ENVIRONMENTAL ENGINEERING SOLUTIONS

February 25, 2014

Mr. Ronnie Shaver
Code Enforcement Officer
City of Jonesboro
Email: rshaver@jonesboro.org

RE: Asbestos Abatement Closeout Documentation
Community Center Basketball Court

Dear Mr. Shaver:

Please find enclosed with this letter the following documents in reference to the above referenced project:

- (1) Copy of EMTEC's Closeout Documentation

The project was completed satisfactorily, and to the best of our opinion, no Asbestos-containing floor leveling compound remains in association within the Gymnasium of the Community Center Basketball Court at 1212 South Church Street in Jonesboro, Arkansas. The project documents are your record of the asbestos abatement and are required by both Arkansas and Federal regulations to be retained by the owner for thirty (30) years.

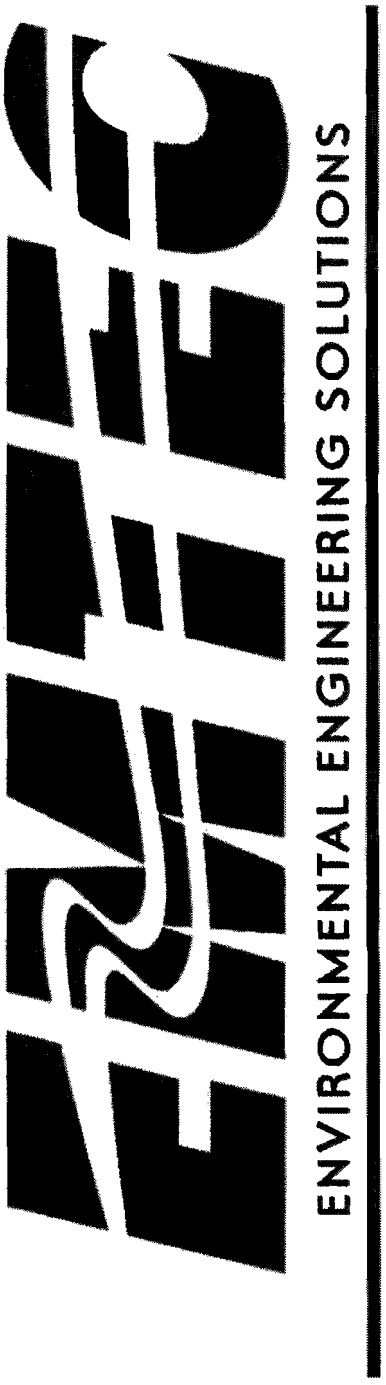
As always, EMTEC strives to provide the City of Jonesboro with professional, knowledgeable and affordable environmental remediation and consulting services. EMTEC hopes that we have provided these services on this project. If not, please feel free to discuss any matter with us so we can address and correct the matter. If you have any questions, please feel free to contact me at our office (501) 374-7492.

Sincerely,

John Hatchett, President
Environmental Consultant

Enclosures

P.O. BOX 3703 • LITTLE ROCK, ARKANSAS 72203 • 1621 ALDERSGATE ROAD • LITTLE ROCK, ARKANSAS 72205
(501) 374-7492 • Fax (501) 374-7494



ASBESTOS ABATEMENT CLOSEOUT DOCUMENTATION

Project: Community Center Basketball Court
1212 South Church Street
Jonesboro, Arkansas

Client: City of Jonesboro
Mr. Ronnie Shaver
Code Enforcement Officer
Jonesboro Police Department
Jonesboro, Arkansas
(870) 351-0207
Email: rshaver@jonesboro.org

Performed By:

EMTEC
P.O. Box 3703
Little Rock, Arkansas 72203

1621 Aldersgate Road
Little Rock, Arkansas 72205

Email: emtec@emtecconsulting.com
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Website: www.emtecconsulting.com

Dates of Abatement: January 8 to January 10, 2014

Date of Report: February 24, 2014

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APPENDICES

ASBESTOS SUB-CONTRACTOR'S SUBMITTALS

PROJECT DIRECTORY

OWNER:

City of Jonesboro
1212 South Church Street
Jonesboro, Arkansas
Contact: Mr. Ronnie Shaver, Code Enforcement Officer
(870) 351-0207
Email: rshaver@jonesboro.org

ASBESTOS CONTRACTOR/CONSULTANT:

EMTEC
Engineering Management Corporation
Mailing Address: P.O Box 3703
Little Rock, Arkansas 72203
Physical Address: 1621 Aldersgate Road
Little Rock, Arkansas 72205
Contact: Mr. John Hatchett
(501) 374-7492
Email: johnh@emtecconsulting.com

ASBESTOS SUBCONTRACTOR:

Snyder Environmental
Contact: Mr. Justin Dixon, President
7031 Dewafelbakker Lane
North Little Rock, Arkansas 72113
1-888-353-2080
Email: jdixon@snyderenvironmental.com

EXECUTIVE SUMMARY

As authorized by Mr. Ronnie Shaver, Code Enforcement Officer for the City of Jonesboro, EMTEC was retained to perform asbestos abatement from within the Community Center Basketball Court located at 1212 South Church Street in Jonesboro, Arkansas. EMTEC utilized Snyder Environmental as a subcontractor to perform all asbestos removal and disposal. EMTEC acted solely as a general contractor and provided the project administration, project specifications, and air sampling. The abatement was started on January 8, 2014 and was completed on January 10, 2014. The following asbestos containing materials were abated:

- Approximately 5,600 SF of floor leveling compound.

All asbestos materials were removed in conjunction with all Federal, State and Local regulations. EMTEC served as the general contractor/consultant throughout the length of the project. EMTEC performed periodic PCM air monitoring during abatement and PCM air monitoring for clearance sampling. All analysis reports are included in this closeout documentation. All of the above asbestos materials have been abated and the building is safe for re-occupancy/demolition.

APPENDICES

APPENDIX A:
ASBESTOS ABATEMENT TECHNICAL SPECIFICATIONS

ENVIRONMENTAL ENGINEERING SOLUTIONS

TECHNICAL SPECIFICATIONS FOR THE ABATEMENT OF ASBESTOS CONTAINING MATERIALS

Project: Community Center Basketball Court
1212 South Church Street
Jonesboro, Arkansas

Client: City of Jonesboro
Mr. Ronnie Shaver
Code Enforcement Officer
Jonesboro Police Department
Jonesboro, Arkansas
Email: rshaver@jonesboro.org

Prepared By:

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Date of Report: December 20, 2013

TECHNICAL SPECIFICATIONS
FOR THE
ABATEMENT OF
ASBESTOS CONTAINING MATERIALS

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SECTION 01 11 00

SUMMARY OF WORK

1. GENERAL

1.1. SUMMARY

Furnish all labor, materials, facilities, equipment, services, employee training and testing, permits and agreements necessary to perform the work required for the removal of asbestos containing materials in accordance with these specifications, federal, state and local regulations. Whenever there is a conflict or overlap of the above references, the most stringent provisions apply. Perform the following work in accordance with the provisions specified in these documents. The following asbestos containing materials are required to be abated:

A. Community Center

1. Access, remove and dispose of approximately 5,600 SF of floor tile/mastic leveling compound. Please note: The floor tile/mastic is non-asbestos; only the floor leveling compound is asbestos containing.

B. Work Requirements Include, But Are Not Limited To The Following:

1. Arrange and coordinate on-site inspection of abatement enclosure(s) and/or set-up with EMTEC, the ENGINEER/CONSULTANT, who must approve prior to start of work.

2. Decontaminate work area for final inspection.

3. Comply with codes, ordinances, rules, regulations, order, and other legal requirements of public authorities, which bear on performance of work.

4. Promptly submit written notice to Owner of any observed variance of contract documents from legal requirements, and assume responsibility for work known to be contrary to such requirements, when written notice is not given.

SECTION 13 28 00

SPECIAL CONSTRUCTION
ABATEMENT OF ASBESTOS CONTAINING MATERIALS

1. GENERAL

1.1. SUMMARY

A. Section Includes:
   1. Abatement of Asbestos Containing Materials

1.2. DEFINITIONS

A. All terms not defined herein shall have the meaning given in the applicable publications and regulations.

1. *Abatement*: Procedures to control fiber release from asbestos-containing materials (ACM). Includes encapsulation, enclosure and removal.

2. *Accredited*: A person who holds a current certificate of training or updated certificate of continuing training as required by Federal and State regulations.

3. *AHERA*: The Asbestos Hazard Emergency Response Act of 1986, also referred to as the Asbestos-Containing Materials in Schools; Final Rule and Notice, and 40 CFR Part 763

4. *Asbestos-Containing Building Material (ACBM)*: Surfacing ACM, thermal system insulation ACM, or miscellaneous ACM that is found in or on interior structural members or other parts of a building.

5. *Asbestos-Containing Material (ACM)*: Any material or product that contains more than 1 percent asbestos as determined by Polarized Light Microscopy (PLM) analysis, or assumed to contain greater than 1 percent asbestos.

6. *Airlock*: A system for permitting ingress or egress without permitting air movement between a contaminated area and an uncontaminated area, typically consisting of two curtained doorways at least 6 feet apart.

7. *Air Monitoring*: The process of measuring the fiber content of a specific volume of air in a stated period of time in an appropriate location.

8. *Amended Water*: Water to which a surfactant has been added.

9. *Authorized Visitor*: Owner, Consultant, or representative of any regulatory or other agency having jurisdiction over the project.

10. *Clean Room*: An uncontaminated area or room that is part of the worker decontamination unit, with provisions for storage of uncontaminated clothing and equipment.

11. *Consultant*: An asbestos consulting company and its employees retained by Owner, which employs a full-time consultant who is qualified to perform asbestos consulting services, and whose employees hold current applicable accreditation.

12. *Containment*: The temporary, polyethylene-lined, enclosure structure erected to control the release of asbestos fibers to the ambient environment.

13. *Contractor*: An asbestos abatement contracting company and its employees, which employs a fulltime contractor who is certified to provide asbestos abatement services, and whose employees hold current applicable accreditation.

14. *Critical Barrier*: A physical barrier that seals openings to the contaminated work area in such a way that airborne contaminants can not be released to uncontaminated areas.

15. *Decontamination Unit*: A series of connected rooms, each room being an airlock, with curtained doorways between any two adjacent rooms, for the decontamination of workers or of materials and equipment.

16. *Demolition*: The wrecking or taking out of any load-supporting structural member and any related razing, removing, or stripping of asbestos products.

17. *Encapsulant* : A liquid material that can be applied to ACM or surfaces stripped of ACM and that controls the possible release of asbestos fibers from the material either by creating a membrane over the surface (bridging encapsulant) or by penetrating into the material and binding its components together (penetrating encapsulant). When used, care must be taken that any reinsulation material will adhere to the encapsulant.

18. *Encapsulation*: All herein specified procedures necessary to coat surfaces from which ACM has been removed with sealing substance meeting applicable government standards. Encapsulation may also be referred to as "lock-down" encapsulation.

19. *Equipment Decontamination Unit*: A decontamination unit for materials and equipment, typically consisting of a designated area of the work area, a washroom, holding area, and an uncontaminated area.

20. *Equipment Room*: A contaminated area or room that is part of the worker decontamination unit, with provisions for storage of contaminated clothing and equipment.

21. *Friable ACM*: Asbestos-containing material that can be crumbled, or reduced to a powder by ordinary hand pressure, or materials assessed as friable by an accredited asbestos abatement inspector.

22. *Fixed Object*: A piece of equipment or furniture in the work area that cannot be removed from the work area.

23. *HEPA Filter:* A High Efficiency Particulate Air (HEPA) filter that traps and retains at least 99.97% of monodispersed particles 0.3 microns in diameter or larger.

24. *HEPA-Filtered Exhaust Unit*: An exhaust fan that draws contaminated air through a HEPA filter and exhausts the filtered air to the outside of the building.

