STATE OF NEW HAMPSHIRE
BUREAU OF PURCHASE AND PROPERTY
STATE HOUSE ANNEX - ROOM 102
25 CAPITOL ST
CONCORD NH 03301-6398

NOTICE OF CONTRACT

DATE: 7/15/14

CONTRACT: ASBESTOS CONTAINING MATERIAL ABATEMENT SERVICES

NIGP CODE: 910-3800

CONTRACT NO.: 8001583

VENDOR: ENVIROVANTAGE INC
629 CALEF HIGHWAY
EPPING NH 03042

VENDOR # 156075

SUBMITTED FOR ACCEPTANCE BY:

Alan Hofmann

ALAN HOFMANN, PURCHASING AGENT
BUREAU OF PURCHASE AND PROPERTY

DATE 7/16/14

RECOMMENDED FOR ACCEPTANCE BY:

Robert Stowell

ROBERT STOWELL, ADMINISTRATOR
BUREAU OF PURCHASE AND PROPERTY

DATE 7/16/14

ENDORSED FOR ACCEPTANCE BY:

Michael P Connor

MICHAEL P. CONNOR, DEPUTY COMMISSIONER
DEPARTMENT OF ADMINISTRATIVE SERVICES

DATE 7/18/14

ACCEPTED FOR THE STATE OF NEW HAMPSHIRE UNDER THE AUTHORITY GRANTED TO ME BY NEW HAMPSHIRE REVISED STATUTES, ANNOTATED 21-I:14, XII.

Linda M Hodgdon

INDA M. HODGDON, COMMISSIONER
DEPARTMENT OF ADMINISTRATIVE SERVICES

DATE 7/18/14

AGREEMENT

The State of New Hampshire and the Contractor hereby mutually agree as follows:

GENERAL PROVISIONS

1. IDENTIFICATION.

1.1 State Agency Name State of New Hampshire Administrative Services		1.2 State Agency Address State House Annex, Room 102 25 Capitol Street Concord, NH 03301	
1.3 Contractor Name ENVIROVANTAGE		1.4 Contractor Address 629 CALEF HIGHWAY, EPPING NH 03042	
1.5 Contractor Phone # 603-679-9682	1.6 Account Number	1.7 Completion Date AUGUST 30, 2017	1.8 Price Limitation $400,000.00
1.9 Contracting Officer for State Agency ALAN HOFMANN, Purchasing Agent		1.10 State Agency Telephone Number 603-271-2550	
1.11 Contractor Signature Scott Knightly Pres.		1.12 Name and Title of Contractor Signatory Scott Knightly, President	

1.13 Acknowledgement: State of NH, County of Rockingham

On July 7, 2014, before the undersigned officer, personally appeared the person identified in block 1.12, or satisfactorily proven to be the person whose name is signed in block 1.11, and acknowledged that s/he executed this document in the capacity indicated in block 1.12.

1.13.1 Signature of Notary Public or Justice of the Peace

[Seal] Nicole Smith

NICOLE SMITH
MY COMMISSION EXPIRES MAY 28, 2016
NOTARY PUBLIC
NEW HAMPSHIRE

1.13.2 Name and Title of Notary or Justice of the Peace

Nicole Smith Accounts Receivable

1.14 State Agency Signature Linda M Hodgdon	1.15 Name and Title of State Agency Signatory Linda M. Hodgdon, Commissioner

1.16 Approval by the N.H. Department of Administration, Division of Personnel *(if applicable)*

By: Director, On:

1.17 Approval by the Attorney General (Form, Substance and Execution)

By: On:

1.18 Approval by the Governor and Executive Council

By: On:

2. EMPLOYMENT OF CONTRACTOR/SERVICES TO BE PERFORMED. The State of New Hampshire, acting through the agency identified in block 1.1 ("State"), engages Contractor identified in block 1.3 ("Contractor") to perform, and the Contractor shall perform, the work or sale of goods, or both, identified and more particularly described in the attached EXHIBIT A which is incorporated herein by reference ("Services").

3. EFFECTIVE DATE/COMPLETION OF SERVICES.

3.1 Notwithstanding any provision of this Agreement to the contrary, and subject to the approval of the Governor and Executive Council of the State of New Hampshire, this Agreement, and all obligations of the parties hereunder, shall not become effective until the date the Governor and Executive Council approve this Agreement ("Effective Date").

