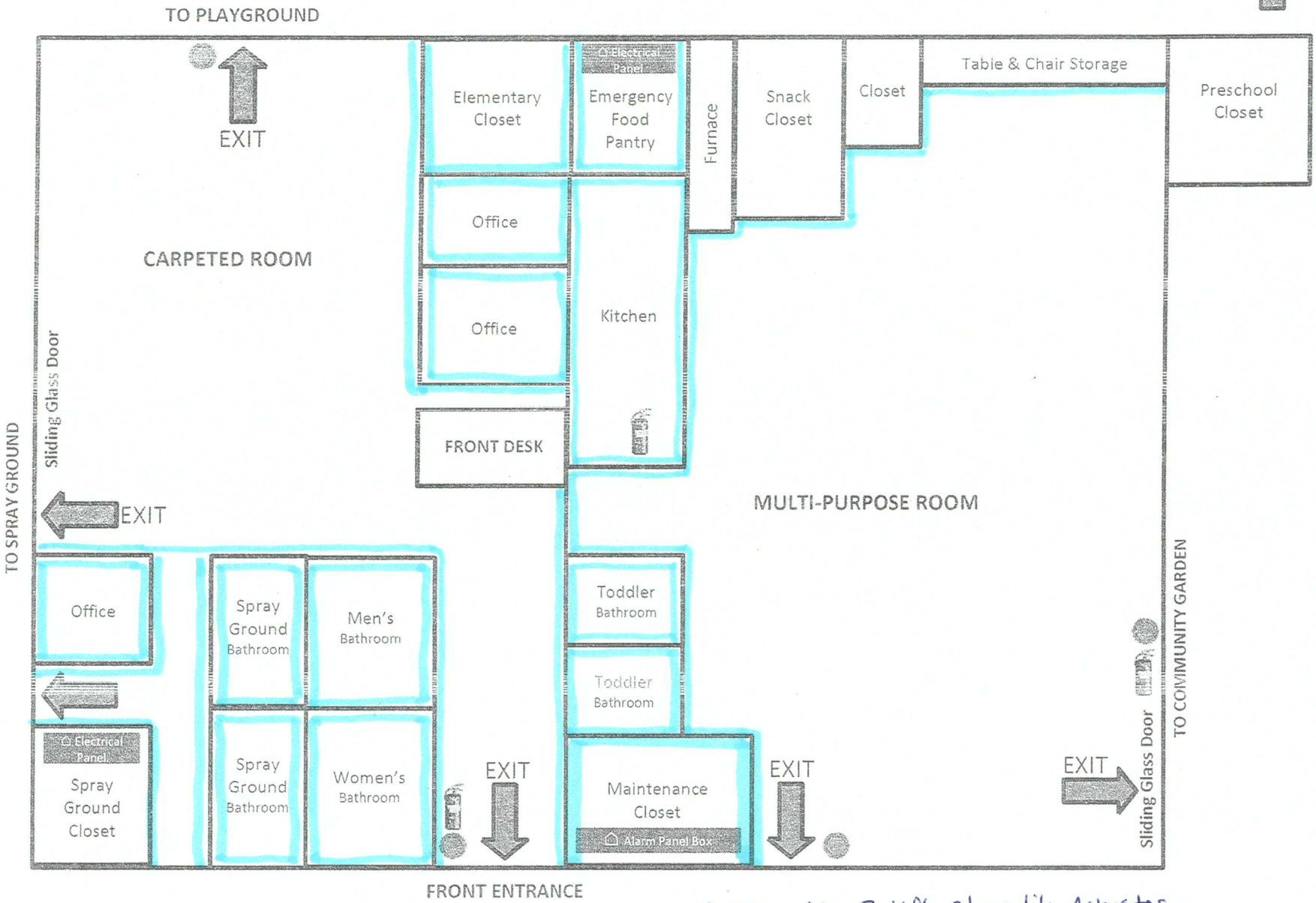
Foothills Environmental Asbestos Consulting Firm CDPHE Registration # 14925

Appendix A
Exhibits

Asbestos-Containing Wall Texture

Evacuation Plan: Deerfield Hills Community Center

In case of emergency, please leave building through the nearest EXIT:



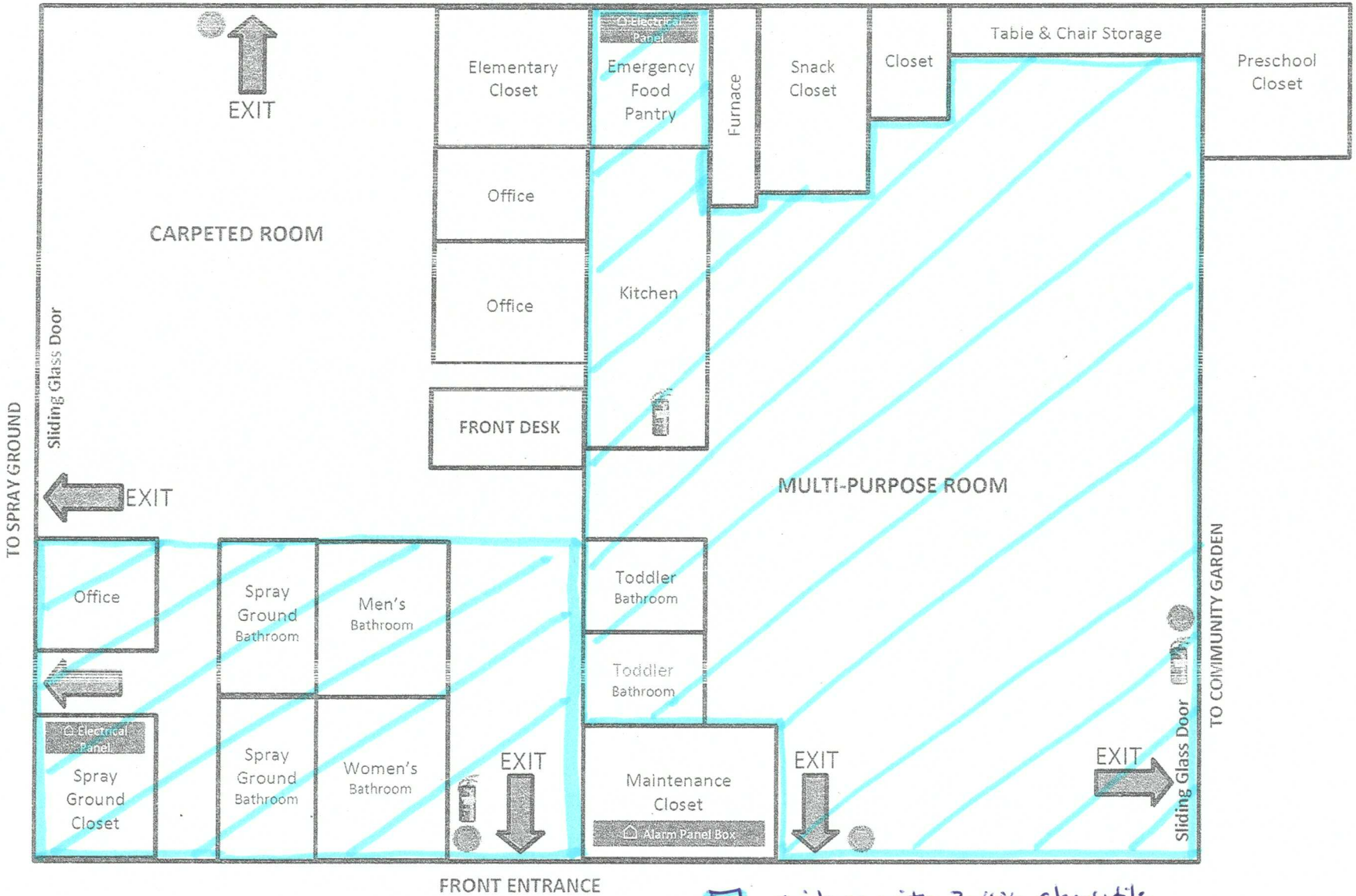
Fire Extinguisher Alarm Pull

— Walls with 3-4% Chrysotile Asbestos texture

Asbestos - Containing Ceiling Texture

Evacuation Plan: Deerfield Hills Community Center

In case of emergency, please leave building through the nearest EXIT:



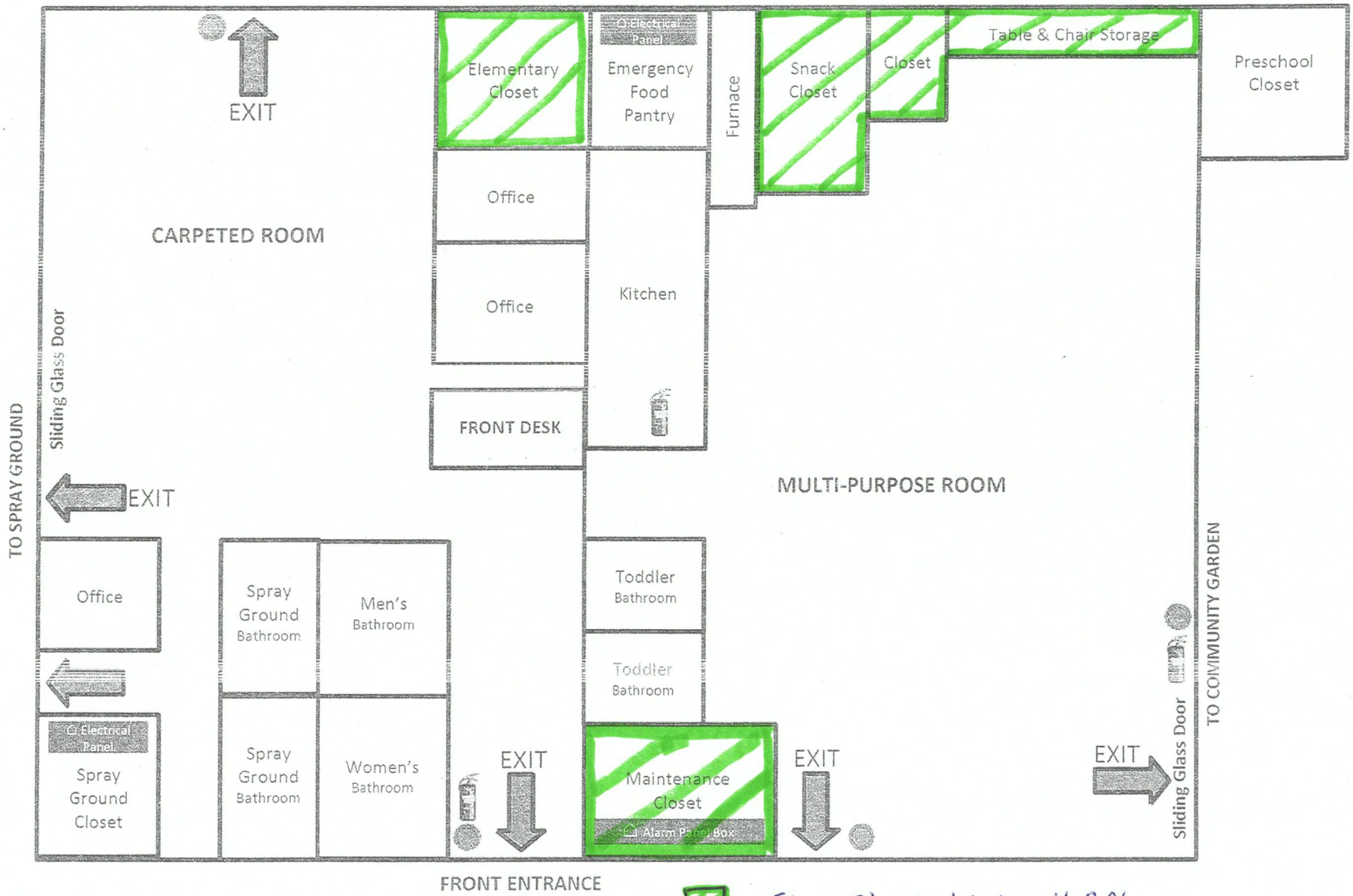
Fire Extinguisher Alarm Pull

- Ceilings with 3-4% Chrysotile Asbestos Texture

Asbestos-containing Floor Tile

Evacuation Plan: Deerfield Hills Community Center

In case of emergency, please leave building through the nearest EXIT:

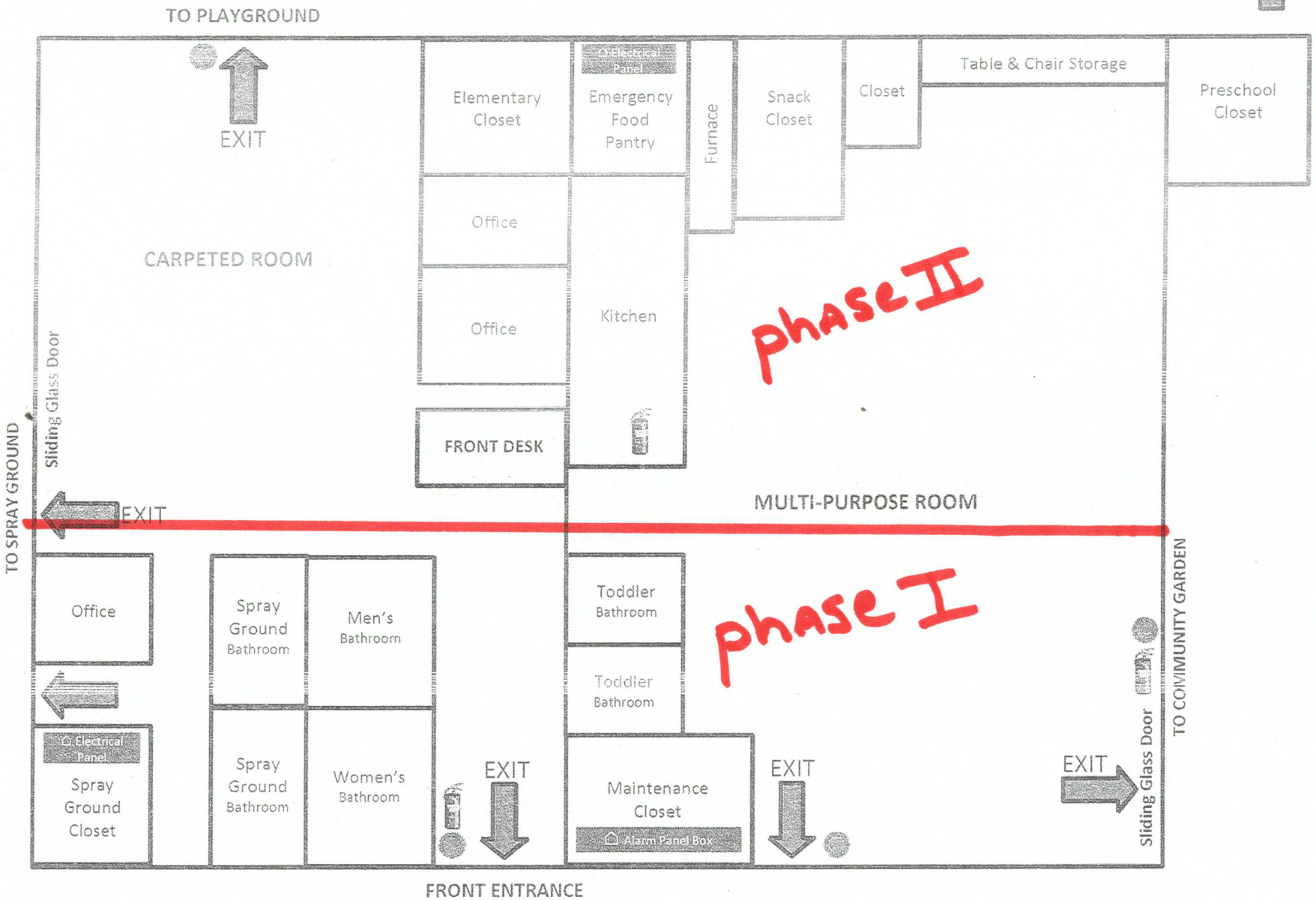


Fire Extinguisher Alarm Pull

- Floor Tile containing 4-9% Chrysotile Asbestos

Evacuation Plan: Deerfield Hills Community Center

In case of emergency, please leave building through the nearest EXIT:



Appendix B
Inspection Data

REI LAB **Reservoirs Environmental, Inc.**

June 16, 2015

Subcontract Number:	**NA**
Laboratory Report:	**RES 322612-1**
Project # / P.O. #	**AS15109**
Project Description:	**Deerfield Hills Community Center**

Chris Thompson
Foothills Environmental, Inc. (Colo. Springs)
5245 Centennial Blvd., Suite 102
Colorado Springs CO 80919

Dear Customer,

Reservoirs Environmental, Inc. is an analytical laboratory accredited for the analysis of Industrial Hygiene and Environmental matrices by the National Voluntary Laboratory Accreditation Program (NVLAP), Lab Code 101896-0 for Transmission Electron Microscopy (TEM) and Polarized Light Microscopy (PLM) analysis and the American Industrial Hygiene Association (AIHA), Lab ID 101533 - Accreditation Certificate #480 for Phase Contrast Microscopy (PCM) analysis. This laboratory is currently proficient in both Proficiency Testing and PAT programs respectively.

Reservoirs Environmental, Inc. has analyzed the following samples for asbestos content as per your request. The analysis has been completed in general accordance with the appropriate methodology as stated in the attached analysis table. The results have been submitted to your office.

RES 322612-1 is the job number assigned to this study. This report is considered highly confidential and the sole property of the customer. Reservoirs Environmental, Inc. will not discuss any part of this study with personnel other than those of the client. The results described in this report only apply to the samples analyzed. This report must not be used to claim endorsement of products or analytical results by NVLAP or any agency of the U.S. Government. This report shall not be reproduced except in full, without written approval from Reservoirs Environmental, Inc. Samples will be disposed of after sixty days unless longer storage is requested. If you have any questions about this report, please feel free to call 303-964-1986.

Sincerely,

Nicole Castillo

Nicole Castillo for

Jeanne Spencer
President

RESERVOIRS ENVIRONMENTAL INC.

NVLAP Lab Code 101896-0

TABLE: PLM BULK ANALYSIS, PERCENTAGE COMPOSITION BY VOLUME

RES Job Number: **RES 322612-1**
Client: **Foothills Environmental, Inc. (Colo. Springs)**
Client Project Number / P.O.: **AS15109**
Client Project Description: **Deerfield Hills Community Center**
Date Samples Received: **June 09, 2015**
Method: **EPA 600/R-93/116 - Short Report, Bulk**
Turnaround: **3-5 Day**
Date Samples Analyzed: **June 16, 2015**