25. *HEPA-Filtered Vacuum*: High efficiency particulate air filtered vacuuming equipment with a filter system that collects and retains 99.97% of monodispersed particles 0.3 microns in diameter or larger.

26. *Holding Area*: A room between the washroom and an uncontaminated area in the equipment decontamination unit. The holding area has an airlock constructed at its entrance from an uncontaminated area.

27. *Moveable Object*: A piece of equipment or furniture in the work area that can be removed from the work area.

28. *Nonfriable ACM*: Asbestos-containing material that does not crumble, or become reduced to powder by ordinary hand pressure, or material that has been assessed as nonfriable by an accredited asbestos abatement inspector.

29. *Owner*: Pulaski County Special School District or its employees or agents.

30. *Pressure Differential*: A condition whereby the containment is maintained at a pressure differential of at least minus 0.02 inches of water relative to the adjacent unsealed areas.

31. *Removal*: All herein specified procedures necessary to strip all ACM from the designated areas and dispose of these materials at an acceptable site.

32. *Renovation*: The modifying of any existing structure, or portion (component) thereof.

33. *Shower Room*: A room in the worker decontamination unit that is located between the clean room and equipment room, and is equipped with a functional shower stall and waste water filtering system.

34. *Small-scale, Short Duration:* Removal small quantities of friable asbestos-containing insulation on pipes, small quantities of asbestos-containing surfacing materials, or other nonfriable asbestos containing materials that are less than 25 square feet or 10 linear feet, and can be removed by glove bag or mini-containment procedures contained in this specification.

35. *Surfactant*: A non-toxic, non-flammable, chemical wetting agent added to water to improve penetration, thus reducing the quantity of water required for a given operation or area.

36. *Supervisor*: An employee of Contractor who is accredited as a Supervisor for Asbestos Abatement Projects, qualifies as a competent person on asbestos abatement projects, and holds current applicable accreditation.

37. *Washroom*: A room between the work area and the holding area in the equipment decontamination unit. The washroom has an airlock between it and the holding area.

38. *Wet-Clean*: The process of eliminating asbestos contamination from building surfaces and objects by using cloths, mops, or other cleaning tools that have been dampened with amended water, and by afterwards disposing of these cleaning tools as asbestos-containing waste.

39. *Work Area*: The area of a building where asbestos-containing materials will be, or are being, removed or abated.

1.3. REFERENCES

A. Comply with the requirements of the following standards. The publications listed below form a part of this specification to the extent referenced. The publications are referenced in text by basic designation only. Refer to the latest edition of each publication.

1. Environmental Protection Agency (EPA):

2. Regulations for Asbestos (Code of Federal Regulations Title 40, Part 61).

3. Guidance for Controlling Friable Asbestos Containing Materials in Buildings.

4. Continued Evaluation of Asbestos Removal Technologies and Recommended Specifications of Negative Pressure Systems.

5. Occupational Safety and Health Administration (OSHA):

6. Asbestos Regulations (Code of Federal Regulations Title 29, Part 1901, Section 1926.1101).

7. Respiratory Protection (Code of Federal Regulations Title 29 Part 1910.134).

8. National Institute for Occupational Safety and Health (NIOSH): Respiratory Protection.... A Guide for the Employee.

9. American National Standards Institute (ANSI):

10. Z86.1-1973.... Commodity Specification for Air.

11. ARKANSAS FIRE PREVENTION CODE IMPLEMENTATION

12. Volume I - Fire Prevention and Volume II - Building Construction of the Arkansas Fire Prevention Code's latest edition .

13. Other Arkansas Codes - The following codes may apply to this contract if alteration of mechanical, electrical or plumbing systems are required. New construction is not applicable to this contract:

Fire Prevention Code	-	1999 Arkansas Fire Prevention Code, Volume I (AFPC V1)
Building Code	-	1999 Arkansas Fire Prevention Code, Volume II (AFPC V2)
Residential Code	-	1995 CABO One & Two Family Dwelling Code (CABO 1&2)
Earthquake Code	-	1997 Standard Building Code (97SBC)

Earthquake Code	-	1996 National Electric Code, NFiPA 70-1996 (NEC)
Plumbing Code	-	1996 Arkansas State Plumbing Code (ASPC)
Gas Code	-	1996 Arkansas State Gas Code, Chapter 15 of the 1991 Arkansas State Plumbing Code (ASGC)
Liquified Petroleum	-	1995 State Code Liquified Petroleum Gas Containers Gas Code and Equipment State of Arkansas (LPGC)
Mechanical Code	-	1992 Arkansas Mechanical Code (AMC)
Energy Code	-	1994 Arkansas Rules and Regulations for Energy Standards for New Construction

1.4. SUBMITTALS

A. After completion of asbestos removal submit to OWNER through ENGINEER/CONSULTANT all project records, including, but not limited to the following:

1. ORIGINAL manifests originating at site of asbestos abatement and showing quantity of asbestos being transported.

2. ORIGINAL certificates of disposal showing quantity of asbestos arriving at disposal site, transporter, and the location of the disposal facility.

3. Daily log or diary maintained by supervisor.

4. List of workers and supervisors, with social security numbers.

5. Recorded evidence of fit testing, medical surveillance.

6. Recorded evidence of worker training and supervisor training, including Arkansas certification cards.

7. Sign in log for on-site visitors, showing time in, time out, name, and social security number.

8. Sign in log for Contractor employees.

9. Air monitoring lab results.

1.5. AUTHORITY TO STOP WORK

A. Owner has the authority to stop the abatement work at any time it determines either personally or through the services of the Owner's Representative that conditions are not within the specifications and applicable regulations. The stoppage of work shall continue until conditions have been corrected and corrective steps have been taken to the satisfaction of Owner. Standby time required resolving violations should be at the Contractor's expense. In the event such a stop work order occurs, Contractor shall immediately stabilize exposed asbestos, decontaminate all workers, and equipment to be removed from containment area and unless otherwise instructed by Owner, leave negative pressure system on.

1.6. PERSONNEL QUALIFICATIONS

A. All personnel of the Contractor performing asbestos abatement work must be certified and tested prior to any work and shall be thoroughly familiar with the standard operation procedure of the Contractor for abatement work. Training shall include successful completion of an asbestos course approved by the Arkansas Department of Environmental Quality, or the U. S. Environmental Protection Agency.

B. All asbestos abatement personnel shall be thoroughly familiar with all applicable regulations and practices for asbestos work and have participated in at least two abatement projects during the last two years.

C. All asbestos abatement personnel shall have successfully completed the asbestos licensing certification requirements of the Arkansas Department of Environmental Quality.

D. All personnel wearing respirators shall be trained in the use and care of respirators and shall pass the respirator fit test.

E. All personnel wearing respirators shall undergo the medical examinations for persons required wearing respiratory protection more than 30 days per year as per OSHA regulations.

F. Anyone without the above qualifications shall not be allowed to work in the abatement area at any time.

1.7. AVAILABILITY OF TRAINED PERSONNEL

A. There shall be a sufficient number of trained and qualified workers, foreman, and superintendents to accomplish the work within the required schedule. Since general work cannot start prior to the successful decontamination of the work area, it is imperative that a sufficient number of trained personnel be engaged throughout the abatement process. Unqualified personnel shall not be used to speed up completion of the abatement work. A fully accredited supervisor shall be on-site at all times while work is being done.

2. MATERIALS

A. Wetting Materials: For wetting prior to disturbance of Asbestos-Containing Materials uses either amended water or a removal encapsulant:

1. Amended Water: Provide water to which a surfactant has been added. Contractor shall use surfactant and removal encapsulant that will, to the extent required by this specification, if used in accordance with manufacturer's instructions, wet Asbestos-Containing Materials to which it is applied as required by the National Emission Standard for Hazardous Pollutants (NESHAP) Asbestos Regulations (40 CFR 61, Subpart M).

2. Removal Encapsulant: Provide a penetrating type encapsulant designed specifically for removal of Asbestos-Containing Material. Use a material which results in wetting of the Asbestos-Containing Material and retardation of fiber release during disturbance of the material equal to or greater than that provided by water amended with a surfactant consisting of one ounce of a mixture of 50% polyoxyethylene ester and 50% polyoxyethylene ether in five gallons of water.

B. Polyethylene Sheet: Provide polyethylene film in the largest sheet size possible to minimize seams 4.0 or 6.0 mil thick as indicated.

C. Duct Tape: Provide duct tape in 2" or 3" widths as indicated, with an adhesive, which is formulated to stick aggressively to sheet polyethylene.

D. Spray Cement: Provide spray adhesive in aerosol cans, which is specifically formulated to stick tenaciously to sheet polyethylene.

E. Disposal Bags shall be 6 mil thick leak-tight polyethylene bags.

F. Fiberboard Drums if required, shall be heavy-duty leak tight fiberboard drums with tight sealing locking metal tops.

G. Paperboard Boxes, if required, shall be heavy-duty corrugated paperboard boxes coated with plastic or wax to retard deterioration from moisture. Provide in sizes that will easily fit in disposal bags.

H. Airless Sprayer: An airless sprayer, suitable for application of encapsulating material, shall be used.

I. Asbestos Filtration Device (AFD): Asbestos filtration devices shall utilize high efficiency particulate absolute (HEPA) filtration systems.

J. Scaffolding: Scaffolding, as required to accomplish the specified work, shall meet all applicable safety regulations.

K. Transportation Equipment: Transportation equipment, as required, shall be suitable for loading temporary storage, transfer, and unloading of contaminated waste without exposure to persons or property.

L. Vacuum Equipment: All vacuum equipment utilized in the work area shall utilize HEPA filtration systems.

M. Water Sprayer: The water sprayer shall be an airless or other low-pressure sprayer for amended water application.

3. EXECUTION

3.1. STANDARD OPERATING PROCEDURES

A. Develop and implement a standard operating procedure during abatement work to ensure maximum protection and safeguard from asbestos exposure of the workers, building occupants, visitors, and the environment. A fully accredited supervisor shall be on-site at all times while work is being done.

B. Provide proper protective clothing and respiratory protection prior to entering the workspace from the outside.

C. Maintain a respirator program as prescribed by the OSHA regulations.

D. Coordinate work and cooperate with industrial hygienist conducting air monitoring on site in order for air monitoring to be conducted according to regulations and to protect workers and occupants of job site. Provide electrical supply for industrial hygienist to conduct air monitoring. If no electricity is available at job site provide electricity for ambient sampling.

1. Maintain record log at job site in a secured, clean area for review by Owner, EPA, OSHA, and Arkansas Department of Environmental Quality. Record log shall include the following:
2. Record of any accident, emergency evaluation, and any other safety and/or health incident.
3. Daily log describing works done and number of workers each shift.
4. Sign in log showing name and social security numbers of persons entering the workspace, date, and time of entry and exit.
5. Sign in log for Contractor employees.
6. Air monitoring lab results.
7. Arkansas certification cards.
8. List of all workers and supervisors, including asbestos training certificate numbers, and expiration date.
9. Evidence of fit testing record and medical surveillance.

E. Carry out safe work practices in the work place, including provisions for inter-room communications, exclusion of eating, drinking, smoking, or in any way breaking the respiratory protection.

F. Remove, encapsulate, or enclose asbestos in ways that minimize release of fibers.

G. Pack, label, load, transport, and dispose of contaminated material in a way that minimizes exposure and contamination.

H. Institute emergency evacuation plan for medical or safety (fire and smoke) so that exposure will be minimized.

I. Implement safety procedures to prevent accidents in the workspace, including electrical shocks, slippery surfaces, and entanglements in loose hoses and equipment.

J. Provide for effective supervision, air monitoring, and personnel monitoring for exposure during the work.

K. Provide engineering systems that minimize exposure to fibers in the workspace.

L. Provide access, support, and protection to all authorized visitors and inspectors.

M. Enforce strict discipline and good order among employees. Do not employ on the job unfit persons, persons not skilled in assigned task, persons not certified as asbestos workers by Arkansas Department of Environmental Quality.

N. Conduct work to assure compliance with schedules.

O. Cooperate with Arkansas Department of Environmental Quality and Owner and in coordination of work with other prime Contractors.