3.2 If the Contractor commences the Services prior to the Effective Date, all Services performed by the Contractor prior to the Effective Date shall be performed at the sole risk of the Contractor, and in the event that this Agreement does not become effective, the State shall have no liability to the Contractor, including without limitation, any obligation to pay the Contractor for any costs incurred or Services performed. Contractor must complete all Services by the Completion Date specified in block 1.7.

4. CONDITIONAL NATURE OF AGREEMENT. Notwithstanding any provision of this Agreement to the contrary, all obligations of the State hereunder, including, without limitation, the continuance of payments hereunder, are contingent upon the availability and continued appropriation of funds, and in no event shall the State be liable for any payments hereunder in excess of such available appropriated funds. In the event of a reduction or termination of appropriated funds, the State shall have the right to withhold payment until such funds become available, if ever, and shall have the right to terminate this Agreement immediately upon giving the Contractor notice of such termination. The State shall not be required to transfer funds from any other account to the Account identified in block 1.6 in the event funds in that Account are reduced or unavailable.

5. CONTRACT PRICE/PRICE LIMITATION/ PAYMENT.

5.1 The contract price, method of payment, and terms of payment are identified and more particularly described in EXHIBIT B which is incorporated herein by reference.

5.2 The payment by the State of the contract price shall be the only and the complete reimbursement to the Contractor for all expenses, of whatever nature incurred by the Contractor in the performance hereof, and shall be the only and the complete compensation to the Contractor for the Services. The State shall have no liability to the Contractor other than the contract price.

5.3 The State reserves the right to offset from any amounts otherwise payable to the Contractor under this Agreement those liquidated amounts required or permitted by N.H. RSA 80:7 through RSA 80:7-c or any other provision of law.

5.4 Notwithstanding any provision in this Agreement to the contrary, and notwithstanding unexpected circumstances, in no event shall the total of all payments authorized, or actually made hereunder, exceed the Price Limitation set forth in block 1.8.

6. COMPLIANCE BY CONTRACTOR WITH LAWS AND REGULATIONS/ EQUAL EMPLOYMENT OPPORTUNITY.

6.1 In connection with the performance of the Services, the Contractor shall comply with all statutes, laws, regulations, and orders of federal, state, county or municipal authorities which impose any obligation or duty upon the Contractor, including, but not limited to, civil rights and equal opportunity laws. In addition, the Contractor shall comply with all applicable copyright laws.

6.2 During the term of this Agreement, the Contractor shall not discriminate against employees or applicants for employment because of race, color, religion, creed, age, sex, handicap, sexual orientation, or national origin and will take affirmative action to prevent such discrimination.

6.3 If this Agreement is funded in any part by monies of the United States, the Contractor shall comply with all the provisions of Executive Order No. 11246 ("Equal Employment Opportunity"), as supplemented by the regulations of the United States Department of Labor (41 C.F.R. Part 60), and with any rules, regulations and guidelines as the State of New Hampshire or the United States issue to implement these regulations. The Contractor further agrees to permit the State or United States access to any of the Contractor's books, records and accounts for the purpose of ascertaining compliance with all rules, regulations and orders, and the covenants, terms and conditions of this Agreement.

7. PERSONNEL.

7.1 The Contractor shall at its own expense provide all personnel necessary to perform the Services. The Contractor warrants that all personnel engaged in the Services shall be qualified to perform the Services, and shall be properly licensed and otherwise authorized to do so under all applicable laws.

7.2 Unless otherwise authorized in writing, during the term of this Agreement, and for a period of six (6) months after the Completion Date in block 1.7, the Contractor shall not hire, and shall not permit any subcontractor or other person, firm or corporation with whom it is engaged in a combined effort to perform the Services to hire, any person who is a State employee or official, who is materially involved in the procurement, administration or performance of this Agreement. This provision shall survive termination of this Agreement.

7.3 The Contracting Officer specified in block 1.9, or his or her successor, shall be the State's representative. In the event of any dispute concerning the interpretation of this Agreement, the Contracting Officer's decision shall be final for the State.

