

# **ASBESTOS ABATEMENT**

## **PROJECT DESIGN**

### **PREPARED FOR:**

**TULSA PUBLIC SCHOOLS  
CHRIS HUDGINS  
PO BOX 470208  
TULSA, OK 74147**

### **PREPARED BY:**

**ENVIRONMENTAL HAZARD CONTROL, INC  
6539 E. 31<sup>ST</sup> STREET, SUITE 33  
TULSA, OK 74145  
918-747-1330  
FAX 918-743-3961**

### **PROJECT LOCATION:**

**Site CLEANUP FOR POSSIBLE SALE/DEMOLITION  
FORMER GILCREASE  
5550 N. MARTIN LUTHER KING BLVD( CINCINNATI AVE)  
TULSA, OK**

**VERSION 1.0  
JULY 22, 2024**



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**DEAN SWAIN  
PROJECT DESIGNER  
OKPD #144901  
EXPIRATION 12/15/2024**



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## Acronyms and Definitions

“ACM” means asbestos containing materials.

“Adequately wet” means sufficiently mix or penetrate with amended water solution to prevent the release of particulates. If visible emissions are observed coming from asbestos containing material, then that material has not been adequately wetted. However, the absence of visible air emissions is not sufficient evidence of being adequately wet.

“AHERA” means the Asbestos Hazard Emergency Response Act of 1986 and rules and regulations enacted by EPA for its implementation, latest revision.

“Amended water” means water to which surfactant (wetting agent) has been added to increase the ability of the liquid to penetrate ACM.

“Asbestos containing material” means any material that contains asbestos of one percent or more as determined by polarized light microscopy.

“Asbestos hauler” means a person who transports regulated asbestos containing materials from abatement projects for hire. For purposes of Oklahoma Department of Labor Asbestos Rules, asbestos haulers will be considered to be asbestos abatement contractors, and their employees to be asbestos abatement workers, and shall be required to license as such.

“Category I nonfriable asbestos containing materials” means asbestos containing packings, gaskets, resilient floor covering, and asphalt roofing products containing more than one percent (1%) asbestos as determined by Polarized Light Microscopy specified in Appendix E, Subpart E, 40 CFR Part 763, Section 1, that when dry cannot be crumbled, pulverized, or reduced to powder by hand pressure.

“Category II nonfriable asbestos containing materials” means any material, excluding Category I nonfriable materials, containing more than one percent (1%) asbestos as determined by Polarized Light Microscopy specified in Appendix E, Subpart E, 40 CFR Part 763, Section 1, that when dry cannot be crumbled, pulverized, or reduced to powder by hand pressure.

“Clean room” means an asbestos-free section of decontamination facility which is intended for workers to change from street clothes to protective clothing prior to asbestos abatement activities and shall have a minimum of twelve (12) square feet of free floor space.

“Competent Person” means, in addition to the definition in 29 CFR 1926.32 (f), one who is capable of identifying existing asbestos hazards in the workplace and selecting the appropriate control strategy for asbestos exposure, who has the authority to take prompt corrective measure to eliminate them, as specified in 29 CFR 1926.32(f). In addition, for Class I and Class II work who is specially trained in a training course which meets the criteria of EPA’s Model Accreditation Plan 940 CFR 763) for asbestos supervisor, or its equivalent and. For purposes of this project design, it will also mean a person who qualifies and is licensed under ODOL Rules as an Asbestos Abatement Supervisor.

“Containment” means an area which has been isolated from the environment through negative pressure, physical barriers, and/or other means, and in which asbestos abatement is intended to take place.

“Critical barrier” means a temporary closure, usually of polyethylene sheeting (one layer or more and minimum of 4-mil thick) or other impervious material over all openings into a work area or any other similarly placed physical barrier sufficient to prevent airborne asbestos in a work area from migrating to an adjacent area.