P. Confine operations at site to areas permitted by law, ordinances, permits, and contract documents.

Q. Do not unreasonably encumber site with materials or equipment.

R. Assume full responsibility for protection and safekeeping of products stored on premises.

3.2. CONTAINMENT FOR NON-FRIABLE MATERIALS

Non-Friable ACM includes materials known to contain greater than 1 percent asbestos by the polarized light microscopy (PLM) method of analysis, and cannot be crumbled or reduced to powder by ordinary hand pressure. These materials include, but are not limited to: resilient floor tile, mastics, etc.

A. Preparation for Containment for Non-Friable Materials

1. Post warning signs and barrier tape in and around work area as required by all applicable regulatory agencies, and restrict access to work area to personnel approved by Contractor or Consultant.

2. Shut down electric power when necessary. Provide temporary power and lighting and ensure safe installation of temporary power sources and equipment per applicable electric code requirements. Use ground-fault interrupter circuits (GFIC) at all temporary power sources in work area. Locate power source for temporary power panels and electrical equipment outside work area. All modifications to the electrical power systems must be carried out by a licensed electrician.

3. Shut down and isolate heating, cooling and ventilating air systems to prevent contamination and fiber dispersal to other areas of the structure. During the work, vents within work area must be sealed with, at least, tape and fire-retardant polyethylene sheeting, unless otherwise indicated in these specifications.

4. Clean fixed objects within the proposed work area using HEPA-filtered vacuums and/or wet-cleaning methods as appropriate, and enclose objects with 6 mil fire retardant polyethylene sheeting sealed with tape.

5. Clean proposed work areas using HEPA-filtered vacuums or wet-cleaning methods as appropriate. Methods that raise dust, such as dry sweeping or vacuuming with equipment not equipped with HEPA filters must not be used.

6. Seal off all openings, including but not limited to: corridors, doorways, elevators, skylights, ducts, grills, diffusers, and any other penetrations of work areas.

7. Doorways and corridors that will not be used for passage during work must be sealed with critical barriers. These seals must be left in place until final air testing is complete and the results received and approved. Allowances must be made for emergency exits.

8. Cover surfaces in the proposed work area, which do not require asbestos removal, with fire-retardant polyethylene sheeting in the following manner:

    8.1. Cover walls with 4-foot splashguards with 1 layer of (4 mil minimum thickness) polyethylene sheeting sealed with tape. This sheeting must be secured as necessary to maintain the integrity of containment throughout removal and testing process.

9. Maintain emergency and fire exits from work areas, or establish alternative exits satisfactory to the fire code.

10. Contractor will be required to place a three stage decon. The decon shall be constructed as follows:

10.1. For each abatement area requiring containment provide decontamination facilities located in an area agreed upon with the Owner. The decontamination facilities shall include a decontamination enclosure system for workers and visitors and a decontamination enclosure system for loading of asbestos into trucks for transportation to the landfill.

10.2. The decontamination enclosure system for workers and visitors shall consist of three (3) rooms that serve as three air locks as follows: clean room at entrance followed by shower room followed by an equipment room to the work area.

10.3. For abatement work requiring full containment, seal all walls with one layer of four mil plastic sheet and the floors with two layers of six mil plastic sheets. Seal off all duct openings, doors, windows, fan coil units, radiators, etc., with two layers of six mil plastic. If suspended ceiling is to be removed, extend the sealing plastic sheeting all the way to the subfloor above. Ensure that barriers are effectively sealed and taped. Repair damaged barriers and remedy defects immediately and visually inspect enclosures prior to each workday. Use smoke methods to test effectiveness of barriers.

10.4. The decontamination enclosure system for loading of asbestos into trucks shall consist of an air lock from the work area leading into the drum wash and wipe room, and another air lock leading into the open loading platform and the truck.

10.5. An air lock is a system permitting ingress and egress without permitting air movement. It consists of two curtained doorways at least eight feet apart. Each curtained doorway shall be constructed by placing three overlapping sheets of plastic over a framed doorway, securing each along the top of the doorway. The first and third sheet shall be secured on the same side of the doorway and the middle sheet shall be secured on the opposite side of the doorway.

10.6. Provide lockers for storage of street clothes of workers in the clean room. Provide in the same room uncontaminated disposable protective clothing and equipment. This room shall be used by workers and

visitors to change from street clothes to disposable protective clothing and gear prior to entering into the contaminated area and to dress into street clothing after they have showered and dried in the shower room as they exit from the contaminated area.

10.7. Showering facilities shall be equipped with hot water, cold water, and soap and towels so arranged as to provide complete showering of workers and visitors as they exit from the contaminated area. Make provisions to prevent any contaminated runoff from the shower room. The shower room facilities and size shall be adequate to allow decontamination and thorough washing of all the workers and visitors within the fifteen (15) minute escape time allowed under air compressor failure. Shower water shall be drained, collected, and filtered through a system with at least a 5.0-micron particle size collection capability.

10.8. Provide the equipment room with storage for contaminated clothing and equipment. In this room workers and visitors dispose of their disposable protective clothing except the respirator as they prepare to enter the shower room.

10.9. The drum wash and wipe room shall be equipped with facilities to wash and wipe the outside of the drum prior to the loading into the trucks for transportation to a landfill. Make provisions to prevent any contaminated run-off from the drum wash room.

10.10. The clean drum storage room is relatively clean since most of the contamination on the outside of the drum has been washed wiped thoroughly in the washroom.

B. Establish Pressure Differential and Ventilation

1. Install HEPA-filtered exhaust units in work area to lower concentration of airborne fibers in work area and contain airborne fibers.

2. Install a sufficient amount of HEPA-filtered exhaust units to maintain a complete volume change in work area 4 times per hour, or more, when required by Consultant, and to maintain a pressure differential between the uncontaminated and contaminated areas of at least 0.02 inches of water column.

3. Locate HEPA-filtered exhaust units so that make-up air enters work area through decontamination unit, or other suitable source

of make-up air. Place HEPA-filtered exhaust units as far as possible from the entrance/exit or other make-up air sources.

4. Exhaust ducts shall be attached to metal ducts mounted to 2" plywood and placed through opening window, door, or wall, then sealed with tape and vented to outside of building.

5. Start HEPA-filtered exhaust units prior to removal and continue operating until final air clearance of work area has been successfully obtained.

6. Replace the air filters in HEPA-filtered exhaust unit under the following circumstances:

   6.1. When the unit's manometer indicates that a pressure drop across the filters exceeds 1.0 inch of water, replace pre-filter first.

   6.2. Replace intermediate filter if manometer still exceeds 1.0 inch.

   6.3. Replace HEPA filter if replacement of pre- and intermediate filters does not reduce manometer reading.

7. HEPA-filtered exhaust units will be inspected daily by Consultant to ensure proper maintenance, and correct placement of filters. The inspection results will be noted in the Consultant(s) daily logs.

8. When pressure differential system is shut down at the end of the project, the filters must be left in HEPA-filtered exhaust unit and HEPA-filtered vacuums, and openings on these items must be sealed with polyethylene sheeting and duct tape. Exhaust tubes and vacuum tubes for the HEPA-filtered must be sealed with duct tape in double bags or 2 layers of fire-retardant polyethylene sheeting. Filters on these pieces of equipment must not be replaced after final cleanup is complete to avoid any risk of re-contaminating the area.

C. Separation of Work Areas from Occupied Areas

1. Ensure that barriers and fire-retardant polyethylene sheeting are effectively sealed and taped. Repair damaged barriers and sheeting, and remedy defects immediately upon discovery. Maintenance is to continue until clearance to dismantle containment is given by Consultant.

2. Supervisor shall frequently inspect containment during each work shift.

3. Monitor effectiveness of barriers with recording manometer. A pressure differential must be maintained at all times, prior to the first disturbance of ACM and ending only when final air testing results show that fiber concentrations are acceptable by whichever method has been specified in these specifications for final air clearance.

4. The strip chart from the recording manometer must be marked with the project name, location, date, and time, and submitted to Consultant daily.

D. Asbestos abatement work shall not be permitted until:

1. Arrangements have been made for disposal of waste at the selected and approved landfill, as identified in Contractor submittals.

2. Arrangements have been made to contain, filter or properly dispose of contaminated wastewater. No asbestos-contaminated waste water is to be discharged unfiltered into public sanitary sewer systems.

3. Waste water must be filtered through a medium that is capable of removing suspended particles of a diameter of greater than or equal to 5 microns.

4. Discharge of filtered water onto surface soil, asphalt, concrete, or any other porous surface shall not be permitted.

5. Decontamination units are in place and work area is effectively isolated from the remainder of the building.

6. All other preparatory steps have been taken and applicable notices posted and permits obtained.

7. Only when all the above conditions have been met will Contractor be allowed to begin disturbance of ACM. An inspection of each containment by Consultant will be performed prior to the start of removal. Removal shall not be performed until the condition of each containment is approved by Consultant.

3.3. NOTIFICATIONS, PERMITS, WARNING SIGNS, LABELS, AND POSTERS

A. Provide the required notification to EPA and any other regional, state, and local authority having jurisdiction on the project. Secure all the permits required for the work, including disposal of asbestos in an approved landfill.

B. Submit a notice of intention for demolition or renovation to the Arkansas Department of Environmental Quality on the approved form. Notice must be submitted to ADEQ ten (10) days prior to commencement of abatement work.

C. Erect warning signs around the workspace and at every point of potential entry from the outside, showing the words "Danger, Contains Asbestos Fibers, Avoid Creating Dust, Cancer and Lung Disease Hazard". The warning signs shall be a bright color so that they will be easily noticeable. The size of the sign and the size of the lettering shall be not less than the OSHA requirements.

D. Provide the OSHA and the U. S. Department of Transportation required labels for all plastic bags and all drums utilized to transport contaminated material to the landfill.

E. Provide any other signs, labels, warnings, and posted instructions that are necessary to protect, inform, and warn people of the hazard from asbestos exposure. Post in a prominent and convenient place for the workers a list of the latest applicable regulations from OSHA, EPA, and NIOSH

3.4 EMERGENCY PRECAUTIONS

A. ARKANSAS FIRE PREVENTION CODE IMPLEMENTATION

1. Comply with Volume I - Fire Prevention and Volume II - Building Construction of the Arkansas Fire Prevention Code's latest edition.

2. In occupied buildings where abatement projects alter the egress by obstructing established corridors to designated exits, the contractor will be responsible for notifying all occupants of any changes in fire exits and replacing revised fire escape diagrams at the appropriate locations. Existing signs showing the directions to exits that are not available must be covered.

3. No emergency power sources can be placed out of service during the abatement project. All fire doors must remain functional. Temporary steps for use by occupants and workers in egress of the building must be constructed with non-combustible material. In buildings to be demolished or where there is no occupancy during the abatement project, the contractor is responsible for informing his employees what fire exits are available and having on-site fire extinguisher.

4. The exit ways must be maintained free of obstruction throughout the abatement process. When the exit ways are altered all workmen should be informed. Because of the diversification of abatement projects, it is the responsibility of the contractor to determine the appropriate chapters of the code that apply and comply with these regulations.

B. Do not cover stairs or ramps with unsecured sheet plastic. Where stairs or ramps are covered with plastic, provide 3/4" exterior grade plywood treads securely held in place, over plastic. Do not cover rungs or rails with any type of protective materials.

C. Establish emergency and fire exits from the work area. All emergency exits shall be equipped with two (2) full sets of protective clothing and respirators at all times.

D. Be prepared to administer first aid to injured personnel after decontamination. Seriously injured personnel shall be treated immediately removed from the work area.

3.5. DISPOSAL ACTIVITIES

A. It is the responsibility of the Contractor to determine current waste handling, transportation, and disposal regulations for the work site and for each waste disposal landfill. The contractor must comply fully with these regulations and all U. S. Department of Transportation, EPA requirements and Federal National Emission standards for Hazardous Air Pollutants (NESHAPS), and the Arkansas Solid Waste Code, Appendix "A".

