CHEROKEE NATION Environmental Programs



Asbestos Sampling Report

PREPARED BY:	Tyler Morre	

TYLER MOORE, ENVIRONMENTAL SPECIALIST I

REQUESTED BY: Housing Authority of the Cherokee Nation

SITE: Quinton, Larry

TABLE OF CONTENTS

- 1. SITE INSPECTION/DESCRIPTION
- II. BACKGROUND
- III. FIELD PROCEDURES AND ANALYTICAL METHODS
- IV. SUMMARY OF FINDINGS
- V. CONCLUSIONS

APPENDIX A: PROJECT SCOPE OF WORK

APPENDIX B: LABORATORY ANALYSIS/CHAIN OF CUSTODY

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:

Larry Quinton 918-820-0488 108399 S. 4673 Rd. Sallisaw, OK 74955 Coordinates: 35.44031, -94.70084

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 August 13, 2024, at the request of the Housing Authority of the Cherokee Nation.

The site is a single-family residential structure built in 1967 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 samples were analyzed from 4 homogeneous areas 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)
04-01	Tan Texture	Ceiling Bedroom 3	Friable	Damaged	3% Chrysotile

Sample #	Material Description	Locations	Condition	Sample Results (% Asbestos)
01-01	White Tile Board	Bathroom Wall	Damaged	None
02-01	Brown Vinyl Tile	Bathroom Floor	Damaged	None .
03-01	White/Brown Sheet Vinyl	Entry and Kitchen Floor	Damaged	None

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. 371681

Client: Cherokee Nation Environmental Programs

Tyler Moore

Account Number:

C162

Date Received:

08/15/2024

Received By:

Baylie Longstreth

Date Analyzed:

08/19/2024

Cassie Sanborn

Project: Larry Quinton

Analyzed By: Methodology:

EPA/600/R-93/116

Project Location: Sallisaw OK Project Number: N/A

QuanTEM Sample ID	Client Sample ID	Composition	Color / Description	Asbestos (%)	Non-Asbestos Fiber (%)		Non Fibrous
001	01-01	Homogeneous	White Tile Board	Asbestos Not Present	Cellulose	90	Paint
002	02-01	Layered	Brown Floor Tile	Asbestos Not Present	NA		CaCO3 Vinyl
002a		Layered	Tan Mastic	Asbestos Not Present	NA		Glue
003	03-01	Layered	White/Brown Sheet Vinyl	Asbestos Not Present	Cellulose	20	CaCO3 Vinyl
003a		Layered	Brown Mastic	Asbestos Not Present	NA		Glue
004	04-01	Layered	Tan Texture	Asbestos Present Chrysotile 3	NA		CaCO3 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 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.



2033 HERITAGE PARK DR, OKLAHOMA CITY, OK 73120 1.800.822.1650

Polarized Light Microscopy Asbestos Analysis Report

QuanTEM Lab No. 371681

Client: Cherokee Nation Environmental Programs

Tyler Moore

Account Number: Date Received:

C162

08/15/2024

Received By:

Baylie Longstreth

Date Analyzed: Analyzed By:

Methodology:

QuanTEM

Sample ID

08/19/2024

Project: Larry Quinton Project Location: Sallisaw OK

Cassie Sanborn EPA/600/R-93/116

Project Number: N/A

Client

Sample ID

Composition

Color /

Description

Asbestos (%)

Non-Asbestos

Non Fibrous

Fiber (%)

Cassie Sanboy

Cassie Sanborn, Laboratory Analyst

8/19/2024

Date of Report



ASBESTOS CHAIN OF CUSTODY

Page 1 of 1

Lab No. 371681 For Lab Use Only

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

LEGAL DOCUMENT - PLEASE PRINT LEGIBLY

www.QuanTEM.com	LEGAL DOCUMENT	LEGAL DOCUMENT - PLEASE PRINT LEGIBLY	Accept Reject
Contact Information		Project Information	Report Results (☑ one box)
Company: Cherokee Nation Environmental Programs Phone:	(918) 453-7607	Project Name: Larry Quinton	QuanTEM Website
Contact: Tyler Moore	Cell Phone: (918) 772-8709 Project Location: Sallisaw OK	Project Location: Sallisaw OK	Fmail wer-moore@cherokee.org
Account #: C 162	E-mail: tyler-moore@cherokee.org Project ID:	Project ID:	Other
SAMPLED BY: Name: Tyler Moore	Date: 8/13/24	P.O. Number: 874812	
RELINQUISHED BY	DATE & TIME	VIA RECEIVED BY	DATE & TIME
W AS	8/13/2024	FedEx OZZ	8/15/24 1020
)	•

TURNAROUND TIME

Same Day 24 - Hour 3 - Day

Dust- Quantitative [fibers/sq.cm]- ASTM D5755

Drinking Water- EPA 100.2

PCM

Gravimetric Preparation 1000 Point Count

Air- NIOSH 7402 Air-150 10312

Air-AHERA

Vermiculite Attic Insulation (EPA 600/R-04/004)

Bulk Analysis (EPA 600/R-93/116)

400 Point Count

PLM

Other

Dust- Presence / Absence

Rush

Bulk- Presence / Absence EPA600/R-93/116 Bulk- Quantitative [weight%]- Charfield

REQUESTED SERVICES (Please ☑ the Appropriate Boxes)

[Comments / Notes										
ler	Volume / Area (as applicable)										
Other											
Waste Water- EFA 600/4-83-043	Description	Tile Board on Bathroom Wall	Vinyl Tile Floor in Bathroom	Vinyl Floor in Entry and Kitchen	Drywall Throughout						
NIOSH 7400	Color	White	Brown	White/Brown	White						
	☑ To Be Analyzed	>	>	$\overline{\Sigma}$	Z			П			
Particle ID	Sample ID (10 Characters Max)	01-01	02-01	03-01	04-01						
	No.	-	2	m	4	2	9	7	œ	6	10

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