

CHEROKEE NATION
Environmental Programs



Asbestos Sampling Report

PARTICIPANT: HERITAGE CENTER

PREPARED BY:

Logan E. Girty
LOGAN GIRTY, ENVIRONMENTAL SPECIALIST II

DATE: 12.16.2020

REQUESTED BY: CNET, TRAVIS SAWNEY

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I. Site Inspection/Description

Cherokee Nation Environmental Programs (CNEP) has conducted asbestos sampling for the presence of asbestos containing materials (ACM) for the following site:

Heritage Center
21192 S Keeler Rd, Park Hill, OK 74451
918-456-6007
Year of construction: 1970

The sampling was performed to determine the presence of all ACM from within the affected parts of the structure for EPA's National Emissions of Hazardous Air Pollutants (NESHAP) compliance as well as OSHA worker protection.

The inspector responsible for this project was:

Logan Girty ODOL, AHERA Inspector, License No: OK401597

The sampling was conducted on December 4, 2020 at the request of the CNET, Travis Sawney.

The year of construction for this site is 1970. Sampling was limited to areas that would be affected by the project scope of work provided by CNET.

ACM was found at this site. See Section IV for locations.

II. BACKGROUND

The Oklahoma Department of Environmental Quality (ODEQ) has adopted EPA's NESHAP regulation under OAC252:100, 41-15 and has been delegated authority in the state of Oklahoma for its enforcement. Section 61.145(a) of Federal EPA regulation states that prior to commencement of the demolition or renovation of a facility a thorough inspection of the affected part or parts of a facility is required to determine the presence of all asbestos including Category I and Category II non-friable, and friable ACM. ACM is defined by EPA and OSHA as any material that contains greater than 1% asbestos.

III. FIELD PROCEDURES AND ANALYTICAL METHODS

During the on-site inspection, we visually assessed the physical characteristics of suspect asbestos-containing materials (SACM) based on homogeneous areas. Homogeneous areas are areas of asbestos similar in color, texture, and construction, date of application, and in general appearance. For purposes of renovation and demolition, homogeneous areas of SACM can be

further classified according to NESHAPs rules by whether the material is friable, Category I non-friable, or Category II non-friable.

Friable ACM is defined by NESHAPs rules as any material containing more than 1% asbestos as determined by Polarized Light Microscopy (PLM), that, when dry, can be crumbled, pulverized or reduced to powder by hand pressure.

Category I Non-friable ACM is defined by NESHAPs rules as any asbestos-containing packings, gaskets, construction mastics, resilient floor covering (i.e. floor tiles, roll sheet flooring) or asphalt roofing products that contain more than 1% asbestos as determined by PLM.

Category II Non-friable ACM is defined by NESHAPs rules as any material, excluding Category I non-friable ACM, containing more than 1% asbestos as determined by PLM, when dry, cannot be crumbled, pulverized, or reduced to powder by hand pressure.

Typically, non-friable materials, such as transite (cementitious products) and vinyl floor tiles are not regulated by the State of Oklahoma provided they do not become friable. General deterioration, machine grinding, drilling, sanding, and dry-buffing are all ways of causing non-friable materials to become classified as Regulated Asbestos Containing Materials (RACM). All friable materials are classified RACM. Please note that the following materials, even though classified as non-friable are fully regulated by Oklahoma Department of Labor for removal purposes as friable material: ceiling tiles, roll sheet flooring (linoleum), and joint wall compound when deemed friable

In addition to classification of suspect material into friable and non-friable materials, a determination of current condition was conducted as part of the physical assessment. The condition noted is the representative of the material at the time of inspection. Conditions of materials can change very quickly when disturbed. All suspect material was placed in one of the following categories of condition.

Significantly damaged: Material that is damaged, blistered, deteriorated, water stained over at least 10% of its total area.

Damaged: Material that is damaged, blistered, deteriorated, water stained less than 10% of its total area.

Good: Material that has no visible damage or deterioration.

Guidelines used for the number of samples collected per homogeneous area were determined using the Asbestos Hazard Emergency Response Act (AHERA) protocol promulgated in 40 CFR 763, Appendix E as follows:

Surfacing materials – material that is sprayed or troweled on wall, ceilings, or support columns for fireproofing, acoustical, or even decorative purpose.