B. Document actual disposal of the waste at the designated landfill by completing a disposal certificate and forwarding original to Owner through ENGINEER/CONSULTANT.

C. Disposal shall be in a landfill meeting requirements of Arkansas Department of Environmental Quality. Do not throw bags into landfills in a way that may cause the bags to burst.

D. Notify ENGINEER/CONSULTANT 24 hours prior to disposal of waste at landfill.

E. Transport waste directly from project site to landfill. Do not accumulate with waste from other projects.

3.6. RESPIRATORY SYSTEMS

A. Provide all workers, foremen, superintendents, authorized visitors, and inspectors personally issued and marked respiratory equipment approved by NIOSH and OSHA. When respirators with disposable filters are employed, provide sufficient filters for re-placement as necessary by the worker.

B. **For Class I work,** Until a negative exposure assessment has been made, as defined by Code of Federal Regulations Title 29, Part 1901, Section 1926.1101, provide and assure that they are used, a Powered Air Purifying Respirator (PAPR) for all employees and authorized visitors within the regulated area.

C. Type "C" respirators shall be worn with belt to minimize possibility of dislocating facemask when hose is snagged in the work area.

D. When type "C" respirators are employed, the air supply system shall provide grade "D" breathing air in accordance with OSHA 29 CRF 19.10.134 and ANSI Z286.1-1973 commodity specification for air.

E. The compressed air system for type "C" respirators shall be high pressure, with a compressor capacity to satisfy the respirator manufacturer's recommendations. The receiver shall have sufficient capacity to allow a fifteen- (15) minute escape time for the respirator wearers in the event of compressor failure or malfunction. The compressed air system shall have compressor failure alarm, high temperature alarm, carbon monoxide alarm, and suitable in-line air purifying sorbent beds and filters to assure Grade "D" breathing air.

F. Use high efficiency particulate air-purifying or half face respirators for the following:

1. Decontamination of removable items including furniture, draperies, carpeting, etc.

2. Pre-construction sealing of walls, floors, and openings with plastic sheeting.

3. Loading drums on truck for transportation and unloading bags at landfill.

4. Final wipe down of workspace if air sample shows exposure in the area is below 0.1 fibers/cc.

5. Removing and cleaning of contaminated electrical fixtures, mechanical equipment and suspended ceiling.

6. Class II Asbestos removal operations.

7. Asbestos encapsulation and enclosure operations prior to plastic sheathing removal.

8. Gross cleanup and plastic sheeting removal.

9. Loading bags and drums, cleaning drums prior to loading on trucks.

G. Provide a minimum of two (2) spare respirators to be available at any time to authorized visitors.

3.7. PROTECTIVE CLOTHING

A. When required, provide to all workers, foremen, superintendents, and to authorized visitors and inspectors protective disposable clothing consisting of full body coveralls, head covers, gloves, and 18 inch boot type covers or reusable footwear.

B. Provide eye protection and hard hats as required by job conditions and safety regulations.

C. Reusable footwear, hard hats and eye protection devices shall be left in the "contaminated equipment room" until the end of the asbestos abatement work.

D. All disposable protective clothing shall be discarded and disposed of as asbestos waste every time the wearer exits from workspace to the outside through the decontamination facilities.

3.8. PERSONNEL PROTECTION AND DECONTAMINATION

Provide all personnel throughout the abatement process with the appropriate protective clothing and gear, as required by specifications and Regulations. Ensure that all personnel entering and leaving an asbestos abatement containment workspace adhere to the following procedures:

A. Entering from the outside: change from street clothes into protective clothing in clean room and wear clean protective gear. Go through shower room into dirty equipment room, pick up equipment and tools and enter the work area.

B. Exiting from the work area: leave all equipment in equipment room. Dispose of all protective clothing into labeled plastic bags asbestos waste. Do not take off the respirator. Enter the shower and shower thoroughly. Remove respirator and wash and wipe thoroughly to decontaminate the respirator. After drying, enter the clean room; store the decontaminated respirator in the assigned space and dress into street clothes.

C. Post written procedures in work place and train all personnel on the procedures for the evacuation of injured and the handling of potential fires. Provide aid to a seriously injured worker without delay for decontamination. Make provisions to minimize exposure of rescue workers and to minimize spreading of contamination during evacuations and fire procedures.

D. The contractor shall instruct all employees and workers in the proper care of their personally issued respiratory equipment, including daily maintenance, sanitizing procedures, etc.

E. Contractor's project supervisory personnel shall inspect all respiratory equipment at the beginning of each work period, including breaks and lunch periods.

3.9. EXPOSURE CONTROLS IN ASBESTOS ABATEMENT CONTAINMENT WORK AREA

A. Provide supply air to and exhaust air from the work area to maintain a negative pressure of 0.02 inches of water. The ventilation system shall operate on a 24-hour basis throughout the abatement process through the second wet cleaning. The ventilation system shall be in accordance with EPA recommendation included in the "Guidance for Controlling Friable Asbestos - Containing Materials in Buildings", Appendix F and Evaluation of Asbestos Removal Technologies and Recommended Specification of Negative Pressure Systems. All responsibility for compliance with licensing and patent infringement shall be borne by the contractor.

B. Provide an automatic recording instrument to monitor the negative pressure differential in a representative location. The instrument shall continuously generate a permanent record.

C. Before beginning work within the Negative Pressure Enclosure and at the beginning of each shift, the enclosure shall be inspected for breaches and smoke-tested for leaks, and any leaks sealed.

D. In multi-room abatement project provide a sufficient number of supply and exhaust units to create a stream of air away from the faces of the workers in each room and in such a way as not to damage or compromise the integrity of the plastic isolation.

3.10. ASBESTOS REMOVAL

In areas where ACM is greater than 2" thick, wetting would begin the day before removal is to take place.

A. Except as noted herein and/or in drawings, spray with water containing a wetting agent, all asbestos that is to be removed. The wetting agent shall be 50 percent polyoxyethylene ether and 50 percent polyoxyethylene ester, or the equivalent mixed one-ounce to five gallons of water. Spray asbestos material with amended water using spray equipment capable of providing a mist application to reduce the release of fibers. Saturate friable material sufficiently to wet the substrate without causing excessive wetting, dripping, or delamination of the material.

B. Spray the asbestos material repeatedly during removal process to maintain wet condition and minimize asbestos fiber dispersion. The spraying must not be used as a technique to remove or dislodge ACM.

C. Remove saturated asbestos material in small sections. As it is removed pack the material in sealable 6 mil polyethylene bags and place in appropriately labeled (29 CFR 1926.1101(k)(8)(iii)) container for transport. Material must not be placed in containers in a prompt manner consistent with 29 CFR 1926.1101(g)(1)(iii).

D. Pack and seal all bagged materials, which contain wire or other sharp objects in drums with locking lids, which are also labeled. Thoroughly clean the exterior of the sealed drums prior to loading on the truck for transportation to the landfill.

E. All used plastic, tape, cleaning material, and clothing shall be treated as asbestos waste material.

F. Waste Load-out Procedures

1. Seal bags or containers. Clean external surfaces of containers thoroughly by wet cleaning in the designated area of work area that is part of equipment decontamination unit.

2. Move containers to washroom, wet-clean each container thoroughly, and move to clean room area pending removal to uncontaminated areas. The material must be placed in a clean bag or container as it exits the equipment washroom and enters clean room area.

3. Ensure that containers are removed from clean room areas by workers who have entered from uncontaminated areas, dressed in clean coveralls. Ensure that workers do not enter from uncontaminated areas into washroom or work area. Ensure that contaminated workers do not exit work area through equipment decontamination unit.

4. When disposal bags are used, the bagged material must be placed within a second bag in equipment decontamination unit. The second, outer bag must be labeled with all applicable warnings, including D.O.T. labeling.

5. Double bagged material shall then be passed through clean room to a covered cart for removal from the building.

6. When larger pieces of material are to be disposed of, the material must be wrapped in 2 layers of fire-retardant polyethylene sheeting and properly labeled in equipment decontamination unit.

7. All bags, containers, and drums that are to be buried at the disposal site must be tagged with the numbering system provided by Owner.

H. After completion of gross removal work, all surfaces from which asbestos has been removed must be wet-brushed with a wire brush and/or wet-cleaned by an equivalent method to remove all visible material. During this work the surfaces being cleaned must be kept wet.

I. Consultant will individually approve each area of encapsulation in writing prior to commencement of encapsulation.

J. Encapsulant is to be applied only to surfaces from which ACM has been removed and must not be used as a method for sealing dust on surfaces.

3.11. WORK PRACTICES AND ENGINEERING CONTROLS FOR CLASS II WORK

A. All Class II work shall be supervised by a competent person as defined in section 2.7; 2.8 & 2.9 of this section.

B. For all indoor Class II jobs, where the employer has not produced a negative exposure assessment pursuant to paragraph (f)(2)(iii) of OSHA 1926.110, or where during the job, changed conditions indicate there may be exposure above the PEL or where the employer does not remove the ACM in a substantially intact state, the employer shall use one of the following methods to ensure that airborne asbestos does not migrate from the regulated area:

1. Critical barriers shall be placed over all openings to the regulated area; or,

2. The employer shall use another barrier or isolation method, which prevents the migration of airborne asbestos form the regulated area, as verified by perimeter area monitoring or clearance monitoring which meets the criteria, set out in paragraph (g)(4)(ii)(B) of OSHA 1926.1101.

3. Impermeable dropcloths shall be placed on surfaces beneath all removal activity;

4. All Class II asbestos work shall be performed using the work practices and requirements set out above and in OSHA 1926.1101 paragraphs (g)(l)(i) through (g)(l)(iii).

3.12. ADDITIONAL CONTROLS FOR CLASS II WORK

A. Class II asbestos work shall also be performed by complying with he work practices and controls designated for each type of asbestos work to be performed, set out in this paragraph. Where more than one control method may be used for a type of asbestos work, the employer may choose one or a combination of designated control methods. Class II work also may be performed using a method allowed for Class I work, except that glove bags and glove boxes are allowed if they fully enclose the Class II material to be removed.

B. For removing vinyl and asphalt flooring materials which contain ACM or for which in buildings constructed no later than 1980, the employer has not

verified the absence of ACM pursuant. The employer shall ensure that employees comply with the work practices included here within and that employees are trained in these practices pursuant to this document.

C. Flooring or its backing shall not be sanded.

D. Vacuums equipped with HEPA filter, disposable dust bag, and metal floor tool (no brush) shall be used to clean floors.

E. Resilient sheeting shall be removed by cutting with wetting of the snip point and wetting during delamination. Rip-up of resilient sheet floor material is prohibited.

F. All scraping of residual adhesive and/or backing shall be performed using wet methods.

G. Dry sweeping is prohibited.

H. Mechanical chipping is prohibited unless performed in a negative pressure enclosure, which meets the requirements of this section and sections 1.2; 1.8 & 2.10.

I. Tiles shall be remove intact, unless the employer demonstrates that intact removal is not possible.

J. When tiles are heated and can be removed intact, wetting may be omitted.

K. Resilient flooring material including associated mastic and backing shall be assumed to be asbestos-containing unless an industrial hygienist determines that it is asbestos-free using recognize analytical techniques.

3.13. FINAL DECONTAMINATION IN CONTAINMENT WORK AREA

A. After the removal and/or encapsulation and/or enclosure of asbestos has been completed and before removal of barriers, the entire area shall be thoroughly wet cleaned and/or vacuumed with HEPA filtered vacuum. Following the successful inspection and final testing as specified herein, remove all HVAC filters and dispose of them as asbestos waste. All plastic barriers, tapes, and disposable contaminated equipment shall also be disposed of as asbestos waste. All reusable contaminated equipment, such as masks, hardhats, etc., shall be thoroughly decontaminated through wet cleaning.