ND=None Detected
TR=Trace, <1% Visual Estimate
Trem/Act=Tremolite/Actinolite

Client Sample Number	Lab ID Number	LAYER	Physical Description	Sub Part (%)	Asbestos Content: Mineral	Asbestos Content: Visual Estimate (%)	Non Asbestos Fibrous Components (%)	Non-Fibrous Components (%)
DH-TS01-01	EM 1422184	A	White texture w/ off white paint	100		**ND**	0	100
DH-TS01-02	EM 1422185	A	Tan/white drywall	30		**ND**	90	10
		B	White texture w/ white paint	70		**ND**	0	100
DH-TS01-03	EM 1422186	A	White tape	10		**ND**	98	2
		B	Off white joint compound	10	**Chrysotile**	**3**	0	97
		C	White paint	10		**ND**	0	100
		D	White/tan drywall	30		**ND**	40	60
		E	Off white texture	40	**Chrysotile**	**3**	0	97
DH-TS01-04	EM 1422187	A	White texture w/ white paint	35		**ND**	0	100
		B	White/tan drywall	65		**ND**	35	65
DH-TS01-05	EM 1422188	A	White paint	5		**ND**	0	100
		B	Off white joint compound	10	**Chrysotile**	**3**	0	97
		C	Off white texture	15	**Chrysotile**	**3**	0	97
		D	White tape	20		**ND**	98	2
		E	White/tan drywall	50		**ND**	40	60

TEM Analysis recommended for organically bound material (i.e. floor tile) if PLM results are <1%.

RESERVOIRS ENVIRONMENTAL INC.

NVLAP Lab Code 101896-0

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Trem/Act=Tremolite/Actinolite

Client Sample Number	Lab ID Number	LAYER	Physical Description	Sub Part (%)	Asbestos Content: Mineral	Asbestos Content: Visual Estimate (%)	Non Asbestos Fibrous Components (%)	Non-Fibrous Components (%)
DH-TS02-01	EM 1422189	A	Off white compound	5	**Chrysotile**	**3**	0	97
		B	White paint	35		**ND**	0	100
		C	White/tan drywall	60		**ND**	45	55
DH-TS02-02	EM 1422190	A	White paint	20		**ND**	0	100
		B	Off white compound	20	**Chrysotile**	**3**	0	97
		C	White/tan drywall	60		**ND**	30	70
DH-TS02-03	EM 1422191	A	White paint	10		**ND**	0	100
		B	Off white texture	25	**Chrysotile**	**3**	0	97
		C	White/tan drywall	65		**ND**	40	60
DH-TS02-04	EM 1422192	A	Off white paint	10		**ND**	0	100
		B	Off white texture	20	**Chrysotile**	**3**	0	97
		C	White/tan drywall	70		**ND**	35	65
DH-TS02-05	EM 1422193	A	Tan/white drywall w/ white paint	100		**ND**	95	5
DH-TS03-01	EM 1422194	A	White texture w/ tan paint	35		**ND**	0	100
		B	Tan/white drywall	65		**ND**	80	20

TEM Analysis recommended for organically bound material (i.e. floor tile) if PLM results are <1%.

RESERVOIRS ENVIRONMENTAL INC.

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Client Sample Number	Lab ID Number	LAYER	Physical Description	Sub Part (%)	Asbestos Content: Mineral	Asbestos Content: Visual Estimate (%)	Non Asbestos Fibrous Components (%)	Non-Fibrous Components (%)
DH-TS03-02	EM 1422195	A	White compound	25		**ND**	0	100
		B	White/tan drywall	75		**ND**	40	60
DH-TS03-03	EM 1422196	A	Off white texture w/ off white paint	35		**ND**	0	100
		B	White/tan drywall	65		**ND**	40	60
DH-TS04-01	EM 1422197	A	Off white paint w/ white texture	30		**ND**	0	100
		B	Tan/white drywall	70		**ND**	65	35
DH-TS04-02	EM 1422198	A	Off white paint w/ white texture	20		**ND**	0	100
		B	Tan/white drywall	80		**ND**	80	20
DH-TS04-03	EM 1422199	A	White texture w/ white paint	25		**ND**	0	100
		B	Tan/white drywall	75		**ND**	70	30
DH-TS05-01	EM 1422200	A	Off white texture	10	**Chrysotile**	**3**	0	97
		B	Off white/multi-colored paint	25		**ND**	0	100
		C	Tan/white drywall	65		**ND**	80	20
DH-TS05-02	EM 1422201	A	White texture w/ white paint	35		**ND**	0	100
		B	White/tan drywall	65		**ND**	35	65

TEM Analysis recommended for organically bound material (i.e. floor tile) if PLM results are <1%.

RESERVOIRS ENVIRONMENTAL INC.