- Less than 1000 ft² – Minimum 3 samples

- From 1000-5000 ft² – Minimum 5 samples
- Greater than 5000 ft² – Minimum 7 samples

Thermal System Insulation (TSI) materials – thermal system insulation material applied to tanks, boiler, pipes or other structural component for an insulating purpose.

- May omit areas of fibrous glass, foam glass, rubber, and Styrofoam from sampling. Areas that have mastic on seams or outer jacketing will be sampled.
- At least three samples must be collected from each homogeneous area of TSI.
- Plus an additional sample from each patched area of less than 6 linear feet.
- Fittings require a sufficient amount to determine positive or negative nature.
- Inspector will first collect samples from damaged areas, exposed ends, or areas missing jacketing first.

Miscellaneous materials – all other material that are not thermal system insulation or surfacing materials. This includes gaskets, packings, joint wall compound, cementitious asbestos materials, ceiling tiles resilient flooring materials, construction mastics, etc..

- May assume and document as such
- A sufficient amount of samples to determine negative or positive nature. A minimum of one per suspect homogeneous area.
- Collect samples from inconspicuous locations.
- Material such as cementitious asbestos or vibration dampening cloths should not be sampled and will be assumed ACM unless instructed by client to collect these samples.

Bulk samples of suspect ACM were analyzed by Polarized Light Microscopy (PLM) in accordance with EPA Methods 600R-93/116. All samples were sent to a NVLAP accredited laboratory for analysis. QuanTEM Laboratories, LLC (NVLAP # 101959-0) in Oklahoma City, OK analyzed the samples. A copy of the full laboratory report and chain of custody can be found in Appendix B.

IV. SUMMARY OF FINDINGS

A total of 19 samples were analyzed from 9 homogeneous area due to multi-layers of material within some homogeneous sample areas. Photographs of all ACM can be found in Appendix C. All accessible and observable areas within the renovation area were sampled for ACM. Samples were not taken of suspect materials that may have placed the inspector at risk of injury (i.e. electrical panel boxes). Any suspect ACM that have not been tested and/or found positive for asbestos must be assumed ACM until they are analyzed. Upon review of laboratory analysis, the following asbestos containing materials can be found in Table 1. All suspect ACM samples that were analyzed and did not contain asbestos can be found in Table 2.

Table 1. Asbestos Containing Materials					
Sample #	Material Description	Locations	Friability (Friable, NF Cat I NF Cat II)	Condition	Sample Results (% Asbestos)
01-01 01-02 01-03 01-04 01-05 01-06 01-07	Ceiling Texture (cementious)	Throughout Upper Level (Lobby)	NF Cat II	Good	3% Chrysotile
02-01	Vinyl Composition Floor Tile	Lower Level	NF Cat I	Good	3% Chrysotile

Table 2. Non – Asbestos Containing Materials				
Sample #	Material Description	Locations	Condition	Sample Results (% Asbestos)
03-01	Carpet Adhesive	Lower Level	Good	None Detected
04-01 04-02 04-03	Wall Texture (cementious)	Lower Level	Good	None Detected
05-01	Drywall	Lower Level	Good	None Detected
06-01	1x1 Ceramic Floor Tile	Bathroom (Stairway)	Good	None Detected
07-01	Vinyl Flooring	Lobby	Good	None Detected
08-01	Formica Countertop	Kitchen	Good	None Detected
09-01 09-02 09-03	Drywall Texture	Kitchen	Damaged	None Detected

V. CONCLUSIONS

Asbestos is not always an immediate hazard. Intact and undisturbed ACM does not pose a health risk. They may, however become a health hazard if they are damaged, disturbed, or deteriorate over time and release fibers into the air. There are no federal, state, or Tribal laws mandating asbestos removal. It is only when the material can no longer be maintained in good condition and/or airborne concentrations of asbestos are measured and found to be above a permissible exposure limit (PEL), or when the building is to be demolished or renovated, that removal may become necessary. Any renovation/demolition work which may impact these positive materials should be conducted in accordance with all applicable Federal, state, and local regulations.

APPENDIX A.