B. After a thorough cleaning of the workspace, and if a high degree of cleanliness has been achieved, notify Owner's Representative that the workspace is ready for inspection. Contractor and Owner's Representative will visually inspect the workspace for the detection of any visible dust or contamination.

C. The final testing shall take place under active agitation of the air in the workspace with fans running, broom sweeping and any other means found suitable by the Engineer/Consultant during the final testing. The final test will consist of taking air samples in the workspace which shall show contamination levels do not exceed the level of 0.01 f/cc, using phase contrast microscopy. If the results of the final testing are not satisfactory, the thorough wet cleaning and/or HEPA vacuum and air sample testing shall be repeated, at the Contractors expense, until the required decontamination level has been achieved.

4. **AIR MONITORING**

A. The Asbestos Contractor is responsible for the personal air sampling. All other air sampling will be performed by Consultant. Area air samples will be analyzed by an NVLAP-accredited laboratory using NIOSH method 7400 using phase contrast microscopy (PCM). PCM air sampling will be used for final air testing.

B. As stated above, EMTEC will perform all area and final clearance sampling.

C. Personal Air Sampling-Contractor will be responsible for conducting all OSHA sampling and analysis. The personal air monitoring will consist of:

1. An 8 hour Time Weighted Average (TWA) for samples collected on 25% of the work force during each eight hour shift for the duration of the project.

2. Continuous personal monitoring to be conducted during preparation, removal, and final cleanup, unless Type C pressure demand respiratory protection is used.

3. Excursion Limit, or Short Term Exposure Limit (STEL) sampling shall be performed during all phases of the asbestos abatement project to establish the STEL for each job function.

D. Conditions for Final Air Testing

1. Final air testing shall take place when removal is complete, the fire-retardant polyethylene sheeting not necessary to the integrity of containment removed, and a visual inspection of work area shows that work area is clean and dry.

2. Contractor should expect a delay of at least 24 hours from the time the samples reach the laboratory to the time the results are known for all PCM analyses. Consultant will make every reasonable effort to obtain these results in a time period suitable to Contractor's work schedule.

E. Air Clearance Criteria

1. Consultant and Contractor recognize the samples taken for all PCM clearance or pre-encapsulation samples must meet a standard that allows Consultant 95% certainty that the sample does not in fact meet the 0.01 fibers/cc final air standard. Ninety-five percent certainty is defined by the equation:

MC + 1.645 (CV) (FAS) = 95% confidence level where:
MC = measured concentration of fibers
CV = coefficient of variation
FAS = final air standard

2. The results of this equation must be less than the final air standard for any sampled area to pass the test.

F. Final Air Testing: Glove Bag Procedure

1. Each work area in which glove bag removal has occurred will be visually inspected by Consultant prior to final air testing.

2. Aggressive sampling procedures will not be used unless work areas are fully contained by critical barriers.

3. Each work area will be tested and analyzed by the PCM method, using static sampling procedures, unless conditions allow aggressive testing (see B. above).

4. A TEM final air test of the general areas of glove bag removal may be performed at Owner's discretion upon failure of a PCM final.

G. Failure of Final Air Tests

1. When the results of the final air test show values of airborne asbestos in excess of the final air standard, Contractor must re-clean work area.

2. The final air testing procedure shall then be repeated at Contractor's expense.

H. Completion

1. Completion Criteria

1.1. After final inspections and final air testing are complete and the results known, Consultant will advise Contractor of the test results.

1.2. When a work area fails either the inspection or the final air testing, the area must be re-cleaned, re-inspected and re-tested. The sequence of re-cleaning and re-testing shall continue until the area passes the inspection and the final air test.

1.3. When work area has passed final air test, Contractor will be informed immediately.

5. GENERAL CONDITIONS

A. Contractor is to work diligently to keep all work areas clean and all materials stored. The owner is not responsible for the security of any construction materials left on site by the asbestos contractor. Contractor is responsible for securing the work area during and at the end of each work shift.

B. Contractor will be responsible for keeping the asbestos survey and all required paperwork and certifications on site at all times.

C. Contractor is responsible for maintaining proper fire exists along with ensuring the building entry/exists are not blocked with contractor equipment

D. Contractor will be responsible for conducting there own OSHA sampling.

E. The contractor is responsible for accessing all identified asbestos containing materials to complete the abatement project.

F. Contractor is responsible for verifying in the field all quantities and locations of asbestos materials scheduled to be removed.

G. Electricity and water will be available within the building during the abatement process.

H. All asbestos waste shall be bagged and/or wrapped prior to placement within an enclosed dumpster and/or any other enclosed conveyance. This enclosed disposal storage shall be secured at all times.

I. All abatement activities are to be performed in accordance to the Arkansas Department of Environmental Quality, EPA and OSHA asbestos regulations.

J. All workers are to be equipped with the proper safety and protective equipment required to perform this type of asbestos abatement. At a minimum, workers shall wear 1/2-face APR respirators equipped with HEPA filter cartridges during the removal and shall also wear disposal coveralls during abatement activities. All discarded coveralls and respirator cartridges shall be treated as ACM waste. Workers are to be properly equipped before entering the regulated area and properly discard all work clothes prior to leaving regulated area.

K. All materials shall be adequately wetted prior to and during the abatement process and placed in leak tight containers for disposal. Transport waste materials in a properly labeled and placarded open/closed conveyance to the proper landfill. Ensure that waste manifest records are maintained in accordance with Arkansas Department of Environmental Quality Asbestos Regulations, U.S. Department of Transportation and U.S. Environmental Protection Agency requirements.

APPENDIX B:
ASBESTOS AIR MONITORING RESULTS

EMTEC

ASBESTOS AIR SAMPLE ANALYSIS REPORT

Customer: City of Jonesboro
Attention: Mr. Ronnie Shaver
Contractor: GC:-EMTEC/Sub-Contractor-Snyder Environmental
Project: Community Center Basketball Court

Project Number: 010814-CJ
Report Date: 1/10/2014
Report Number: 1
Page: 1 of: 1

Sampled By: Steven Smith
Date Sampled: 1/08/2014
Graticule Field: .00785 mm^2

Method of Analysis: NIOSH 7400 or 29 CFR 1926.1101, App. A
Specified Range: 100<Total Fibers<1300 f/mm2

Sample Number	Location of Sample	Time Started	Time Ended	Total Minutes	Flow Rate Start	Flow Rate End	Average Flow	Volume (Liters)	Total Fibers/Fields	Average Blank Fibers	Fibers/ Square mm	Coeff. Of Variation	Fibers/cc	8 Hour TWA
B-01	Field Blank	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0/ 100	0/ 100	N/A	N/A	N/A	N/A
B-02	Field Blank	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0/ 100	0/ 100	N/A	N/A	N/A	N/A
AO-03	Decon (Back Side of Gym)	13:15	16:40	205	2.6	2.6	2.6	533	8/ 100	0/ 100	10.19	N/A	<LOQ 0.0092	N/A
AO-04	Outside Regulated Area (Lobby)	13:15	16:40	205	2.6	2.6	2.6	533	4/ 100	0/ 100	5.10	N/A	<LOQ 0.0092	N/A

Abbreviations: A=Area, AC=Aggressive clearance sample, AD=Area during abatement, AO=Area sample outside regulated area, AP=Area prior to abatement, B=Blank, C=Passive clearance, CR=Area sample in the clean room, P=Personal breathing zone sample, PDU=Sample at the pressure differential unit, STE=Short term exposure limit, LOQ=Limit of quantification (the limit below which the sample cannot be accurately calculated), WLO=Area sample in the waste load out.

Comments: Abatement of floor leveling compound. Area is properly prepped and regulated. Proper removal methods are being utilized. Workers are wearing proper protective and safety equipment.

Analyzed By: John Hatchett

EMTEC

ASBESTOS AIR SAMPLE ANALYSIS REPORT

Customer: City of Jonesboro
Attention: Mr. Ronnie Shaver
Contractor: GC:-EMTEC/Sub-Contractor-Snyder Environmental
Project: Community Center Basketball Court

Project Number: 010814-CJ
Report Date: 1/10/2014
Report Number: 2
Page: 1 **of:** 1

Sampled By: Steven Smith
Date Sampled: 1/09/2014
Graticule Field: .00785 mm^2

Method of Analysis: NIOSH 7400 or 29 CFR 1926.1101, App. A
Specified Range: 100<Total Fibers<1300 f/mm2

Sample Number	Location of Sample	Time Started	Time Ended	Total Minutes	Flow Rate Start	Flow Rate End	Average Flow	Volume (Liters)	Total Fibers/Fields	Average Blank Fibers	Fibers/ Square mm	Coeff. Of Variation	Fibers/cc	8 Hour TWA
B-01	Field Blank	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0/ 100	0/ 100	N/A	N/A	N/A	N/A
B-02	Field Blank	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0/ 100	0/ 100	N/A	N/A	N/A	N/A
AO-03	Decon (Back Side of Gym)	11:45	16:15	270	2.6	2.6	2.6	702	13/ 100	0/ 100	16.56	1.58	.014 f/cc	N/A
AO-04	Outside Regulated Area (Lobby)	11:45	16:15	270	2.6	2.6	2.6	702	5/ 100	0/ 100	6.37	N/A	<LOQ 0.0070	N/A

Abbreviations: A=Area, AC=Aggressive clearance sample, AD=Area during abatement, AO=Area sample outside regulated area, AP=Area prior to abatement, B=Blank, C=Passive clearance, CR=Area sample in the clean room, P=Personal breathing zone sample, PDU=Sample at the pressure differential unit, STE=Short term exposure limit, LOQ=Limit of quantification (the limit below which the sample cannot be accurately calculated), WLO=Area sample in the waste load out.

Comments: Abatement of floor leveling compound. Area is properly prepped and regulated. Proper removal methods are being utilized. Workers are wearing proper protective and safety equipment.

Analyzed By: John Hatchett

EMTEC

ASBESTOS AIR SAMPLE ANALYSIS REPORT

Customer: City of Jonesboro
Attention: Mr. Ronnie Shaver
Contractor: GC:-EMTEC/Sub-Contractor-Snyder Environmental
Project: Community Center Basketball Court

Project Number: 010814-CJ
Report Date: 1/10/2014
Report Number: 3
Page: 1 of: 1

Sampled By: Steven Smith
Date Sampled: 1/10/2014
Graticule Field: .00785 mm^2

Method of Analysis: NIOSH 7400 or 29 CFR 1926.1101, App. A
Specified Range: 100<Total Fibers<1300 f/mm2

Sample Number	Location of Sample	Time Started	Time Ended	Total Minutes	Flow Rate Start	Flow Rate End	Average Flow	Volume (Liters)	Total Fibers/Fields	Average Blank Fibers	Fibers/ Square mm	Coeff. Of Variation	Fibers/cc	8 Hour TWA
B-01	Field Blank	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0/ 100	0/ 100	N/A	N/A	N/A	N/A
B-02	Field Blank	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0/ 100	0/ 100	N/A	N/A	N/A	N/A
AO-03	Decon (Back Side of Gym)	9:45	13:30	225	2.6	2.6	2.6	585	9.5/ 100	0/ 100	12.10	N/A	<LOQ 0.0084	N/A
AO-04	Outside Regulated Area (Lobby)	9:45	13:30	225	2.6	2.6	2.6	585	3/ 100	0/ 100	3.82	N/A	<LOQ 0.0084	N/A
AC-05	Clearance Sample-Northwest Area	13:40	14:55	75	20.0	20.0	20.0	1500	9/ 100	0/ 100	11.46	N/A	<LOQ 0.0033	N/A
AC-06	Clearance Sample-Southwest Area	13:41	14:55	74	20.0	20.0	20.0	1480	6/ 100	0/ 100	7.64	N/A	<LOQ 0.0033	N/A
AC-07	Clearance Sample-South Bleachers	13:41	14:58	77	20.0	20.0	20.0	1540	5/ 100	0/ 100	6.37	N/A	<LOQ 0.0032	N/A
AC-08	Clearance Sample-Northeast Bleachers	13:42	14:58	76	20.0	20.0	20.0	1520	7/ 100	0/ 100	8.92	N/A	<LOQ 0.0032	N/A
AC-09	Clearance Sample-Southeast Area	13:42	14:59	77	20.0	20.0	20.0	1540	8/ 100	0/ 100	10.19	N/A	<LOQ 0.0032	N/A

Abbreviations: A=Area, AC=Aggressive clearance sample, AD=Area during abatement, AO=Area sample outside regulated area, AP=Area prior to abatement, B=Blank, C=Passive clearance, CR=Area sample in the clean room, P=Personal breathing zone sample, PDU=Sample at the pressure differential unit, STE=Short term exposure limit, LOQ=Limit of quantification (the limit below which the sample cannot be accurately calculated), WLO=Area sample in the waste load out

Comments: Area passed visual inspection. Building passed clearance criteria of <.01 f/cc. Building is safe for re-occupancy or Demolition.