“Decontamination unit” means an enclosed area adjacent and connected to the regulated area and consisting of an equipment room, shower area, and clean room, which is used for the decontamination of workers, materials, and equipment that are contaminated with asbestos.

“Dirty room” means a chamber of a decontamination unit connecting the asbestos abatement area to the shower. The dirty room is for removal of contaminated or potentially contaminated protective clothing prior to entering the shower. The dirty room shall be a minimum of twelve (12) square feet and shall be built large enough to accommodate the decontamination of work equipment.

“EPA” means the Environmental Protection Agency.

“Friable asbestos containing material” means any material containing one percent (1%) or more asbestos, which when dry, may be crumbled, pulverized, or reduced to powder by hand pressure. The term includes non-friable ACM after such previously non-friable becomes damaged to the extent that when dry may be crumbled, pulverized, or reduced to powder by hand pressure.

“GFCI” means a ground fault circuit interrupter.

“HEPA” means a high efficiency particulate air filter capable of trapping and retaining at least 99.97% of all mono-dispersed particles of 0.03 microns in diameter.

“Load-out” means two chambers of a containment area which are used to decontaminate disposal bags, barrels, and equipment prior to removal and transport from containment.

“Negative pressure enclosure” means an area which has been isolated from the environment through negative pressure, physical barriers, and/or other means, and in which asbestos abatement is intended to take place.

“NESHAP” means the National Emissions Standards for Hazardous Air Pollutants, EPA regulations 40 CFR part 61, latest revision.

“ODOL” means the Oklahoma Department of Labor, Asbestos Division.

“OSHA” means the Occupational Safety and Health Administration of the United States of America.

“PEL” means permissible exposure limit. For the purposes of this project design, the ODOL PEL of 0.01 fibers per cubic centimeter of air (f/cc) shall apply.

“RACM” means regulated asbestos containing material. Regulated asbestos containing materials means friable ACM, Category I non-friable ACM that has become friable, Category I non-friable material that will be or has been subjected to sanding, grinding, cutting, or abrading, or Category II non-friable ACM that has a high probability of becoming, or has become crumbled, pulverized, or reduced to powder by forces expected to act on the material in the course of demolition, renovation, or abatement operations.

“Regulated area” means an area established by the employer to demarcate areas where Class I, II, III asbestos work is conducted, and any adjoining area where debris and waste from such asbestos work accumulate; and a work area within which airborne concentrations of asbestos, exceed or there is a reasonable possibility they may exceed the permissible exposure limit (PEL).

“Third party air monitoring” means an air-monitoring laboratory, which shares no partners or owners, if a proprietorship, or offices if a corporation, with the Contractor for whom monitoring is being performed.

“Wetted” means the application of amended water solution to asbestos containing materials in sufficient quantities to minimize fiber release. The ACM shall not be saturated.

## **A. *General Provisions for Regulated Asbestos***

- 1) Contractor shall be responsible for all Federal, state, and local notifications and fees, labor, materials, insurance as required, and equipment necessary to carry out the abatement operation in accordance with job specifications, this project design, and all relevant Federal, State, and local safety rules.
- 2) Contractor will be responsible for soliciting and paying for a third part air monitoring firm during all abatement activities as required by Federal and state laws.
- 3) Contractor shall be responsible for transportation and disposal of regulated asbestos containing waste in a State of Oklahoma and Company approved asbestos landfill. All asbestos waste shall be transported by a state of Oklahoma licensed asbestos abatement contractor who is a recognized asbestos hauler and manifested according to 40 CFR Part 61.
- 4) Contractor will be responsible for completing the Oklahoma required "Non-Hazardous Special Waste Manifest" and "Waste Shipment Record" and providing all required regulatory notifications.
- 5) The contractor is responsible for verification of all quantities. A mandatory walk through is required for this project. At this walk through the contractor is responsible for determining the following:
  - a. the conditions affecting the work, including but not limited to physical conditions of the site, which may bear upon site access, handling and storage of tools and materials, access to water, electric or other utilities or otherwise affect performance of required activities. Please note there is no current electric or water at the site and the basement boiler room and tunnels are full of water that will have to be pumped/filtered out first to gain access for removal.
  - b. the character and quantity of all surface and substrate materials or obstacles to be encountered in so far as this information is reasonable ascertainable from an inspection of the site, including exploratory work done by the Facility Owner or a designated consultant, as well as information presented in drawings and specifications included with this contract. Any failure by the Contractor to acquaint himself with responsibility for estimating properly the difficulty or cost of successfully performing the work shall not be grounds for additional cost to the Facility Owner. The Facility Owner is not responsible for any conclusions or interpretations made by the Contractor on the basis of the information made available by Facility Owner.
  - c. No bids will be accepted from any Contractor who has not inspected the job site either in person or through a qualified designated representative.
- 6) Any and all asbestos air monitoring results shall be posted at the site as the Contractor obtains them from the third-party air-monitoring firm.