NVLAP Lab Code 101896-0

TABLE: PLM BULK ANALYSIS, PERCENTAGE COMPOSITION BY VOLUME

RES Job Number: **RES 322612-1**
Client: **Foothills Environmental, Inc. (Colo. Springs)**
Client Project Number / P.O.: **AS15109**
Client Project Description: **Deerfield Hills Community Center**
Date Samples Received: **June 09, 2015**
Method: **EPA 600/R-93/116 - Short Report, Bulk**
Turnaround: **3-5 Day**
Date Samples Analyzed: **June 16, 2015**

ND=None Detected
TR=Trace, <1% Visual Estimate
Trem/Act=Tremolite/Actinolite

Client Sample Number	Lab ID Number	LAYER	Physical Description	Sub Part (%)	Asbestos Content: Mineral	Asbestos Content: Visual Estimate (%)	Non Asbestos Fibrous Components (%)	Non-Fibrous Components (%)
DH-TS05-03	EM 1422202	A	Off white texture	10	**Chrysotile**	**3**	0	97
		B	Off white/multi-colored paint	20		**ND**	0	100
		C	White/tan drywall	70		**ND**	40	60
DH-TS05-04	EM 1422203	A	Off white texture	15	**Chrysotile**	**3**	0	97
		B	Off white/multi-colored paint	30		**ND**	0	100
		C	White/tan drywall	55		**ND**	45	55
DH-TS05-05	EM 1422204	A	White texture w/ off white paint	40		**ND**	0	100
		B	White/tan drywall	60		**ND**	40	60
DH-TS06-01	EM 1422205	A	Tan/white drywall	30		**ND**	95	5
		B	White texture w/ off white paint	70		**ND**	0	100
DH-TS06-02	EM 1422206	A	Off white texture	15	**Chrysotile**	**3**	0	97
		B	White paint	30		**ND**	0	100
		C	White/tan drywall	55		**ND**	35	65

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Client Sample Number	Lab ID Number	LAYER	Physical Description	Sub Part (%)	Asbestos Content: Mineral	Asbestos Content: Visual Estimate (%)	Non Asbestos Fibrous Components (%)	Non-Fibrous Components (%)
DH-TS06-03	EM 1422207	A	White paint	20		**ND**	0	100
		B	Off white texture	30	**Chrysotile**	**4**	0	96
		C	White/tan drywall	50		**ND**	40	60
DH-TS06-04	EM 1422208	A	White paint	20		**ND**	0	100
		B	Off white texture	20	**Chrysotile**	**4**	0	96
		C	White/tan drywall	60		**ND**	30	70
DH-TS06-05	EM 1422209	A	Tan/white drywall	40		**ND**	85	15
		B	White paint w/ off white texture	60	**Chrysotile**	**TR**	0	100
DH-TS06-06	EM 1422210	A	White texture w/ white paint	100		**ND**	0	100
DH-SOA01-01	EM 1422211	A	White foamy texture w/ white paint	100		**ND**	0	100
DH-SOA01-02	EM 1422212	A	White foamy texture w/ white paint	100		**ND**	0	100
DH-SOA01-03	EM 1422213	A	White foamy texture w/ white paint	100		**ND**	0	100
DH-SOA01-04	EM 1422214	A	White foamy texture w/ white paint	100		**ND**	0	100
DH-SOA01-05	EM 1422215	A	White foamy texture w/ white paint	100		**ND**	0	100

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Client Sample Number	Lab ID Number	LAYER	Physical Description	Sub Part (%)	Asbestos Content: Mineral	Asbestos Content: Visual Estimate (%)	Non Asbestos Fibrous Components (%)	Non-Fibrous Components (%)
DH-CMU01-01	EM 1422216	A	Gray cinder block w/ yellow/white paint	100		**ND**	0	100
DH-CMU01-02	EM 1422217	A	Gray granular material w/ tan/white paint	100		**ND**	0	100
DH-CMU01-03	EM 1422218	A	Gray granular material w/ white paint	100		**ND**	0	100
DH-CMU01-04	EM 1422219	A	White texture w/ tan paint	35		**ND**	0	100
		B	Gray granular material w/ off white paint	65		**ND**	0	100
DH-CMU01-05	EM 1422220	A	White/multi-colored paint w/ gray granular material	100		**ND**	0	100
DH-CBM01-01	EM 1422221	A	Off white mastic	100		**ND**	0	100
DH-CBM01-02	EM 1422222	A	Off white mastic	100		**ND**	0	100
DH-FT01-01	EM 1422223	A	Black mastic	5		**ND**	0	100
		B	Off white/multi-colored floor tile	95	**Chrysotile**	**9**	0	91
DH-FT02-01	EM 1422224	A	White/gray floor tile	100		**ND**	0	100
DH-FT03-01	EM 1422225	A	White floor tile	100		**ND**	0	100
DH-FT04-01	EM 1422226	A	Yellow mastic	5		**ND**	0	100
		B	Brown floor tile	95	**Chrysotile**	**4**	0	96
DH-M01-01	EM 1422227	A	Black/yellow mastic	100		**ND**	0	100