Analyzed By: John Hatchett

APPENDIX C:
EMTEC'S
ADEQ LICENSE

State of Arkansas
Department of
Environmental Quality

EMTEC

is a licensed

Asbestos Abatement Consultant

having qualified as required by law in accordance with the regulations adopted by the Arkansas Pollution Control and Ecology Commission's Regulation 21 pursuant to Arkansas Code Annotated §20-27-1001 et seq., relative to abatement of asbestos-containing material within the state of Arkansas.

License Number: 000229
Issue Date: 2014 January 07
Expire Date: 2015 January 07

Teresa Marks
ADEQ Director

APPENDIX D:
EMTEC'S
GENERAL CONTRACTOR'S LICENSE

License No. 0053370414 ID #955

State of Arkansas

Contractors Licensing Board

ENGINEERING MANAGEMENT CORPORATION & DIVISION
PO BOX 3703
LITTLE ROCK, AR 72203

This is to Certify That ENGINEERING MANAGEMENT CORPORATION & DIVISION

is duly licensed under the provisions of Act 150 of the 1965 Acts as amended and is entitled to practice Contracting in the State of Arkansas within the following classification:

LIGHT BUILDING
- (COMMERCIAL & RESIDENTIAL)
SPECIALTY
Environmental General
Remediation

with the following suggested bid limit $500,000

from March 29, 2013 **until** April 30, 2014

when this Certificate expires.

Witness our hands of the Board, dated at North Little Rock, Arkansas:

GREAT SEAL OF THE STATE OF ARKANSAS

Cecil L. Malone

CHAIRMAN

SECRETARY

March 29, 2013

APPENDIX E:
EMTEC'S
CERTIFICATE OF INSURANCE

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY): 12/31/2013

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER Roberson and Associates Insurance 315 North Market St Benton AR 72015	CONTACT NAME: House Account PHONE (A/C, No, Ext): (501) 315-8011 FAX (A/C, No): (501) 315-5731 E-MAIL ADDRESS: PRODUCER CUSTOMER ID #: 00006480
INSURED Emtec Engineering Management Corporation Post Office Box 3703 Suite 214 Little Rock AR 72203	INSURER(S) AFFORDING COVERAGE — NAIC # INSURER A: State Auto Ins — 25127 INSURER B: Hudson Specialty Insurance Co — 37079 A INSURER C: INSURER D: INSURER E: INSURER F:

COVERAGES **CERTIFICATE NUMBER:** CL0771900070 **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSR	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
A	GENERAL LIABILITY X COMMERCIAL GENERAL LIABILITY CLAIMS-MADE X OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: POLICY PRO-JECT LOC	X		Blanket Waiver of Subrogation and Additional Insured BOP253694502 BOP253694503 BOP253694504	12/15/2011 12/15/2012 12/15/2013	12/15/2012 12/15/2013 12/15/2014	EACH OCCURRENCE DAMAGE TO RENTED PREMISES (Ea occurrence) MED EXP (Any one person) PERSONAL & ADV INJURY GENERAL AGGREGATE PRODUCTS - COMP/OP AGG	$ 1000000 $ 300000 $ 5000 $ 1000000 $ 2000000 $ 2000000
A	AUTOMOBILE LIABILITY X ANY AUTO ALL OWNED AUTOS SCHEDULED AUTOS HIRED AUTOS NON-OWNED AUTOS	X	X	Blanket Waiver of Subrogation and Additional Insured BAP2285818 07 BAP2285818 08 BAP2285818 09	12/15/2011 12/15/2012 12/15/2013	12/15/2012 12/15/2013 12/15/2014	COMBINED SINGLE LIMIT (Ea accident) BODILY INJURY (Per person) BODILY INJURY (Per accident) PROPERTY DAMAGE (Per accident)	$ 1000000 $ $ $
A	X UMBRELLA LIAB OCCUR EXCESS LIAB CLAIMS-MADE DEDUCTIBLE RETENTION $	X	X	Follow Form CXS2081886 07 CXS2081886 08 CXS2081886 09	12/15/2011 12/15/2012 12/15/2013	12/15/2012 12/15/2013 12/15/2014	EACH OCCURRENCE AGGREGATE	$ 1000000 $
A	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) Y/N If yes, describe under DESCRIPTION OF OPERATIONS below	N/A	X	Wavier of Subrogation WCP2160527 07 WCP2160527 08 WCP2160527 09	12/15/2011 12/15/2012 12/15/2013	12/15/2012 12/15/2013 12/15/2014	WC STATU-TORY LIMITS / OTH-ER E.L. EACH ACCIDENT E.L. DISEASE - EA EMPLOYEE E.L. DISEASE - POLICY LIMIT	$ 1000000 $ 1000000 $ 1000000
B	Professional Liability Pollution Liability	X	X	ESB1786-13-12-04 Blanket Waiver & Addl Ins	6/22/2013 6/22/2012	6/22/2014 6/22/2013	Limit Deductible	$1000000 $5000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (Attach ACORD 101, Additional Remarks Schedule, if more space is required)

CERTIFICATE HOLDER

Insured Copy

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

Jeff Cook/NJ

APPENDIX F:
EMTEC'S
EMPLOYEE CERTIFICATIONS

State of Arkansas Department of Environmental Quality

011474 JOHN HATCHETT

having satisfied the requirements necessary to meet the provisions of AHERA/ASHARA under TSCA Title II and the Arkansas Pollution Control and Ecology Commission's Regulation 21 and is hereby certified in the State of Arkansas in the discipline(s) of Asbestos

Air Monitor 9/30/2014

Contractor/Supervisor 9/30/2014

Inspector 9/30/2014

Project Designer 8/31/2014

Issue Date:03-Oct-2013

Teresa Marks

ADEQ Director

NORTHWEST ENVIROCON, INC.

CERTIFICATE OF TRAINING COMPLETION

This is to certify that ***John Hatchett*** has successfully completed a 40 hours course on **Sampling and Evaluating Airborne Asbestos Dust**. This course has been approved by the State of Washington, Department of Labor and Industries as being equivalent to the National Institute for Occupational Safety and Health Course 582.

Completion of this course requires a minimum grade of 70% on a written examination and a demonstrated proficiency in counting 5 Proficiency Analytical Testing Slides.

Granted on August 2nd, 1996 by:

Certification No: 0489604N

Robert Roberson
Laboratory Director
NIOSH PAT Laboratory # 11596

Northwest Envirocon, Inc.
First Little Rock Plaza, Suite 229
10800 Financial Centre Parkway
Little Rock, AR 72211
Ph. (501) 228-9556

State of Arkansas
Department of
Environmental Quality

014705 STEVE L. SMITH

having satisfied the requirements necessary to meet the provisions of AHERA/ASHARA under TSCA Title II and the Arkansas Pollution Control and Ecology Commission's Regulation 21 and is hereby certified in the State of Arkansas in the discipline(s) of Asbestos

Air Monitor 2/28/2014

Contractor/Supervisor 2/28/2014

Inspector 2/28/2014

Issue Date:04-Oct-2013

Project Designer 8/31/2014

Teresa Marks

ADEQ Director

ASBESTOS SUB-CONTRACTOR'S SUBMITTALS

APPENDIX G:
ADEQ ASBESTOS
NOTICE OF INTENT & REVISIONS

ASB

ARKANSAS DEPARTMENT OF ENVIRONMENTAL QUALITY
ASBESTOS NOTICE OF INTENT (NOI)

Mail or Deliver to:
ADEQ - Air Division
Asbestos Section
5301 Northshore Drive
North Little Rock, AR 72118-5317
501-682-0718

NOI No: _____
Check No: _____

FOR DEPARTMENT USE ONLY
Date Received: _____
Postmarked: _____
Priority: _____
County: _____

1) CHECK ONE:

DEMOLITION	☐	*21.601	ANNUAL NOTICE	☐	*21.604
ORDERED DEMOLITION	☐	*21.602	EMERGENCY NOTICE	☐	*21.606(O)
RENOVATION	☒	*21.603	COURTESY NOTICE	☐	

***(ARKANSAS POLLUTION CONTROL AND ECOLOGY COMMISSION REGULATION 21 CITATION REQUIRES NOTIFICATION TO BE SUBMITTED 10 WORKING DAYS PRIOR TO START DATE.)

2) RENOVATION *21.606H
(ABATEMENT DATES)

START January 8, 2014

END January 17, 2014

3) ABATEMENT WORK HOURS *21.606H

(Weekdays) 7:30 AM/PM to 5:30 AM/PM

(Weekends) _____ AM/PM to _____ AM/PM

DAYS OF WEEK REMOVAL WILL OCCUR
(CHECK EACH)

SUN	MON	TUE	WED	THURS	FRI	SAT
☐	☒	☒	☒	☒	☒	☐

4) DEMOLITION DATES *21.606I

START _____

END _____

5) WORK HOURS *21.606H

(Weekdays) _____ AM/PM to _____ AM/PM

(Weekends) _____ AM/PM to _____ AM/PM

DAYS OF WEEK WORK WILL OCCUR
(CHECK EACH)

SUN	MON	TUE	WED	THURS	FRI	SAT
☐	☐	☐	☐	☐	☐	☐

6) CONTRACTOR/CONSULTANT OR IN-HOUSE STAFF *21.606B Snyder Environmental

AR LICENSE # 000355 ADDRESS 7031 Dewafelbakker Lane

CITY North Little Rock STATE AR ZIP CODE 72113

CONTACT PERSON: Justin Dixon TELEPHONE 501-801-2776

7) FACILITY OWNER *21.606B City of Jonesboro

ADDRESS 410 W. Washington

CITY Jonesboro STATE AR ZIP CODE 72401

CONTACT PERSON Ronnie Shaver TELEPHONE 870-351-0207

8) NAME OF STRUCTURE(S) *21.606G Community Center Basketball Court

ADDRESS 1212 S. Church Street

CITY Jonesboro STATE AR ZIP CODE 72401

NUMBER OF FLOORS 1 DIMENSIONS 300X150 AGE 70 years

PRIOR USE Gym PRESENT USE Will be closed for renovation

9) PROJECT DESIGNER - (REQUIRED IF GREATER THAN 3 SQ FT/3 LN FT RACM OR MORE THAN SSSD PROJECT IS INVOLVED) *21.502, *21.503D & *21.606R

NAME John Hatchett AR CERTIFICATION NO. 011474

ADDRESS PO Box 3703

CITY Little Rock STATE AR ZIP CODE 72203

LICENSED FIRM EMTEC AR LICENSE NO. 000229

(CERTIFIED, WORKING AS A FULL-TIME EMPLOYEE OF FACILITY OR LICENSED FIRM.)

10) INSPECTOR - (NEEDED FOR ALL FACILITY PROJECTS) *21.501, *21.503B & *21.606R

NAME Ronnie Shaver AR CERTIFICATION NO. 014193

ADDRESS 410 W. Washington

CITY Jonesboro STATE AR ZIP CODE 72401

LICENSED FIRM City of Jonesboro AR LICENSE NO. NA

DATE OF ASBESTOS SURVEY USED FOR RENO/DEMO PROJECT November 2013

AREA TO BE DISTURBED INCLUDED IN SURVEY? YES ☒ NO ☐

(SURVEYS ARE TO BE PREPARED BY AR CERTIFIED INSPECTOR WORKING AS FULL-TIME EMPLOYEE OF FACILITY OR FOR LICENSED FIRM.)

