CHEROKEE NATION Environmental Programs



Asbestos Sampling Report

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TYLER MOORE, ENVIRONMENTAL SPECIALIST I

REQUESTED BY: Housing Authority of the Cherokee Nation

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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:

Romy Vogt 918-718-5563 460536 E 966 Rd Bunch, OK 74931

Coordinates: 35.61589, -94.81640

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:

Tyler Moore EPA AHERA Inspector

The sampling was conducted on March 31, 2025, at the request of the Housing Authority of the Cherokee Nation.

The site is a single-family residential structure built in 1950. Sampling was limited to areas that would be affected by the project scope of work (Appendix A) provided by the Housing Authority of the Cherokee Nation.

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 4 sample was analyzed from 3 homogeneous area due to multi-layers of material within some homogeneous sample areas. 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 has 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)
02-01	Brown Lower Layer Vinyl	Bath Floor	NF Cat I	Damaged	3% Chrysotile

1 able 2	. Non – Asbestos Containing	y Materials		I
Sample #	Material Description	Locations	Condition	Sample Results (% Asbestos)
01-01	Brown Top Layer Vinyl	Bath Floor	Damaged	Asbestos not Present
03-01	White Drywall	Bath Walls	Damaged	Asbestos not Present
03-02	White Joint Compound	Bath Walls	Damaged	Asbestos not Present

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.

377980

Client: Cherokee Nation Environmental Programs

Account Number:

C162

Tyler Moore

Date Received:

04/03/2025

Received By:

Charlie Johnson

Date Analyzed:

04/07/2025

Project: Romy Vogt

Analyzed By:

Cassie Sanborn

Project Location: Bunch, OK

Methodology:

EPA/600/R-93/116

Composition

Layered

Layered

Layered

Layered

Homogeneous

Homogeneous

Project Number:

Non-Asbestos

Non Fibrous

Sample ID 001

QuanTEM

Client Sample ID

01-01

02-01

Color / Description

Brown

Sheet Vinyl

Brown

Mastic

Brown

Floor Tile

Yellow/Black

Mastic

White

Drywall

White

Joint Compound

Asbestos (%) Asbestos Not Present

Asbestos Not Present

Asbestos Present

Asbestos Present

Asbestos Not Present

Asbestos Not Present

Chrysotile

Chrysotile

3

<1

Fiber (%) Cellulose

Glass Fiber

NA

NA

NA

Cellulose

NA

CaCO3

Vinyl

Glue

CaCO3 Vinyl

Glue Tar

Gypsum Paint

CaCO3 Paint

15

5

001a

002

002a

003

004

Cassid Sanbor

03-02

03-01

Cassie Sanborn, Laboratory Analyst

4/7/2025

Date of Report

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

QuanTEM is a NVLAP accredited Testing PLM laboratory (Lab Code: 101959-0). This report relates only to the specific items tested. NVLAP accreditation applies only to analysis performed utilizing EPA-40 CFR Appendix E to Subpart E of Part 763 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.



ASBESTOS CHAIN OF CUSTODY

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

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		Lab	

LEGAL DOCUMENT - PLEASE PRINT LEGIBLY

Report Results (one box)	QuanTEM Website	Fmail Wer-moore@cherokee.org	Other		DATE & TIME
Project Information	(918) 453-7607 Project Name: Romy Vogt	(918) 772-8709 Project Location: Bunch, OK		P.O. Number: 896007	A RECEIVED BY
		Cell Phone: (918) 772-8709	E-mail: tyler-moore@cherokee.org Project ID:		DATE & TIME VIA
Contact Information	Company: Cherokee Nation Environmental Programs Phone:	Contact: Tyler Moore	Account #: C 162	SAMPLED BY: Name: Tyler Moore & Logan Girty Date: 3/31/2025	RELINQUISHED BY

DATE & TIME	4/2/25 1040AA			TURNAROUND TIME	Rush	Same Day	24 - Hour	₹ 3-Day	5 - Day	Comments / Notes							
RECEIVED BY	Mal	Soves		TEM	Bulk- Presence / Absence EPA600/R-93/116	Bulk- Quantitative [weight%]- Chatfield	Dust- Presence / Absence	Dust- Quantitative [fibers/sq.cm]- ASTM D5755		Volume / Area Commen (as applicable)							
)	ronriate	200		B F	Bulk	Dust	Dust	Other								
VIA	FedEx	REDIJECTED SERVICES (Please V) the Angropriate Roves		TEM	Air- AHERA	Air-NIOSH 7402	Air-ISO 10312	Drinking Water- EPA 100.2	Waste Water- EPA 600/4-83-043	Description	Top Layer of Bath Floor	Lower layer of Bath Floor	Drywall in Bath	Joint Wall Compound		49	
DATE & TIME	4/2/2025	S CESTED S									F	Lo					
DAT	4			PLM	Vermiculite Attic Insulation	Other		PCM	NIOSH 7400	Color	Brown	Brown	White	White			
HED BY	Tyler Moore				[](9)					☑ To Be Analyzed	>	>	>	>			
RELINQUISHED BY	Tyler			PLM	Bulk Analysis (EPA 600/R-93/116)	400 Point Count	1000 Point Count	Gravimetric Preparation	Particle ID	Sample ID (10 Characters Max) /	01-01	02-01	03-01	03-02			
					>					No.	-	7	3	4	12	9	7

SATURDAY FEDEX SAMPLE DELIVERY - CALL TO SCHEDULE . Use this address for Saturday Delivery only: 4220 N. Santa Fe Ave., Oklahoma City, OK 73105-8517 . Mark Package "Hold for Saturday Pickup" Please Note - UPS and USPS are NOT available for Saturday Delivery

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