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NVLAP Lab Code 101896-0

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Client Sample Number	Lab ID Number	LAYER	Physical Description	Sub Part (%)	Asbestos Content: Mineral	Asbestos Content: Visual Estimate (%)	Non Asbestos Fibrous Components (%)	Non-Fibrous Components (%)
DH-CDW01-01	EM 1422228	A	Off white compound	10		**ND**	0	100
		B	White compound	15		**ND**	0	100
		C	White/tan drywall	75		**ND**	20	80
DH-CTA01-01	EM 1422229	A	Yellow mastic	10		**ND**	0	100
		B	Off white ceramic tile	90		**ND**	0	100
DH-CTA02-01	EM 1422230	A	Yellow mastic	100		**ND**	0	100
DH-FL01-01	EM 1422231	A	Off white/black resinous material	100		**ND**	8	92
DH-DM01-01	EM 1422232	A	Gray mastic	100		**ND**	0	100
DH-RF01-01	EM 1422233	A	Tan/multi-colored shingle	100		**ND**	25	75

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Paige Terry
Analyst / Data QA

Due Date: 6·12·16·16
Due Time: 10:30

Reservoirs Environmental, Inc.

REI LAB

5801 Logan St. Denver, CO 80216 • Ph: 303-964-1986 • Fax 303-477-4275 • Toll Free :866 RESI-ENV

After Hours Cell Phone: 720-339-9228

RES 322612

INVOICE TO: (IF DIFFERENT)		CONTACT INFORMATIC	
Company: Foothills Environmental, Inc.	Company: Foothills Environmental, Inc.	Contact: Chris Thompson	Contact:
Address: 5245 Centennial Blvd, Suite 102	Address: 11099 West 8th Avenue	Phone: (719) 309-6086	Phone:
Colorado Springs, CO 80919	Golden, CO 80215	Fax:	Fax:
	linda.gonzalez@foothillsusa.com	Cell/pager: (719) 330-2970	Cell/pager:
Project Number and/or P.O. #: AS15109		Final Data Deliverable Email Address: chris@foothillsusa.com	
Project Description/Location: Deerfield Hills Community Center			

ASBESTOS LABORATORY HOURS: Weekdays: 7am - 7pm & Sat. 8am - 5pm

PLM / PCM / TEM ____ RUSH (Same Day) ___ PRIORITY (Next Day) X STANDARD (3-5 Day)
(Rush PCM = 2hr, TEM = 6hr.)

CHEMISTRY LABORATORY HOURS: Weekdays: 8am - 5pm

Metal(s) / Dust** ___ RUSH ___ 24 hr. ___3-5 Day
RCRA 8 / Metals & Welding Fume Scan / TCLP** ___RUSH (3 Day)___5 Day ___10 Day
Organics ___ 24 hr. ___ 3 day ___5 Day
Prior notification is required for RUSH turnarounds.

MICROBIOLOGY LABORATORY HOURS: Weekdays: 9am - 6pm

E.coli and/or Coliforms* ___ 24-48 Hour Other: _____
Pathogens* ___ 24-48 Hour
Microbial Growth* ___ 5-10 Day
Legionella ___ 10 Day
Mold ___ RUSH ___24 Hr ___48 Hr ___3 Day ___5 Day
TAT dependent on speed of microbial growth.

Turnaround times establish a laboratory priority, subject to laboratory volume and are not guaranteed. Additional fees apply for afterhours, weekends and holidays.

Special Instructions:

VALID MATRIX CODES

Air = A	Bulk = B
Dust = D	Paint = P
Soil = S	Wipe = W
Swab = SW	F = Food
Drinking Water = DW	Waste Water = WW
O = Other	

ASTM E1792 approved wipe media only

LAB NOTES:

	Client sample ID number (Sample ID's must be unique)	PLM (Short report, Point Count, Long report, Qualitative)	TEM - AHERA, Level II, 7402, ISO, +/- (Air, Bulk or Dust), Quant, Semi-Quant, Micro-vac, ISO-Indirect Preps	PCM - 7400A, 7400B, OSHA	DUST - Total, Respirable	METALS - Analyte(s) RCRA 8, TCLP, Welding Fume, Metals Scan, pH	ORGANICS - METH, TSS	MICROBIOLOGY: Pathogens: Aerobic Plate Count, Salmonella, E.coli O157:H7, Listeria, S.aureus, Campilobacter: +/- or Quantification	E.coli and/or Coliforms: +/- or Quantification	Microbial Growth: Aerobic Plate Count ID, Bacteria or Y & M: +/- or Quantification	Legionella: +/- or Quantification	Other: Bioburden, LAL or Environmental	Mold: Spore Trap or Bulk: +/-, Identification, Quantification	SAMPLER'S INITIALS OR OTHER NOTES:	Sample Volume (L) / Area	Matrix Code	# Containers	Date Collected mm/dd/yy	Time Collected hh/mm a/p	EM Number (Laboratory Use Only)
1	DH-TS01-01	X													NA	B1		6/3/15	1200	1422184
2	02																			5
3	03																			6
4	04																			7
5	05																			8
6	DH-TS02-01																			9
7	02																			90
8	03																			1
9	04																			2
10	05																			3

Number of samples received: 50 (Additional samples shall be listed on attached long form.)