8. EVENT OF DEFAULT/REMEDIES.
8.1 Any one or more of the following acts or omissions of the Contractor shall constitute an event of default hereunder ("Event of Default"):
8.1.1 failure to perform the Services satisfactorily or on schedule;
8.1.2 failure to submit any report required hereunder; and/or
8.1.3 failure to perform any other covenant, term or condition of this Agreement.
8.2 Upon the occurrence of any Event of Default, the State may take any one, or more, or all, of the following actions:
8.2.1 give the Contractor a written notice specifying the Event of Default and requiring it to be remedied within, in the absence of a greater or lesser specification of time, thirty (30) days from the date of the notice; and if the Event of Default is not timely remedied, terminate this Agreement, effective two (2) days after giving the Contractor notice of termination;
8.2.2 give the Contractor a written notice specifying the Event of Default and suspending all payments to be made under this Agreement and ordering that the portion of the contract price which would otherwise accrue to the Contractor during the period from the date of such notice until such time as the State determines that the Contractor has cured the Event of Default shall never be paid to the Contractor;
8.2.3 set off against any other obligations the State may owe to the Contractor any damages the State suffers by reason of any Event of Default; and/or
8.2.4 treat the Agreement as breached and pursue any of its remedies at law or in equity, or both.

9. DATA/ACCESS/CONFIDENTIALITY/ PRESERVATION.
9.1 As used in this Agreement, the word "data" shall mean all information and things developed or obtained during the performance of, or acquired or developed by reason of, this Agreement, including, but not limited to, all studies, reports, files, formulae, surveys, maps, charts, sound recordings, video recordings, pictorial reproductions, drawings, analyses, graphic representations, computer programs, computer printouts, notes, letters, memoranda, papers, and documents, all whether finished or unfinished.
9.2 All data and any property which has been received from the State or purchased with funds provided for that purpose under this Agreement, shall be the property of the State, and shall be returned to the State upon demand or upon termination of this Agreement for any reason.
9.3 Confidentiality of data shall be governed by N.H. RSA chapter 91-A or other existing law. Disclosure of data requires prior written approval of the State.

10. TERMINATION. In the event of an early termination of this Agreement for any reason other than the completion of the Services, the Contractor shall deliver to the Contracting Officer, not later than fifteen (15) days after the date of termination, a report ("Termination Report") describing in detail all Services performed, and the contract price earned, to and including the date of termination. The form, subject matter, content, and number of copies of the Termination Report shall be identical to those of any Final Report described in the attached EXHIBIT A.

11. CONTRACTOR'S RELATION TO THE STATE. In the performance of this Agreement the Contractor is in all respects an independent contractor, and is neither an agent nor an employee of the State. Neither the Contractor nor any of its officers, employees, agents or members shall have authority to bind the State or receive any benefits, workers' compensation or other emoluments provided by the State to its employees.

12. ASSIGNMENT/DELEGATION/SUBCONTRACTS. The Contractor shall not assign, or otherwise transfer any interest in this Agreement without the prior written consent of the N.H. Department of Administrative Services. None of the Services shall be subcontracted by the Contractor without the prior written consent of the State.

13. INDEMNIFICATION. The Contractor shall defend, indemnify and hold harmless the State, its officers and employees, from and against any and all losses suffered by the State, its officers and employees, and any and all claims, liabilities or penalties asserted against the State, its officers and employees, by or on behalf of any person, on account of, based or resulting from, arising out of (or which may be claimed to arise out of) the acts or omissions of the Contractor. Notwithstanding the foregoing, nothing herein contained shall be deemed to constitute a waiver of the sovereign immunity of the State, which immunity is hereby reserved to the State. This covenant in paragraph 13 shall survive the termination of this Agreement.

14. INSURANCE.

14.1 The Contractor shall, at its sole expense, obtain and maintain in force, and shall require any subcontractor or assignee to obtain and maintain in force, the following insurance:
14.1.1 comprehensive general liability insurance against all claims of bodily injury, death or property damage, in amounts of not less than $250,000 per claim and $2,000,000 per occurrence; and
14.1.2 fire and extended coverage insurance covering all property subject to subparagraph 9.2 herein, in an amount not less than 80% of the whole replacement value of the property.
14.2 The policies described in subparagraph 14.1 herein shall be on policy forms and endorsements approved for use in the State of New Hampshire by the N.H. Department of Insurance, and issued by insurers licensed in the State of New Hampshire.
14.3 The Contractor shall furnish to the Contracting Officer identified in block 1.9, or his or her successor, a certificate(s) of insurance for all insurance required under this Agreement. Contractor shall also furnish to the Contracting Officer identified in block 1.9, or his or her successor, certificate(s) of insurance for all renewal(s) of insurance required under this Agreement no later than fifteen (15) days prior to the expiration date of each of the insurance policies. The certificate(s) of insurance and any renewals thereof shall be attached and are incorporated herein by reference. Each certificate(s) of insurance shall contain a clause requiring the insurer to endeavor to provide the Contracting Officer identified in block 1.9, or his or her successor, no less than ten (10) days prior written notice of cancellation or modification of the policy.