- 7) Contractor shall have available at the job-site copies of Contractor's asbestos abatement license, asbestos supervisor and workers licenses, current respirator fit test records, and any other applicable training certifications or licenses necessary to complete this abatement operation.
- 8) Contractor shall have a copy of all Safety Data Sheets (SDS) available and on-site for all materials brought on-site by Contractor.
- 9) Contractor shall maintain the work area and any adjacent work areas in a manner that is free from hazards that contribute to slips, trips, and falls. Contractor shall maintain conditions to protect abatement workers and any other building occupants from the exposure of asbestos containing materials or any other hazards.
- 10) Contractor will be responsible for securing the site once they are mobilized to the site until abatement is complete and demobilization. Building owner is not responsible for damages or theft to Contractor's equipment or materials during these project design abatement activities.

## ***B. Regulated Asbestos Project Design Requirements.***

Oklahoma Department of Labor (DOL) Abatement of Friable Asbestos Materials Rules, Section 380:50-4-1. General requirements.

### **(1) A statement that DOL Abatement of Friable Asbestos Materials Rules apply.**

All of the mentioned asbestos abatement shall be done in accordance with the Oklahoma Department of Labor Abatement of Friable Asbestos Rules, OAC 380:50 and all applicable Federal, State, and Local rules, including but not limited to:

- i. OAC Title 40§450-456, latest revision
- ii. OSHA 29 CFR 1910.1001, latest revision
- iii. OSHA 29 CFR 1926.1101, latest revision
- iv. EPA 40 CFR part 61, NESHAP, latest revision
- v. EPA 40 CFR part 763, latest revision
- vi. Workers' compensation
- vii. Liability insurance
- viii. Public contracts
- ix. All other applicable EPA, OSHA, DOT, and DOL rules and regulations, and

In case of conflict between these rules and this Project Design, the most stringent shall apply.

### **(2) Sequencing and phasing of work.**

A. This asbestos abatement project will be conducted in the following phase(s), but not necessarily in this order and Contractor may do any combination of phases together:

Phase 1: Gross removal inside negative pressure enclosure of approximately #50 intact hard pack ACM fittings and 7,000 square feet asbestos contaminated floor debris from main east/west hallway, East bathroom/hallway, cafeteria, and upstairs mechanical area of auditorium.