NOTE: REI will analyze incoming samples based upon information received and will not be responsible for errors or omissions in calculations resulting from the inaccuracy of original data. By signing client/company representative agrees that submission of the following samples for requested analysis as indicated on this Chain of Custody shall constitute an analytical services agreement with payment terms of NET 30 days, failure to comply with payment terms may result in a 1.5% monthly interest surcharge.

Relinquished By: (Chris Thompson) Date/Time: 6/6/15 1700

Sample Condition: On Ice Yes / No Sealed Yes / No Intact Yes / No
Temp. (F°) _____

Laboratory Use Only
Received By: Date/Time: 6·9·15 10:30 Carrier: Hand / FedEx / UPS / USPS / Drop Box / Courier

Results:	Contact	Phone Email Fax	Date	Time	Initials	Contact	Phone Email Fax	Date	Time	Initials
	Contact	Phone Email Fax	Date	Time	Initials	Contact	Phone Email Fax	Date	Time	Initials

Reservoirs Environmental, Inc.
REI LAB
5801 Logan St. Denver, CO 80216 • Ph: 303 964-1966 • Fax 303-477-4275 • Toll Free 866 RESI-ENV

RES Job # 322612

Page 2 of 3

Submitted by: Foothills Environmental, Inc.

Clie	Client sample ID number (Sample ID's must be unique)	PLM (Short report, Long report, Point Count)	TEM - AHERA, Level II, 7402, ISO, +/-, Quant, Semi-quant, Micro-vac, ISO-Indirect Preps	PCM - 7400A, 7400B, OSHA	DUST - Total, Respirable	METALS - Analyte(s) RCRA 8, TCLP, Welding Fume, Metals Scan	ORGANICS - METH	MICROBIOLOGY: Pathogens: Aerobic Plate Count, Salmonella, E coli O157:H7, Listeria, S.aureus, Camphlobacter: +/- or Quantification	MICROBIOLOGY: E.coli and/or Coliforms: +/- or Quantificatino	MICROBIOLOGY: Microbial Growth: Aerobic Plate Count ID, Bacteria or Y & M: +/- or Quantification	MICROBIOLOGY: Legionella: +/- or Quantification	MICROBIOLOGY: Other: Bioburden, LAL or Environmental	MICROBIOLOGY: Mold: Spore Trap or Bulk: +/- or Quantification	SAMPLER'S INITIALS OR OTHER NOTES:	Sample Volume (L) / Area	Matrix Code	# Containers	Date Collected mm/dd/yy	Time Collected hh/mm a/p	EM Number (Laboratory Use Only)
42	11 DH-TS03-01	X												CJT	NA	B	1	6/3/15	1200	1422194
43	12 02																			5
44	13 03																			6
45	14 DH-TS04-01																			7
46	15 02																			8
47	16 03																			9
48	17 DH-TS05-01																			200-2
49	18 02																			3
50	19 03																			4
51	20 04																			5
52	21 05																			6
53	22 DH-TS06-01																			7
54	23 02																			8
55	24 03																			9
56	25 04																			10-2
57	26 05																			3
58	27 06																			4
59	28 DH-SOA01-01																			5
60	29 02																			6
61	30 03																			7
62	31 04																			8
63	32 05																			9
64	33 DH-CMU01-01																			20-2
65	34 02																			3
66	35 03																			4
67	36 04																			
68	37 05																			
69	38 DH-CBM01-01																			
70	39 02																			
71	40 DH-FT01-01																			
72	41 DH-FT02-01																			

VALID MATRIX CODES

Air = A	Bulk = B
Dust = D	Paint = P
Soil = S	Wipe = W
Swab = SW	F = Food
Drinking Water = DW	Waste Water = WW
O = Other	

ASTM E1792 approved wipe media only

LAB NOTES:

UPS Internet Shipping: Shipment Label FOR UPS SHIPPING ONLY

1 LBS 1 OF 1

LINDA GONZALEZ
303-232-2660
FOOTHILLS ENVRIONMENTAL, INC.
11099 W. 8TH AVENUE
LAKEWOOD CO 80215

SHIP TO:
GINA
303 964 1986
RESERVOIRS ENVIRONMENTAL INC
5801 LOGAN ST.
DENVER CO 80216-1307

CO 802 9-10

UPS NEXT DAY AIR 1

TRACKING #: 1Z 6Y5 89R 01 9921 7157

BILLING: P/P

Reference#1: AS15109

UIS 17.2.07 WNINVS0 63.0A 04/2015

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