15. WORKERS' COMPENSATION.
15.1 By signing this agreement, the Contractor agrees, certifies and warrants that the Contractor is in compliance with or exempt from, the requirements of N.H. RSA chapter 281-A *("Workers' Compensation")*.
15.2 To the extent the Contractor is subject to the requirements of N.H. RSA chapter 281-A, Contractor shall maintain, and require any subcontractor or assignee to secure and maintain, payment of Workers' Compensation in connection with activities which the person proposes to undertake pursuant to this Agreement. Contractor shall furnish the Contracting Officer identified in block 1.9, or his or her successor, proof of Workers' Compensation in the manner described in N.H. RSA chapter 281-A and any applicable renewal(s) thereof, which shall be attached and are incorporated herein by reference. The State shall not be responsible for payment of any Workers' Compensation premiums or for any other claim or benefit for Contractor, or any subcontractor or employee of Contractor, which might arise under applicable State of New Hampshire Workers' Compensation laws in connection with the performance of the Services under this Agreement.

16. WAIVER OF BREACH. No failure by the State to enforce any provisions hereof after any Event of Default shall be deemed a waiver of its rights with regard to that Event of Default, or any subsequent Event of Default. No express failure to enforce any Event of Default shall be deemed a waiver of the right of the State to enforce each and all of the provisions hereof upon any further or other Event of Default on the part of the Contractor.

17. NOTICE. Any notice by a party hereto to the other party shall be deemed to have been duly delivered or given at the time of mailing by certified mail, postage prepaid, in a United States Post Office addressed to the parties at the addresses given in blocks 1.2 and 1.4, herein.

18. AMENDMENT. This Agreement may be amended, waived or discharged only by an instrument in writing signed by the parties hereto and only after approval of such amendment, waiver or discharge by the Governor and Executive Council of the State of New Hampshire.

19. CONSTRUCTION OF AGREEMENT AND TERMS. This Agreement shall be construed in accordance with the laws of the State of New Hampshire, and is binding upon and inures to the benefit of the parties and their respective successors and assigns. The wording used in this Agreement is the wording chosen by the parties to express their mutual intent, and no rule of construction shall be applied against or in favor of any party.

20. THIRD PARTIES. The parties hereto do not intend to benefit any third parties and this Agreement shall not be construed to confer any such benefit.

21. HEADINGS. The headings throughout the Agreement are for reference purposes only, and the words contained therein shall in no way be held to explain, modify, amplify or aid in the interpretation, construction or meaning of the provisions of this Agreement.

22. SPECIAL PROVISIONS. Additional provisions set forth in the attached EXHIBIT C are incorporated herein by reference.

23. SEVERABILITY. In the event any of the provisions of this Agreement are held by a court of competent jurisdiction to be contrary to any state or federal law, the remaining provisions of this Agreement will remain in full force and effect.

24. ENTIRE AGREEMENT. This Agreement, which may be executed in a number of counterparts, each of which shall be deemed an original, constitutes the entire Agreement and understanding between the parties, and supersedes all prior Agreements and understandings relating hereto.

EXHIBIT A
SCOPE OF SERVICES:

The Contractor will respond to the agency's initial request within 2 business days to schedule an appointment. Asbestos Containing Material Abatement Services shall be completed in a reasonable time frame as mutually agreed upon with agency and Contractor. The Contractor shall submit a proposed schedule to the state agency requesting services at each facility within 10 days of initial request.

All services performed under this contract shall be performed between the hours of 7:30 A.M. and 4:00 P.M unless other arrangements are made in advance with the State. Any deviation in work hours shall be pre-approved by the Contracting Officer. Some state agencies may require a ten-day advance knowledge of said work schedules to provide security and access to respective work areas. No premium will be paid for hours after 4:00 PM Monday through Friday.

The Contractor shall not commence work until a conference is held with each agency, at which representatives of the Contractor and the State are present. The conference will be arranged by the requesting agency (State).

The Contractor agrees that any damage or injury to buildings, materials, equipment or to other property during the performance of this service will be repaired at their own expense.

The State shall require correction of defective work or damages to any part of the building or its appurtenances when caused by the Contractor's employees, equipment or supplies. The Contractor shall place in satisfactory condition all defective work and damages rendered thereby or any other damages incurred. Upon failure of the Contractor to proceed promptly with the necessary corrections, the State may withhold any amount necessary to correct all defective work or damages from payments to the Contractor.