ACM floor debris in hallway areas



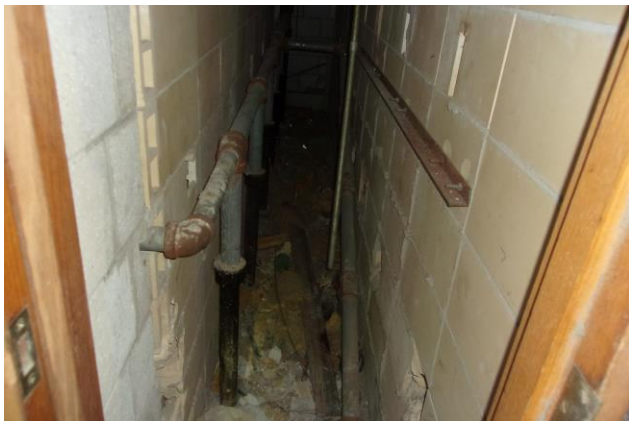


Upstairs entrance to mechanical of auditorium

Phase 2: Gross removal inside negative pressure enclosure of approximately #100 hard pack ACM fittings and 5000 square feet asbestos contaminated floor debris from the pool/gym, locker room, classroom area of the west, including elevated mechanical areas above locker rooms, and boys and girl gym.

Phase 3: Gross removal inside negative pressure enclosure of approximately #100 hard pack fittings and 4000 square feet asbestos contaminated thermal system insulation and floor debris from boiler room and associated tunnels. Please note the boiler room and tunnels must have its water pumped out using 5 micron filters and disposed of in sanitary sewer.

Phase 4: Gross removal in negative pressure enclosure of approximately 1000 square feet of asbestos contaminated floor debris from bathroom and chase off classroom 1.



Typical restroom chase

Phase 5: Gross removal in negative pressure enclosure of approximately 1000 square feet of asbestos contaminated floor debris from bathroom and chase off classroom 11.

Phase 6: Floor cleanup inside room 6 of approximately 10 square feet of ACM hard pack fitting.

Phase 7: Floor cleanup inside room 14 of approximately 10 square feet of ACM hard pack fitting.

B. Sequencing of work:

The asbestos abatement contractor will notify the Oklahoma Department of Environmental Quality and Oklahoma Department of Labor, Asbestos Division, at least 10 business days in advance before asbestos stripping or removal work or any other activity begins (such as site preparation that would break up, dislodge, or similarly disturb asbestos material).

Each phase will consist of the following sequencing scenarios:

- i. Demarcate each work area with OSHA approved asbestos warning signs, tape, or other approved barriers.
- ii. Establish remote decontamination unit, perform pre-clean and inside work area prep.
- iii. Establish negative pressure, where applicable.
- iv. ODOL prep inspection.
- v. Remove ACM materials using enclosed work practices.
- vi. Final clean of work areas.
- vii. Pre visual inspection by air monitoring firm. All removal areas shall be free of dust, debris, or other similar materials before proceeding to next step.
- viii. ODOL visual inspection (if required by ODOL inspector).
- ix. Clearance of work areas by third party firm. (if required).
- x. ODOL final inspection (if required by ODOL inspector).

**(3) Identification of means of egress and a fire protection plan.**

- A. The emergency escape routes shall be marked and illuminated. In case of emergency, worker safety will become priority. Fire extinguishers will meet the requirements found in 380:50-15-14 in that each shall be at a minimum 10: ABC rated fire extinguishers. Fire extinguishers will be provided by Contractor and should be placed so that from any space within the work area there is a fire extinguisher within a 50-foot radius. All employees shall be trained in the location, use and operation of any portable fire extinguisher; however, worker safety and escape will be number one priority.

**(4) The quantity, type, percentage with bulk analysis unless presumed and a diagramed location of asbestos materials to be abated.**

- A. This asbestos abatement project will consist of removal of:

This asbestos abatement project will include approximately #250 hard pack fittings and 18,020 total square feet of asbestos contaminated floor/tunnel debris from throughout Gilcrease school.

- B. The type is provided in Appendix B, Bulk Asbestos Laboratory Results and the approximate locations of ACM materials are provided in Appendix A, Figure 1.

