CHEROKEE NATION Environmental Programs



Asbestos Sampling Report

PARTICIPANT: BRYANT, EDNA

PREPARED BY: Lach & DATE: 4 26. 2021

LOGAN GIRTY. ENVIRONMENTAL SPECIALIST II

REQUESTED BY: HACN HOUSING REHABILITATION (HUD) -

GEORGE HUBBARD

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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:

Edna Bryant 1213 Pierce St, Ft. Gibson, OK 74434 918-616-2605 Coordinates: 35.7954 / -95.2353

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 April 19, 2021 at the request of the Cherokee Nation Housing Rehabilitation Department.

The site is a single family home built in 1974. Sampling was limited to areas that would be affected by the project scope of work (Appendix A) provided by the housing rehabilitation department.

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.

<u>Friable ACM</u> 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.

<u>Category I Non-friable ACM</u> 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.

<u>Category II Non-friable ACM</u> 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 (cementious 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.

<u>Damaged</u>: 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 form 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, cementious 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 or one per suspect homogeneous area.
- Collect samples from inconspicuous locations.
- Material such as cementious 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 10 samples were analyzed from 2 homogeneous areas 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.

Sample #	Material Description	Locations	Friability (Friable, NF Cat I NF Cat II)	Condition	Sample Results (% Asbestos)
01-01					
01-02					
01-03	Drywall Texture	Throughout	Friable	Damaged	2% Chrysotile
01-04					
01-05					
02-01					
02-02					
02-03	Ceiling Drywall Texture	Throughout	Friable	Damaged	4% Chrysotile
02-04					,
02-05					

Sample #	Material Description	Locations	Condition	Sample Results (% Asbestos)
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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.



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

Polarized Light Microscopy Asbestos Analysis Report

QuanTEM Lab No. 333952

Account Number:

C162

Date Received:

04/21/2021

Received By:

Courtney Holman

Date Analyzed:

04/23/2021

Analyzed By:

Methodology:

Cassie Sanborn

EPA/600/R-93/116

Client: Cherokee Nation Environmental Programs

Logan Girty

PO Box 948

Tahlequah, OK 74464

Project: Edna Bryant Project Location: Ft. Gibson

Project Number: N/A

QuanTEM Sample ID	Client Sample ID	Composition	Color / Description	Asbestos (%)	Non-Asbestos Fiber (%)		Non Fibrous
001	01-01	Layered	White Texture	Asbestos Not Present	NA		CaCO3 Paint
001a		Layered	White Drywall	Asbestos Not Present	Cellulose	10	Gypsum
002	01-02	Homogeneous	White Texture	Asbestos Not Present	NA		CaCO3 Paint
003	01-03	Layered	White Texture	Asbestos Not Present	NA		CaCO3 Gypsum Paint
003a		Layered	White Drywall	Asbestos Not Present	Cellulose	10	Gypsum
004	01-04	Layered	White Texture	Asbestos Not Present	NA		Paint
004a		Layered	White Drywall	Asbestos Not Present	Cellulose	10	Gypsum

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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Polarized Light Microscopy Asbestos Analysis Report

QuanTEM Lab No. 333952

Account Number:

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Date Received:

04/21/2021

Received By:

Courtney Holman

Date Analyzed:

04/23/2021

Analyzed By: Methodology: Cassie Sanborn

EPA/600/R-93/116

Client: Cherokee Nation Environmental Programs

Logan Girty

PO Box 948

Tahlequah, OK 74464

Project: Edna Bryant

Project Location: Ft. Gibson

Project Number: N/A

QuanTEM Sample ID	Client Sample ID	Composition	Color / Description	Asbestos (%)		Non-Asbestos Fiber (%)		Non Fibrous
005	01-05	Layered	White Texture	Asbestos Present Chrysotile	2	NA		CaCO3 Paint
005a		Layered	White Drywall	Asbestos Not Present		Cellulose	10	Gypsum
006	02-01	Homogeneous	White Ceiling Texture	Asbestos Present Chrysotile	3	NA		CaCO3 Paint
007	02-02	Homogeneous	White Ceiling Texture	Asbestos Not Present		NA		CaCO3 Foam Paint
008	02-03	Homogeneous	White Ceiling Texture	Asbestos Not Present		NA		CaCO3 Foam Paint
009	02-04	Homogeneous	White Ceiling Texture	Asbestos Present Chrysotile	4	NA		CaCO3 Paint