11) CLEARANCE AIR MONITOR (NEEDED IF CONTAINMENT IS USED) *21.503F, 21.606R & 21.901G

NAME Daniel Foster AR CERTIFICATION NO. 014709

ADDRESS PO Box 3703

CITY Little Rock STATE AR ZIP CODE 72203

LICENSED FIRM EMTEC AR LICENSE NO. 000229

(CERTIFIED, WORKING AS FULL-TIME EMPLOYEE OF FACILITY OR LICENSED FIRM.)

12) (A) APPROXIMATE AMOUNT AND TYPE OF RACM TO BE REMOVED: *21.606F

5,600 SF floor leveling compound

(B) IF PROJECT IS DEMOLITION, LIST TYPE AND AMOUNT OF CATEGORY I AND CATEGORY II ACM BEING LEFT IN PLACE: *21.606F

NA

(C) PROCEDURE, INCLUDING ANALYTICAL METHODS, EMPLOYED TO DETECT THE PRESENCE OF RACM AND CATEGORY I AND CATEGORY II NONFRIABLE ACM: *21.606E

PLM Bulk Samples.

13) DESCRIPTION OF PLANNED DEMOLITION OR RENOVATION WORK TO BE PERFORMED AND METHODS(S) TO BE EMPLOYED, INCLUDING DEMOLITION OR RENOVATION TECHNIQUES TO BE USED AND DESCRIPTION OF AFFECTED FACILITY COMPONENTS: *21.606J

Materials listed in section 12) (A) above to be removed by hand so the facility can be renovated.

14) DESCRIPTION OF WORK PRACTICES AND ENGINEERING CONTROLS TO BE USED TO PREVENT EMISSIONS OF ASBESTOS AT THE DEMOLITION OR RENOVATION SITE: *21.606K

Materials will be wetted before, during and after abatement, properly packaged, labeled and transported to a certified class I land fill for disposal.

15) DESCRIPTION OF PROCEDURES TO BE FOLLOWED IN THE EVENT THAT UNEXPECTED ASBESTOS IS FOUND OR PREVIOUSLY NONFRIABLE ASBESTOS MATERIAL BECOMES CRUMBLED, PULVERIZED OR REDUCED TO A POWDER: *21.606P

Wet the unexpected and notify ADEQ.

16) IF DEMOLITION ORDERED BY A GOVERNMENT AGENCY, PLEASE IDENTIFY THE AGENCY BELOW: *21.602 & 21.606N

NAME OF INDIVIDUAL NA _____ TITLE _____

ADDRESS _____

CITY _____ STATE _____ ZIP CODE _____

AUTHORITY _____

DATE OF ORDER _____ DATE ORDERED TO BEGIN _____

METHOD OF DEMOLITION _____

(COPY OF ORDER MUST BE ATTACHED)

17) FOR EMERGENCY RENOVATIONS *21.605 & 21.606(O)

DATE OF EMERGENCY NA HOUR OF EMERGENCY NA

DESCRIPTION OF THE SUDDEN, UNEXPECTED EVENT:

NA

EXPLANATION OF HOW THE EVENT CAUSED UNSAFE CONDITIONS OR WOULD CAUSE EQUIPMENT DAMAGE OR UNREASONABLE FINANCIAL BURDEN: *21.606(O)

NA

(18) WASTE TRANSPORTER *21.606Q

NAME OF TRANSPORTER Snyder Environmental

ADDRESS 7031 Dewafelbakker Lane CITY North Little Rock

STATE AR ZIP CODE 72113 TELEPHONE 501-801-2776

19) WASTE DISPOSAL SITE *21.606L

NAME OF LANDFILL Craighead County Landfill (Legacy Landfill)

ADDRESS 238 County Road 476 CITY Jonesboro

STATE AR ZIP CODE 72401 TELEPHONE (870) 972-6353

20) If abatement is involved, I certify that at least one contractor supervisor trained in the provisions of Regulation 21 will be on site during the abatement process and will supervise the abatement. *21.606M

I certify that the information contained in this Notice of Intent (NOI) is true and correct. I understand that falsification or omission of relevant information shall be grounds for enforcement action by the Department of Environmental Quality or Environmental Protection Agency.

SIGNATURE _____ DATE 12/23/13

(Signatures must be original signatures-no photocopies, electronic signatures or rubber stamps.)

MAKE CHECKS PAYABLE TO: **AR DEPARTMENT OF ENVIRONMENTAL QUALITY**

APPENDIX H:
SNYDER ENVIRONMENTAL
ADEQ LICENSE

State of Arkansas
Department of
Environmental Quality

SNYDER ENVIRONMENTAL & CONST.

is a licensed

Asbestos Abatement Contractor

having qualified as required by law in accordance with the regulations adopted by the Arkansas Pollution Control and Ecology Commission's Regulation 21 pursuant to Arkansas Code Annotated §20-27-1001 et seq., relative to abatement of asbestos-containing material within the state of Arkansas.

License Number: 000355
Issue Date: 2013 December 27
Expire Date: 2014 December 27

Teresa Marks
ADEQ Director

APPENDIX I:
SNYDER ENVIRONMENTAL
GENERAL CONTRACTOR'S LICENSE

License No. 0123520414 ID #15105

State of Arkansas

Contractors Licensing Board

SNYDER ENVIRONMENTAL & CONSTRUCTION, INC.
7031 DEWAFELBAKKER LN
LITTLE ROCK, AR 72113

This is to Certify That SNYDER ENVIRONMENTAL & CONSTRUCTION, INC.

is duly licensed under the provisions of Act 150 of the 1965 Acts as amended and is entitled to practice Contracting in the State of Arkansas within the following classification:

SPECIALTY
Asbestos
Remodeling, Renovations, Restoration, Alterations

with the following suggested bid limit Unlimited

from May 10, 2013 **until** April 30, 2014

when this Certificate expires.

Witness our hands of the Board, dated at North Little Rock, Arkansas:

GREAT SEAL OF THE STATE OF ARKANSAS

Cecil L. Malone

CHAIRMAN

SECRETARY

May 10, 2013 - mi

APPENDIX J:
SNYDER ENVIRONMENTAL
CERTIFICATE OF INSURANCE

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY): 12/23/2013

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER

BONDING & INSURANCE SPECIALISTS AGENCY, INC.
9340 S. HARLEM AVENUE
BRIDGEVIEW, IL 60455
IN CALIFORNIA, DBA BONDS AND INSURANCE SERVICES, LIC. #0795489

CONTACT NAME: KAREN OCONNELL
PHONE (A/C, No, Ext): 708-598-5355 FAX (A/C, No): 708-598-6686
E-MAIL ADDRESS: KOCONNELL@BISA-INC.COM

INSURER(S) AFFORDING COVERAGE	NAIC #
INSURER A: ARCH SPECIALTY INSURANCE COMPANY	21199
INSURER B: ARCH INSURANCE COMPANY	11150
INSURER C:	
INSURER D:	
INSURER E:	
INSURER F:	

INSURED

SNYDER ENVIRONMENTAL & CONSTRUCTION, INC.
CHIRHO HOLDINGS, INC.
7031 DEWAFELBAKKER LANE
LITTLE ROCK, AR 72213

COVERAGES CERTIFICATE NUMBER: 130453 REVISION NUMBER:

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSR	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
	GENERAL LIABILITY	X	X				EACH OCCURRENCE	$ 1,000,000
X	COMMERCIAL GENERAL LIABILITY						DAMAGE TO RENTED PREMISES (Ea occurrence)	$ 50,000
	CLAIMS-MADE [X] OCCUR			12 EMP 71772 03	7/1/2013	7/1/2014	MED EXP (Any one person)	$ 5,000
X	* CONTRACTORS POLLUTION						PERSONAL & ADV INJURY	$ 1,000,000
X	FOR ASBESTOS & LEAD OPS						GENERAL AGGREGATE	$ 2,000,000
	GEN'L AGGREGATE LIMIT APPLIES PER:						PRODUCTS - COMP/OP AGG	$ 2,000,000
	POLICY [X] PRO-JECT [ ] LOC						* PER CLAIM	$ 1,000,000
	AUTOMOBILE LIABILITY	X	X				COMBINED SINGLE LIMIT (Ea accident)	$ 1,000,000
	ANY AUTO						BODILY INJURY (Per person)	$
	ALL OWNED AUTOS [ ] SCHEDULED AUTOS			11 CAB 58271 03	7/1/2013	7/1/2014	BODILY INJURY (Per accident)	$
X	HIRED AUTOS [X] NON-OWNED AUTOS						PROPERTY DAMAGE (Per accident)	$
X	COMP DED $1,000 [X] COLL DED $1,000							$
X	UMBRELLA LIAB [X] OCCUR	X	X	12 EMX 71773 03			EACH OCCURRENCE	$ 4,000,000
	EXCESS LIAB [ ] CLAIMS-MADE			INCLUDES G/L, POLL, AUTO, PROF & W/C LIABILITY	7/1/2013	7/1/2014	AGGREGATE	$ 4,000,000
	DED [ ] RETENTION $							$
	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY Y/N		X				[X] WC STATU-TORY LIMITS [ ] OTH-ER	
	ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) Y	N/A		EBWCC00066-02	06/19/13	06/19/14	E.L. EACH ACCIDENT	$ 1,000,000
	If yes, describe under DESCRIPTION OF OPERATIONS below						E.L. DISEASE - EA EMPLOYEE	$ 1,000,000
							E.L. DISEASE - POLICY LIMIT	$ 1,000,000
	CONTRACTOR'S POLLUTION LIABILITY MOLD OPS-CLAIMS MADE FORM	X	X	12 EMP 71772 03	7/1/2013	7/1/2014	$1,000,000 - MOLD LIMIT - PER CLAIM $1,000,000 - MOLD AGGREGATE	
	PROFESSIONAL LIABILITY-CLAIMS MADE FORM						$1,000,000 - PER CLAIM	

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (Attach ACORD 101, Additional Remarks Schedule, If more space is required)

ALL PROJECTS DONE DURING THE CAPTIONED POLICY TERM.

THE CERTIFICATE HOLDER IS NAMED AS AN ADDITIONAL INSURED UNDER THE GENERAL LIABILITY POLICY.

CERTIFICATE HOLDER

EMTEC
P.O. BOX 3703
LITTLE ROC, AR 72203

KAO

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

Dana M. Huber

APPENDIX K:
SNYDER ENVIRONMENTAL
WASTE MANIFEST

Arkansas Department of Pollution Control & Ecology
ASBESTOS WASTE SHIPMENT RECORD

GENERATOR

1. WORK SITE NAME AND MAILING ADDRESS	OWNER'S NAME	OWNER'S TELEPHONE #
City Gym 1212 S. Church St Jonesboro Ar	City of Jonesboro	870-351-4207
2. OPERATOR'S NAME AND ADDRESS Snyder Enviromental 7031 Dewafelbaker Ln., North Little Rock, AR 72113		OPERATOR'S TELEPHONE # 501-801-2776
3. WASTE DISPOSAL SITE (WDS) NAME, MAILING ADDRESS, AND PHYSICAL SITE LOCATION Craighead County Landfill		WASTE DISPOSAL SITE PHONE # 870-972-6353

4. NAME AND ADDRESS OF RESPONSIBLE AGENCY
ADEQ

5. DESCRIPTION OF MATERIALS	6. CONTAINERS NUMBER AND TYPE	7. TOTAL QUANTITY M3 (yd3)
Asbestos	Blk Bags	30 yd3
	(attach additional pages, if necessary)	

8. SPECIAL HANDLING INSTRUCTIONS AND ADDITIONAL INFORMATION
FOLLOW ALL EPA GUIDELINES

9. **OPERATOR'S CERTIFICATE**: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, labeled, and are in all respects in proper condition for transport by highway according to applicable International and government regulations.