**(5) Abatement methods, and techniques, and numbers of glovebags or mini containments.**

- A. Abatement Methods: Phases 1-7 abatement of asbestos containing hard pack fittings and gross cleanup of contaminated floor debris shall be performed in accordance with the Oklahoma Department of Labor Asbestos Division's, **Abatement of Friable Asbestos Materials Rules**, Subchapter 17, Minimum Abatement Standards.
- i. A DOL licensed asbestos supervisor shall be on-site at all times asbestos abatement is being performed. Such supervisor shall be prepared at any time to enter the containment as required.
  - ii. A DOL licensed asbestos worker or supervisor shall be stationed outside the containment at all times, except for short-term excursions in the containment. If this DOL licensed person enters for a short-term excursion a second DOL licensed worker or supervisor shall remain stationed outside.
  - iii. All abatement work will be performed inside a negative pressure enclosure (NPE).
  - iv. We ask for a variance from maintaining -0.02 pressure differential and the requirement for at least 4 air changes per hour shall be maintained in each NPE and instead contractor will install enough negative air machines for at least 6 air changes per hour. We ask for the variance because the site is scheduled for demolition, has limited electricity, has been subjected to vagrant vandalism for years, and will be almost impossible to achieve true negative pressure.
  - v. Each NPE shall be kept under negative pressure continuously from the start of removal of asbestos until clearance air monitoring requirements of Section 380:50-11-2 and this project design are met. Contractor is allowed to turn off negative air machines when applying the lock-down encapsulant upon successful visual inspection by DOL inspector.
  - vi. Air movement shall be directed away from employees performing asbestos work and toward a HEPA filtration machine. Extra negative air machines can be added to the NPE for this purpose and internally vented.
  - vii. Prior to beginning work, the NPE shall be smoke tested for leaks and any leaks sealed.
  - viii. Remove the material in an adequately wet condition using fine mist equipment. However, do not allow excessive water to accumulate in the work area. Keep all removed material wet enough to prevent fiber release until it can be placed in appropriate containers for disposal.
  - ix. Wetted asbestos containing material shall be removed in manageable sections by hand removal methods. Mechanical or high-pressure water spray systems are prohibited. Removed material shall be placed in containers before moving to a new location for continuance of work. Surrounding areas shall be periodically sprayed and maintained in an adequately wet condition until visible material is cleaned up and properly containerized.
  - x. Material removed from building structures or components shall not be dropped or thrown to the floor.
  - xi. Containers (6-mil labeled disposal bags or drums) shall be sealed when full and stored in containment if space allows, or in the first airlock of the load out. Waste disposal containers shall be decontaminated on exterior surfaces by wet cleaning and HEPA vacuuming before being placed in clean bags or drums for transport to waste load out trailer.
  - xii. Since the material to be abated is chrysotile asbestos and is easily wetted, we ask for a variance from starting abatement activities in supplied air pressure demand respirators and instead start in a minimum of full-face air purifying respirators that have been quantitative fit tested within the last 12 months.

**(6) Details of personal and area air monitoring samples.**

- A. Air monitoring for all Phases will be conducted according to Subchapter 11 requirements as follows:
- i. Inside Area Monitoring: A minimum of one (1) area sample in the vicinity of each abatement crew per shift. One (1) sample from the load-out area during load-out activities.
  - ii. Outside Area Monitoring: Minimum of, but not limited to, one (1) air sample from each independent exit area collected directly outside and adjacent to the work area. One (1) sample per shift from the exhaust of each negative air machine, which discharges from the containment area. One (1) sample from outside the clean room.
  - iii. Personal Monitoring: Twenty-five percent of the work force or a minimum of two abatement workers will be monitored in their breathing zone with one of the workers doing removal and the other conducting cleanup operations. An additional sample will be collected from a worker during load out activities.

**(7) Numbers and locations of Clean Test samples and type of analysis to be employed.**

- A. The clearance monitoring for each phase will be conducted by collection of a minimum of five (5) area samples will be collected inside the work area and read by Phase Contrast Microscopy. All clearance air monitoring will be conducted by aggressive sampling techniques and sample flow rates will be limited to a maximum of ten (10) liters per minute for 25-millimeter cassettes and samples shall be collected over a period of not fewer than two hours in order to collect a minimum of 1200 liters of air.