The work staff shall consist of qualified persons completely familiar with the products and equipment they shall use. The Contracting Officer may require the Contractor to dismiss from the work such employees as deems incompetent, careless, insubordinate, or otherwise objectionable, or whose continued employment on the work deemed to be contrary to the public interest or inconsistent with the best interest of security.

The Contractor or their personnel shall not represent themselves as employees or agents of the State.

While on State property, employees shall be subject to the control of the State, but under no circumstances shall such persons be deemed to be employees of the State.

All personnel shall observe all regulations or special restrictions in effect at the State Agency.

The Contractor shall furnish all personnel with uniforms, which shall be neat and clean in appearance with identification that is visible at all times.

The Contractor's personnel shall be allowed only in areas where work is being performed. The use of State telephones is prohibited.

If sub-contractors are to be utilized, please include information regarding the proposed sub-contractors including the name of the company, their address, contact person and three references for clients they are currently servicing.

OBLIGATIONS and LIABILITY OF THE CONTRACTOR:
The Contractor shall do all the work and furnish all the materials, tools, equipment, permits and safety devices necessary to perform in the manner and within the time hereinafter specified. Contractor shall complete the entire work to the satisfaction of the State and in accordance with the specifications herein mentioned, at the price herein agreed upon and fixed therefore. All the work, labor and equipment to be done and furnished under this contract(s), shall be done and furnished strictly pursuant to, and in conformity with the specifications described herein, and the directions of the State representatives as given from time to time during the progress of the work, under the terms of this contract(s) and also in accordance with contract(s) drawings.

The Contractor shall take all responsibility for the work under this contract(s); for the protection of the work; and for preventing injuries to persons and damage to property and utilities on or about the work. They shall in no way be relieved of their responsibility by any right of the State to give permission or issue orders relating to any part of the work; or by any such permission given on orders issued or by failure of the State to give such permission or issue such orders. The Contractor shall bear all losses resulting to him or to the Owner on account of the amount or character of the work, or because of the nature of the area in or on which the work is done is differed from what was estimated or expected, or account of the weather, elements or other causes.

The Contractor agrees that any damage or injury to buildings, materials, and equipment or to other property during the performance of this service will be repaired at their own expense.

PERFORMING SERVICES:

The Contractor will perform all services according to the requirements and specifications of this Contract.

Asbestos Abatement & Related Work – Specification

Throughout Scope of Work Document: All reference to NH Admin Rule He-P 5000 is changed to NH Admin. Rule Env-A 1800 or current version.

PART 1 – GENERAL

Exhibit A scope of services document shall be modified by the IH Consultant to reflect the specific scope of work for each project.

The Contractor shall provide pricing to State for each requested project based on the Scope of Services document as modified by IH Consultant for the project.

1.1 RELATED DOCUMENTS

General provisions of the contract, including General and Supplementary Conditions and Other Division 1 Abatement Specification Sections, apply to the work of each of the Specification Sections.

1.2 PROJECT SCOPE-OF-WORK/ACBM TO BE REMOVED

General: All asbestos abatement work is to be completed in accordance with the requirements set forth herein. The scope-of-work includes the removal, transport, and disposal of designated asbestos-containing building materials (ACBM or asbestos-containing material, ACM) located at the location.
All work is to be completed in accordance with the schedules stated herein, in the Contract Documents, and as designated by the State of New Hampshire. It is essential that all work be phased and scheduled as required to facilitate the State of New Hampshire's renovation and upgrade work. All work is to be completed in strict accordance with applicable local, state, and federal codes and regulations and the requirements stated in this specification and Contract Documents.

Contract Documents: Indicate the work of the contract and related requirements and conditions that have an impact on the project. This abatement specification, along with other construction specification sections and drawings, shall be considered part of the Contract Documents.

A summary of work to be completed is provided below and includes an inventory of ACBM to be removed, packaged, transported, and disposed of in accordance with the Contract Documents.

Reference full inspection reports for discussions and additional information and limitations of the State of New Hampshire's survey.