PRINTED/TYPED NAME & TITLE	SIGNATURE	MONTH	DAY	YEAR
Lynn Beer Supervisor		1	10	14

TRANSPORTER

10. TRANSPORTER 1 (ACKNOWLEDGMENT OF RECEIPT OF MATERIALS)
SYNDER ENVIRONMENTAL & CONSTRUCTION, INC.

PRINTED/TYPED NAME & TITLE	SIGNATURE	MONTH	DAY	YEAR
Mark Waste ADDRESS & TELEPHONE # 6734 Hwy 141 N.	Randy Millsaugh	1	10	14

11. TRANSPORTER 2 (ACKNOWLEDGMENT OF RECEIPT OF MATERIALS)

PRINTED/TYPED NAME & TITLE ADDRESS & TELEPHONE #	SIGNATURE	MONTH	DAY	YEAR

DISPOSAL SITE

12. DISCREPANCY INDICATION SPACE Land Fill

13. WASTE DISPOSAL SITE OWNER OR OPERATOR: CERTIFICATION OF RECEIPT OF ASBESTOS MATERIALS COVERED BY THIS MANIFEST EXCEPT AS NOTED IN ITEM 12.

PRINTED/TYPED NAME & TITLE	SIGNATURE	MONTH	DAY	YEAR
Randy Greer operator	Randy Greer	1	10	2014

MARCK RECYCLING & WASTE SERVICES
OF NEA, LLC
6734 Hwy 141 N.
Jonesboro, AR 72401
Phone: (870) 935-1451 Fax: (870) 935-1495

MANIFEST

GENERATOR

Generator _____ EPA

Address _____ I.D.# _____

_____ Shipping Location _____

_____ Address _____

Phone _____ Phone _____

Description of Waste Materials	Industrial Waste Code #	Profile Number	Total Quantity	Unit of Measure	Container Type

I hereby certify that the above-described materials are not hazardous wastes as defined by 40 CFR, Part 261 or any applicable state law or regulation, have been fully and accurately described, classified and packaged, and are in proper condition for transportation according to applicable law and regulations.

Generator Authorized Agent Name (Print) _____ Signature _____ Delivery Date _____

TRANSPORTER

Transporter Name Marck Waste

Address 6734 Hwy 141 N.
Jonesboro, AR 72401

I hereby acknowledge receipt of the above-described materials for transport from the generator shipping location listed above.

Driver Signature _____ Shipment Date _____

Driver Name (Print) _____

Truck Number _____

Truck Type Roll Off

I hereby acknowledge that the above-described materials were received from the generator shipping location and were transported without incident to the destination listed below.

Driver Signature _____ Delivery Date _____

DESTINATION

Site Name Legacy Landfill

Address 238 CR 476
Jonesboro, AR

Phone Number 870 - 972 - 6353

Disposal Location: North _____ East _____ Level _____

I hereby acknowledge receipt of the above-described materials.

Name of Authorized Agent (Print) _____ Signature _____ Receipt Date _____

White - Original | Canary - Disposer Retain | Pink - Transporter Retain | Goldenrod - Generator Retain

APPENDIX L:
SNYDER ENVIRONMENTAL
DAILY LOGS

SNYDER ENVIRONMENTAL DAILY OPERATIONAL REPORT

Date: 1-8-14 **Job Name/Location:** Jonesboro Gym

Job #: 13120054 9 **Supervisor on Site:** Lym Bean

Project Start time: 7:00Am **Stop Time:** 5:30 Pm

Type of Work: _____ Mobilize X Prep _____ Remove

_____ Tear Down _____ Final Clean

Type and Amount of Material Impacted: filler on floor

Waste Information: Double Bagged Snyder

List OS Air Monitor & Type if Present: Stephen Smith Emtec

Description of Daily Activity: Prep Gym

Renove floor filler

SNYDER REPRESENTATIVES ON SITE

Juan Lara

Fizquiel Ortiz

Armando Ortiz

Simon Montalvo

Isreal Linares

Jamie Dorantes

Jose Hernandez

Misseal Briceno

Safety Meeting Topic: Wear all PPE.

SNYDER ENVIRONMENTAL DAILY OPERATIONAL REPORT

Date: 1-8-14 **Job Name/Location:** Jonesboro Gym

Job #: 7:00Am **Supervisor on Site:** Lynn Bee

Project Start time: 7:00Am **Stop Time:** 7:30 Pm

Type of Work: _____ Mobilize _____ Prep X Remove

_____ Tear Down _____ Final Clean

Type and Amount of Material Impacted: Floor filler

Waste Information: Double Bagged WCA

List OS Air Monitor & Type if Present: Stephen Smith Tentec

Description of Daily Activity: Remove floor filler

SNYDER REPRESENTATIVES ON SITE

Juan Lara	Jose Hernandez
Isreal Linares	
Armando Ortiz	
Fizquiel Ortiz	
Silmon Montalvo	
Jamie Dorantes	
Misael Bruno	

Safety Meeting Topic: Wear all P.P.E.

SNYDER ENVIRONMENTAL DAILY OPERATIONAL REPORT

Date: 1-10-14 **Job Name/Location:** Jonesboro Gym

Job #: 131200549 **Supervisor on Site:** Lynn Bean

Project Start time: 7:00A **Stop Time:** 3:30P

Type of Work: ____ Mobilize ____ Prep J Remove

____ Tear Down X Final Clean

Type and Amount of Material Impacted: Floor Filter

Waste Information: Double Bagged WCA

List OS Air Monitor & Type if Present: Stephen Smith Emtec

Description of Daily Activity: Final cleaning clearances

SNYDER REPRESENTATIVES ON SITE

Juan Lara

Ezquiel Ortiz

Isreal Linares

Misael Briceno

Armando Ortiz

Jamie Dorantes

Simon Montalvo

Jose Hernandez

Safety Meeting Topic: Wear all P.P.E.

1-8-14

D-CON

Employee Name	IN	OUT	IN	OUT	IN	OUT	IN	OUT
Juan Lara	3:00 P	5:00 P						
Armando Ortiz	3:00 P	5:00 P						
Ezequiel Ortiz	3:00 P	5:00 P						
Simon Matchus	3:00 P	5:00 P						
Israel Linares	3:00 P	5:00 P						

1-9-14

D-CON Employee Name	IN	OUT	IN	OUT	IN	OUT	IN	OUT
Juan Lara	7:30A	11:30A	12:00P	6:00P				
Ezquiel Ortiz	7:30A	11:30A	12:00P	6:00P				
Simon Montelvo	7:30A	11:30A	12:00P	6:00P				
Isreal Linares	7:30A	11:30A	12:00P	6:00P				
Armando Ortiz	7:30A	11:30A	12:00P	6:00P				
Jamie Perales	7:30A	11:30A	12:00P	6:00P				

APPENDIX M:
SNYDER ENVIRONMENTAL
WORKER CERTIFICATIONS

State of Arkansas
Department of
Environmental Quality

011690 LYNN BEAN

having satisfied the requirements necessary to meet the provisions of AHERA/ASHARA under TSCA Title II and the Arkansas Pollution Control and Ecology Commission's Regulation 21 and is hereby certified in the State of Arkansas in the discipline(s) of Asbestos

Contractor/Supervisor 3/31/2014

Teresa Marks
ADEQ Director

Issue Date:29-Mar-2013

State of Arkansas
Department of
Environmental Quality

012345 JUAN LARA SOTELO

having satisfied the requirements necessary to meet the provisions of AHERA/ASHARA under TSCA Title II and the Arkansas Pollution Control and Ecology Commission's Regulation 21 and is hereby certified in the State of Arkansas in the discipline(s) of Asbestos

Contractor/Supervisor 10/31/2014

Teresa Marks
ADEQ Director

Issue Date:07-Nov-2013

State of Arkansas
Department of
Environmental Quality

013425 EZEQUIEL ORTIZ

having satisfied the requirements necessary to meet the provisions of AHERA/ASHARA under TSCA Title II and the Arkansas Pollution Control and Ecology Commission's Regulation 21 and is hereby certified in the State of Arkansas in the discipline(s) of Asbestos

Worker 3/31/2014

Teresa Marks
ADEQ Director

Issue Date:29-Mar-2013

State of Arkansas
Department of
Environmental Quality

012230 ARMANDO ORTIZ

having satisfied the requirements necessary to meet the provisions of AHERA/ASHARA under TSCA Title II and the Arkansas Pollution Control and Ecology Commission's Regulation 21 and is hereby certified in the State of Arkansas in the discipline(s) of Asbestos

Worker 3/31/2014

Teresa Marks
ADEQ Director

Issue Date:29-Mar-2013

State of Arkansas
Department of
Environmental Quality

012706 SIMON MONTALVO

having satisfied the requirements necessary to meet the provisions of AHERA/ASHARA under TSCA Title II and the Arkansas Pollution Control and Ecology Commission's Regulation 21 and is hereby certified in the State of Arkansas in the discipline(s) of Asbestos

Worker 3/31/2014

Teresa Marks
ADEQ Director

Issue Date:29-Mar-2013

State of Arkansas
Department of
Environmental Quality

012708 ISRAEL LINARES

having satisfied the requirements necessary to meet the provisions of AHERA/ASHARA under TSCA Title II and the Arkansas Pollution Control and Ecology Commission's Regulation 21 and is hereby certified in the State of Arkansas in the discipline(s) of Asbestos

Worker 3/31/2014

Teresa Marks
ADEQ Director

Issue Date:29-Mar-2013

State of Arkansas
Department of
Environmental Quality

013400 JAIME DORANTES RIVERA

having satisfied the requirements necessary to meet the provisions of AHERA/ASHARA under TSCA Title II and the Arkansas Pollution Control and Ecology Commission's Regulation 21 and is hereby certified in the State of Arkansas in the discipline(s) of Asbestos

Worker 3/31/2014

Teresa Marks
ADEQ Director

Issue Date:29-Mar-2013

State of Arkansas
Department of
Environmental Quality

012975 JOSE LUIS HERNANDEZ

having satisfied the requirements necessary to meet the provisions of AHERA/ASHARA under TSCA Title II and the Arkansas Pollution Control and Ecology Commission's Regulation 21 and is hereby certified in the State of Arkansas in the discipline(s) of Asbestos

Worker 3/31/2014

Teresa Marks
ADEQ Director

Issue Date:29-Mar-2013

State of Arkansas
Department of
Environmental Quality

015585 MISSAEL PADILLA

having satisfied the requirements necessary to meet the provisions of AHERA/ASHARA under TSCA Title II and the Arkansas Pollution Control and Ecology Commission's Regulation 21 and is hereby certified in the State of Arkansas in the discipline(s) of Asbestos

Worker 9/30/2014

Teresa Marks
ADEQ Director

Issue Date:25-Sep-2013

Snyder Environmental, Inc.
Air Sample Analysis Report

7031 Dewafelbakkers Lane
North Little Rock, AR. 72113

Client: Snyder Environmental

SEC Project #: 131200SA9

Collected By: Lynn Ben

Contact Person: J. Dixon

Project Name: Jonesboro GYM

Date of Collection: 1-9-14

Phone Number: 501 801 2776

Sample ID #	Type of Sample	Location	Time Started	Time Ended	Total Minutes Elapsed	Flow Rate Start (lpm)	Flow Rate End (lpm)	Average Flow Rate (lpm)	Total Volume (liters)	Total Fiber/ Fields	Fibers Sq. cov	Coeff. Variation	Fiber Count F/cc	8 Hr. TWA
05-100	Stel	Juan Lara	8:00A	8:30A	30m	2.5	2.5							
05-101	Personal	" "	8:30A	4:00P		2.5	2.0							

Comments: Floor Filler

Analyzed By: _____ Date: _____ Reviewed By: _____ Date: _____

Relinquished By: _____ Time: _____ Date: _____

Received By: _____ Time: _____ Date: _____