For clearance air cassettes to be approved using PCM analysis, the upper confidence level of the airborne fiber concentration shall be less than 0.01 fibers per centimeter of air or the airborne fiber concentration outside the containment as determined prior to abatement, whichever is greater.

For any PCM analysis exceeding the allowed clearance level, the Contractor may have such cassette analyzed by TEM AHERA Method. In which case the average asbestos fiber level for the five cassettes shall be less than 70 structures per square millimeter (mm<sup>2</sup>). If the air cassettes do not meet the TEM clearance values, the contractor must re-clean the work area by wet wiping and HEPA vacuuming and then additional clearance air monitoring conducted.

**(8) Numbers, capacities, and diagram to identify the locations, and discharge points, if any, of negative air machines.**

- A. Phases 1-3: Each of these phases are less than 80,000 cubic feet. One 2,000cfm rated machine can filter 20,000 cubic feet of air in 10 minutes. Therefore, a minimum of four (4) 2000cfm rated machines, externally vented, are necessary to provide one air change every 10 minutes.

- B. Phases 4 and 5: Each of these two phases are less than 10,000 cubic feet. One 2,000cfm rated machine can filter 20,000 cubic feet of air in 10 minutes. Therefore, only a single 2000cfm rated machine, externally vented, is necessary to provide one air change every 10 minutes.
- C. Phases 6-7 are small, 10 square feet of material, and we ask for no negative air pressure on these two critical barrier classrooms only.

**(9) Details of the project containment(s), glovebag or mini containments, including drawings. Details shall include all applicable subchapters of the Oklahoma Asbestos Control Act, including by not limited to scaffolding requirements and live electric isolation.**

- A. Preparation of all asbestos abatement work areas shall be as follows:
  - i. Locate and lock-out/tag-out electric and HVAC in areas to be abated. All temporary electric power to be on **GFCI** circuits and trip at or below seven (7) milli-amps of electrical current.
  - ii. Clean all movable and fixed objects within the work area using a HEPA filtered vacuum and wet-cleaning methods. After cleaning, movable objects shall be removed from the work area and stored in an uncontaminated location. And all fixed objects shall be wrapped in a minimum of a single layer of 4-mil poly. Carpeting, drapes, clothing, upholstered furniture, and other fabric items that are contaminated shall be properly disposed of as contaminated waste.
  - iii. Site is scheduled for demolition so we are incorporating demolition procedures and installation of critical barriers and single layer of 4-mil wall poly. No floor poly will be installed since all of the areas have ground contamination that is being cleaned up.
- B. Any preparatory or cleaning activity that has the potential for contact with ACM shall require the workers to be in minimum of full body coveralls, a full-face air purifying respirator and air monitoring according to 380:50-11-1.
- C. If contractor incorporates the use of any scaffolding as defined under 29 CFR 1926 Subpart L they shall follow all applicable scaffold rules and regulations. Scaffolding means any temporary elevated platform (supported or suspended) and its supporting structure (including points of anchorage) used for supporting employees or materials or both.

**(10) Details of the decontamination system(s).**

- A. We ask for a variance from contiguous (attached) decontamination units and instead the contractor will utilize a remote decontamination for all Phases. The site is vacant, been subjected to vagrant vandalism and has limited electricity, limited water access, limited sanitary sewer access. Any decontamination facilities will be built according to 380:50-15-7 through 380:50-15-12 as follows:

- i. All shower water waste shall be filtered with 5-micron filter. Any shower filters and residue shall be disposed of as contaminated material.
  - ii. The shower facility shall have functioning hot water storage capacity of five gallons per on-site Worker at 130 degrees Fahrenheit.
  - iii. Contractor shall ensure that one shower head shall be provided for each 10 employees of each sex, or numerical fraction thereof, according to 29 CFR 1926.51 requirements.
  - iv. Showers shall have a means of dispensing liquid soap.
  - v. Ten-foot candle illumination shall be required in all areas of the decontamination unit.
  - vi. Showers shall be stable, free of sharp edges, and trip or fall hazards.
  - vii. The temperature of the clean room and shower shall be maintained above fifty degrees Fahrenheit.
  - viii. The clean room shall be built large enough to accommodate each worker and provide a locker for the workers personal belongings. This means there must be at least 12 square feet of free floor space in the clean room.
  - ix. The clean room shall be kept clean and sanitary at all times.
  - x. The equipment room shall be built large enough to accommodate the decontamination of work equipment and be equipped with impermeable disposal bags for contaminated clothing and debris.
- B. Contractor will erect an attached change/loadout to containment area that will be utilized by workers as a changing area following the enclosed protocol:
- i. Workers will enter the change room from the removal areas and HEPA vacuum off all visible debris from contaminated suits.
  - ii. Workers will then put a clean disposable suit on over the potential contaminated dirty suit and proceed to the dirty room of the decontamination unit.
  - iii. Workers will then take off both suits and dispose of as contaminated debris; and
  - iv. Then workers will proceed into the shower to thoroughly wash their head and body.
  - v. Please note that the route taken from each work area to the decon unit will be monitored by EHCl.

**(11) The extent to which asbestos-contaminated soils, if any, must be removed, and the sampling methods of determining the efficacy of such removal.**

- A. Not applicable.

**(12) Special materials or methods required to protect objects in the work area should be detailed, (e.g., plywood over carpeting or hardwood floors to prevent damage from scaffolds and falling materials.)**

- A. There are no special materials or methods required to protect objects in the work area at this time.

**(13) Any variances from the Abatement of Friable Asbestos Materials Rules.**

- A. We ask for a variance from maintaining -0.02 pressure differential and the requirement for at least 4 air changes per hour shall be maintained in each NPE and instead

contractor will install enough negative air machines for at least 6 air changes per hour. We ask for the variance because the site is scheduled for demolition, has limited electricity, has been subjected to vagrant vandalism for years, and will be almost impossible to achieve true negative pressure.

- B. Phases 6-7 are small classrooms and involve a small, 10 square feet of material, so we ask for no negative air pressure on these two critical barrier classrooms only.
- C. Since the material to be abated is chrysotile asbestos and is easily wetted, we ask for a variance from starting abatement activities in supplied air pressure demand respirators and instead start in a minimum of full-face air purifying respirators that have been quantitative fit tested within the last 12 months.
- D. Site is scheduled for demolition so we are incorporating demolition procedures and installation of critical barriers and single layer of 4-mil wall poly. No floor poly will be installed since all of the areas have ground contamination that is being cleaned up.
- E. We ask for a variance from contiguous (attached) decontamination units and instead the contractor will utilize a remote decontamination for all Phases. The site is vacant, subjected to vagrant vandalism and has limited electricity, limited water access, and limited sanitary sewer access.

# **APPENDIX A**

## **SITE MAP(s)**



## LEGEND

C = Clean room

S = Shower

D = Equipment room

LO = Loadout

A = Area pump

F = Fire extinguisher

E = Emergency Exit

CA = Changing area

P = Clearance Pump



= NEG AIR MACHINE



= CRITICAL BARRIER

# DISASTER SHELTER AREAS

## GILCREASE ELEMENTARY

2014 - 2015



8/5/2014

### Phase 3 Boiler room and tunnels

## **APPENDIX B**

### **ANALYTICAL RESULTS**





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

### Polarized Light Microscopy Asbestos Analysis Report

Quantem Lab No. 370932

Account Number: A389

Date Received: 07/19/2024

Received By: Courtney Holman

Date Analyzed: 07/19/2024

Analyzed By: Benjamin Hill

Methodology: EPA/600/R-93/116

Client: Environmental Hazard Control, Inc.