LABORATORY RESULTS
&
CHAIN OF CUSTODY



2033 HERITAGE PARK DR, OKLAHOMA CITY, OK 73120 | 1.800.822.1650

Polarized Light Microscopy Asbestos Analysis Report

QuanTEM Lab No. 329527

Account Number: C162

Date Received: 12/09/2020

Received By: Chloe Collins

Date Analyzed: 12/10/2020

Analyzed By: Katherine Sluder

Methodology: EPA/600/R-93/116

Client: Cherokee Nation Environmental Programs

Logan Girty

PO Box 948

Tahlequah, OK 74464

Project: Heritage Cntr

Project Location: Tahlequah

Project Number: N/A

QuanTEM Sample ID	Client Sample ID	Composition	Color / Description	Asbestos (%)	Non-Asbestos Fiber (%)	Non Fibrous
001	01-01	Homogeneous	Tan Texture	Asbestos Present Chrysotile 3	NA	CaCO3 Binder Paint
002	01-02	Homogeneous	Tan Texture	Asbestos Present Chrysotile 3	NA	CaCO3 Binder Paint
003	01-03	Homogeneous	Tan Texture	Asbestos Present Chrysotile 3	NA	CaCO3 Binder Paint
004	01-04	Homogeneous	Tan Texture	Asbestos Present Chrysotile 3	NA	CaCO3 Binder Paint
005	01-05	Homogeneous	Tan Texture	Asbestos Present Chrysotile 3	NA	CaCO3 Binder Paint
006	01-06	Homogeneous	Tan Texture	Asbestos Present Chrysotile 3	NA	CaCO3 Binder Paint

Unless otherwise noted, upon receipt the condition of the sample was acceptable for analysis.

QuanTEM is a NVLAP accredited PLM laboratory (Lab Code: 101959-0). This report relates only to the specific items tested. NVLAP accreditation applies only to analysis performed utilizing EPA/600/M4-82-020 and EPA/600/R-93/116 methods. This report may not be used to claim product endorsement by NVLAP or any agency of the US Government. This report may not be reproduced except in full, without the written approval of the laboratory.



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Project Location: Tahlequah

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007	01-07	Homogeneous	Tan Texture	Asbestos Present Chrysotile 3	NA	CaCO3 Binder Paint
008	02-01	Layered	Tan Floor Tile	Asbestos Present Chrysotile 3	NA	CaCO3
008a		Layered	Black Mastic	Asbestos Not Present	Cellulose 1	CaCO3 Tar
009	03-01	Layered	Red/Black Carpet	Asbestos Not Present	Synthetic 90	Binder CaCO3
009a		Layered	Tan Mastic	Asbestos Not Present	Cellulose 1 Synthetic 2	Glue CaCO3
010	04-01	Homogeneous	Gray Texture	Asbestos Not Present	NA	CaCO3 Sand Paint

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Client: Cherokee Nation Environmental Programs

Logan Girty

PO Box 948

Tahlequah, OK 74464

Project: Heritage Cntr

Project Location: Tahlequah

Project Number: N/A

QuanTEM Sample ID	Client Sample ID	Composition	Color / Description	Asbestos (%)	Non-Asbestos Fiber (%)	Non Fibrous
011	04-02	Homogeneous	Gray Texture	Asbestos Not Present	NA	CaCO ₃ Sand Paint
012	04-03	Homogeneous	Gray Texture	Asbestos Not Present	NA	CaCO ₃ Sand Paint
013	05-01	Homogeneous	White Drywall	Asbestos Not Present	Cellulose 10	Gypsum
014	06-01	Layered	Brown Ceramic Tile	Asbestos Not Present	NA	Sand Binder
014a		Layered	Gray Grout	Asbestos Not Present	Cellulose 2	CaCO ₃ Sand Binder
015	07-01	Layered	Gray Flooring	Asbestos Not Present	NA	Vinyl CaCO ₃