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

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Polarized Light Microscopy Asbestos Analysis Report

QuanTEM Lab No. 333952

Account Number:

C162

Date Received:

04/21/2021

Received By:

Courtney Holman

Date Analyzed: Analyzed By:

Cassie Sanborn

Methodology:

04/23/2021

EPA/600/R-93/116

Client: Cherokee Nation Environmental Programs

Logan Girty

PO Box 948

Tahlequah, OK 74464

Project: Edna Bryant

Project Location: Ft. Gibson

Project Number: N/A

Non-Asbestos Non Fibrous QuanTEM Client Color / Sample ID Sample ID Composition Description Asbestos (%) Fiber (%) CaCO3 Asbestos Present NA 010 02-05 Homogeneous White Paint Chrysotile 4 Ceiling Texture

Cassie Sanlow

Cassie Sanborn, Laboratory Analyst

4/23/2021

Date of Report



ASBESTOS CHAIN OF CUSTODY

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Con	Contact Information				Project Information	Report Results (☑ one box)
Cherokee Nation Environmental Programs	nmental Programs	Phone: (9	18) 453-6140	Project Name:	Edna Bryant	QuanTEM Website
Contact Logan Girty		Cell Phone: (918) 772-8346	3) 772-8346	Project Location: Ft. Gibson	Ft. Gibson	Fmail logan-girty@cherokee.org
1		E-mail: logan-girt	E-mait: logan-girty@cherokee.org	Project ID:		Other
SAMPLED BY: Name: Logan Girty		Date: 4-19-2	-2021	P.O. Number:	260136	
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		REQUESTED	SERVICES (Ple	ase 🖾 the Ap	REQUESTED SERVICES (Please 🖾 the Appropriate Boxes)	
W IO	MIG		TEM	V	TEM	TURNAROUND TIME
T LIN Analysis (EPA 600/8-93/116)	Vermiculite Attic Insulation	sulation	Air- AHERA		Bulk- Presence / Absence EPA600/R-93/116	Rush
400 Point Count	(EPA 600/R-04/004)		Air- NIOSH 7402	2	Bulk- Quantitative [weight%]- Chatfield	Same Day
1000 Paint Count	Other		Air- ISO 10312		Dust- Presence / Absence	24 - Hour
Gravimetric Preparation	PCM		Drinking Water- EPA 100.2	- EPA 100.2	Dust- Quantitative [fibers/sq.cm]- ASTM D5755	3-Day
Particle D	NIOSH 7400		Waste Water- EF	Waste Water- EPA 600/4-83-043	Other	5 - Day
			1			

S	Sample ID	☑ To Be	Color	Description	Volume / Area	Comments / Notes
	(10	Analyzed			(as applicable)	
-	01-01	>	Pink	Drywall Texture		Throughout
~	01-02	\ <u>\</u>	Beige	Drywall Texture		Throughout
m	01-03	2	Green	Drywall Texture		Throughout
4	01-04	>	White	Drywall Texture		Throughout
	01-05	5	Beige	Drywall Texture		Throughout
	02-01		White	Ceiling Drywall Texture		Throughout
0 1	02-02	5	White	Ceiling Drywall Texture	***************************************	Throughout
α	02-03	5	White	Ceiling Drywall Texture		Throughout
0	02-04	<u> </u>	White	Ceiling Drywall Texture		Throughout
, 0			White	Ceiling Drywall Texture		Ceiling Drywall Texture Throughout

Please Note - UPS and USPS are NOT available for Saturday Delivery