2301 S Sheridan Rd Ste B

Tulsa, OK 74129-1064

Project: Gilcrease

Project Location: 5550 N. Cincinnati

Project Number: N/A

Quantem Sample ID	Client Sample ID	Composition	Color / Description	Asbestos (%)	Non-Asbestos Fiber (%)	Non Fibrous
001	0540-539-01-1201	Layered	White Texture	Asbestos Not Present	Glass Fiber	50 CaCO3 Paint
001a		Layered	Brown Plaster	Asbestos Not Present	Cellulose Glass Fiber	10 Gypsum 5 Mica

*Benjamin Hill*

Benjamin Hill, Assistant Laboratory Manager

7/19/2024

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.

Page 1 of 1

2301 S. Sheridan Road, Ste #B  
TULSA, OK 74129

(918) 747-1330  
FAX (918) 743-3961

**TURNAROUND (Please Circle)**  
**RUSH SAME DAY 24 HR 3 Day 5 Day**

370932

[illegible]

# AHERA SAMPLE COLLECTION FORM

Inspector's Name Jack Johns Inspector's Number 0150  
 LEA's Name Tulsa Public Schools ISD #1 LEA's Number (4 digits) 0540  
 Address 3027 S. New Haven Tulsa, Oklahoma  
 School Name Gilcrease School Number (3 digits) 539  
 Building Name Main Building Number (2 digits) 01  
 Location and Description of Area and Material 01 - breeching, 02 - HW storage tank,  
03 - HWS & HWSR ftgs., 04 - HW & CW ftgs., 05 - chillwater, 06 - plaster, 07 -  
boiler Rm. #2 HW storage tank, 08 - HW & CW boiler room #2, 09 - 1 x 1 ceiling  
tile, 10 - 2 x 2 ceiling tile Date 8-28-88

Sample Number** ####-###-##-####	Location in Area*** and Comments	Lab Results
0540-539-01-0101	Breeching, above boiler #02	
0102	Breeching, east side room by stack pipe	25% chrysotile
0540-539-01-0201	Tank, east end bottom side	10% chrysotile
0202	Tank, west end bottom	
0540-539-01-0301	Ftgs., north end above boiler	
0302	Ftgs., east tunnel at entrance	
0303	Ftgs., at entry of Rm. #89	25% chrysotile
0540-539-01-0401	Ftgs., north end boiler #03	20% chrysotile
0402	Ftgs., east tunnel at entrance	
0403	Ftgs., front of pipe chase #40	

\*\* Will consist of LEA #, School #, Bldg. #, Area # plus 2 digit sequential number -  
 see Management Plan Format (Item #8) for numbering system  
 \*\*\* A diagram may be attached to show sample locations

LAB E.P.A. No. 6430

D. Thompson  
 Analyst  
9/14/88  
 Date

Sample Number** ###-###-##-####	Location in Area*** and Comments	Lab Results
0540-539-01-0501	Ftgs., west end AH #2	10% Chrysothrix
0502	Ftgs., east end #1 chiller compressor	
0503	Ftgs., front of AH #1, Rm. #103	
0540-539-01-0601	Plaster, see grid	
0602	Plaster, see grid	
0603	Plaster, see grid	negative
0540-539-01-0701	Tank, north end of tank on bottom, Rm. #2	
0702	Tank, south end of tank on bottom, Rm. #2	negative
0540-539-01-0801	Ftgs., north end of tank, boiler Rm. #2	
0802	Ftgs., west end of tunnel at pool	
0803	Ftgs., east end of tunnel at pool	negative
0540-539-01-0901	Ceiling tile, Rm. #55, above entry door	
0902	Ceiling tile, Rm. #84, above entry door	
0903	Ceiling tile, Rm. #111, above entry door	negative
0540-539-01-1001	Ceiling tile, Rm. #106, above entry door	negative

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\*\*\* A diagram may be attached to show sample locations