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Project Location: Tahlequah

Project Number: N/A

QuanTEM Sample ID	Client Sample ID	Composition	Color / Description	Asbestos (%)	Non-Asbestos Fiber (%)	Non Fibrous
015a		Layered	Tan Mastic	Asbestos Not Present	Cellulose 2	Glue CaCO3
016	08-01	Layered	Tan Counter Top	Asbestos Not Present	Cellulose 95	Binder
016a		Layered	Tan Mastic	Asbestos Not Present	Cellulose 3	Glue
017	09-01	Homogeneous	White Texture	Asbestos Not Present	NA	CaCO3 Paint
018	09-02	Homogeneous	White Texture	Asbestos Not Present	NA	CaCO3 Paint
019	09-03	Homogeneous	White Texture	Asbestos Not Present	NA	CaCO3 Paint

Katherine Sluder, Analyst

12/10/2020

Date of Report

Unless otherwise noted, upon receipt the condition of the sample was acceptable for analysis.

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ASBESTOS CHAIN OF CUSTODY

2033 Heritage Park Drive, Oklahoma City, OK 73120-7502
(800) 822-1650 • (405) 755-7272 • Fax: (405) 755-2058

LEGAL DOCUMENT - PLEASE PRINT LEGIBLY

Contact Information		Project Information	
Company:	Cherokee Nation Environmental Programs	Project Name:	Heritage Cntr
Contact:	Logan Girty	Project Location:	Tahlequah
Account #:	C 162	Project ID:	
SAMPLED BY:	Name: Logan Girty	P.O. Number:	256398
		Date:	12-8-2020

RELINQUISHED BY	VIA	RECEIVED BY	DATE & TIME
<i>Logan Girty</i>	Fedex	<i>Chae Collins</i>	12/9/20 8:00

REQUESTED SERVICES (Please check the appropriate boxes)			
PLM	PLM	TEM	TEM
☒ Bulk Analysis (EPA 600/R-93/116)	☐ Vermiculite Attic Insulation (EPA 600/R-04/004)	☐ Air- AHERA	☐ Bulk- Presence / Absence EPA600/R-93/116
☐ 400 Point Count	☐ Other	☐ Air- NIOSH 7402	☐ Bulk- Quantitative [weight%]- Chatfield
☐ 1000 Point Count		☐ Air- ISO 10312	☐ Dust- Presence / Absence
☐ Gravimetric Preparation	PCM	☐ Drinking Water- EPA 100.2	☐ Dust- Quantitative [fibers/sq.cm]- ASTM D5755
☐ Particle ID	☐ NIOSH 7400	☐ Waste Water- EPA 600/4-83-043	☐ Other

No.	Sample ID (10 Characters Max)	To Be Analyzed	Color	Description	Volume / Area (as applicable)	Comments / Notes
1	01-01	☒		ceiling texture		Lobby
2	01-02	☒		ceiling texture		
3	01-03	☒		ceiling texture		
4	01-04	☒		ceiling texture		
5	01-05	☒		ceiling texture		
6	01-06	☒		ceiling texture		
7	01-07	☒		ceiling texture		
8	02-01	☒		VC		lower level
9	03-01	☒		carpet adhesive		lower level
10	04-01	☒		wall texture		lower level



ASBESTOS CHAIN OF CUSTODY

2033 Heritage Park Drive, Oklahoma City, OK 73120-7502
(800) 822-1650 • (405) 755-7272 • Fax: (405) 755-2058

LEGAL DOCUMENT - PLEASE PRINT LEGIBLY

For Lab Use Only

Lab No. 379527

Accept Reject

Project Information						
Company: Cherokee Nation Environmental Programs			Project Name: Heritage Cntr			
Project Location: Tahlequah						
No.	Sample ID (10 Characters Max)	To Be Analyzed	Color	Description	Volume / Area (as applicable)	Comments / Notes
11	04-02	☒		wall texture		lower level
12	04-03	☒		wall texture		lower level
13	05-01	☒		drywall		lower level
14	06-01	☒		floor 1 x 1 tile		bathroom
15	07-01	☒		vinyl flooring		lobby
16	08-01	☒		formica countertop		kitchen
17	09-01	☒		kitchen wall texture		kitchen
18	09-02	☒		kitchen wall texture		kitchen
19	09-03	☒		kitchen wall texture		kitchen
20		☐				
21		☐				
22		☐				
23		☐				
24		☐				
25		☐				
26		☐				
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30		☐				