Please note that all quantities listed in the following table are approximate only and shall be confirmed by

1.3 WORK SCHEDULES:
All work shall be completed in accordance with the schedule requirements as indicated by the State of New Hampshire.
All work shall be strictly coordinated and scheduled by the Contractor as indicated by and cooperation with the State of New Hampshire and the State of New Hampshire's industrial hygiene consultant (IH Consultant). Work will be phased as required to facilitate the State of New Hampshire's operations, general occupancy of the site, and general construction activity. Contractor must provide proposed daily schedules to the State of New Hampshire and IH Consultant for each phase of work and each State of New Hampshire work request. Adequate advance notice must be provided to the State of New Hampshire and the IH Consultant prior to any schedule changes. Start and completion dates for the work and specific phasing requirements must be submitted to the State of New Hampshire and the IH Consultant for approval.

1.4 CONTRACTOR ESTIMATES
Estimates: Contractor pricing must be based on the Contractor's field measurements and assessment of the conditions and requirements of the Work, in addition to requirements of the Specification. Listings of ACBM and non-ACBMs and noted conditions for the work areas provided by the State of New Hampshire are intended for informational purposes to assist the Contractor in the Contractor's delineation of the work. It is the responsibility of the Contractor to verify all such project information as necessary to satisfy the Contractor as to the requirements of the work for each specific phase of the project. The Contractor must notify the State of New Hampshire and the IH Consultant of any conflicting information or clarifications required for the preparation of any estimates, and submittal documentation. Unless otherwise stated by the State of New Hampshire, the Contractor is responsible for the removal of all designated ACBM, so designated by the State of New Hampshire

1.5 EXISTING CONDITIONS
Prior to commencement of work, inspect areas in which work will be performed. Prepare a listing of damage to structure, surfaces, non-ACM insulations, equipment or surrounding properties that could be misconstrued as damage resulting from the work. Contractor is responsible for all damages to equipment, furnishings, finishes and building surfaces in the work area and adjacent caused by the Contractor during the course of abatement and general housecleaning. Use care to prevent damages to existing surfaces during installation of solid barriers, critical barriers and primary isolation barriers. Contractor is responsible for completing all repairs to damaged items/surfaces caused by the work. In addition, all tape, adhesive, and other staining and damage must be fully repaired by Contractor to meet or exceed existing conditions.

1.6 POTENTIAL ASBESTOS HAZARD:
The disturbance or dislocation of asbestos-containing materials may cause asbestos fibers to be released into the buildings' atmosphere or outside environment, thereby creating a potential health hazard to workmen and building occupants. Apprize all workers, supervisory personnel, subcontractors and consultants who will be at the job site of the seriousness of the hazard and of proper work procedures that must be followed.

Where in the performance of the work, workers, supervisory personnel, subcontractors, or consultants may encounter, disturb, or otherwise function in the immediate vicinity of any identified asbestos-containing materials, take appropriate continuous measures as necessary to protect all building occupants from the potential hazard of exposure to airborne asbestos. Such measures shall include the procedures and methods described herein, and compliance with regulations of applicable federal, state and local agencies. Complete, and coordinate with the State of New Hampshire as applicable, all communication of hazards in strict accordance with 29 CFR 1926 and other applicable state and federal regulations for asbestos, PCB ballasts, mercury, fluorescent light bulbs, and other anticipated hazards. The Contractor shall coordinate with the State of New Hampshire and the IH Consultant to review all existing inspection records and testing results as needed.

1.7 CONTRACTOR USE OF PREMISES:
General: The Contractor shall limit the use of the site to the work indicated, so as to allow for the State of New Hampshire operations and general construction activity. Confine operations at the site to the specified work areas of the Specification. Take all precautions necessary to protect the site, buildings, any occupants, and surrounding areas from work-related hazards during the construction period. Maintain building in a safe and structurally sound condition throughout the work. Maintain access to the public and other trades in designated areas (for example, stairwells) as indicated herein and as otherwise noted by the State of New Hampshire. Provide additional barriers and site security as needed to accommodate such access.

Install solid barriers to prevent unauthorized access and visibility from adjacent, public or State of New Hampshire-occupied areas as designated by the State of New Hampshire and using materials and construction methods approved by the State of New Hampshire. Contractor shall work in cooperation with, and coordinate all work with the State of New Hampshire and the IH consultant.

1.8 STOP WORK:
If the State of New Hampshire or the IH Consultant presents a written or verbal stop work order immediately and automatically stop all work. Do not recommence work until authorized in writing by the State of New Hampshire and the IH Consultant.

1.9 PROJECT COORDINATION

A. Administrative and Supervisory Personnel:

Project Manager: Provide a full-time Project Manager who is experienced in administration and supervision of asbestos abatement projects including work practices, protective measures for building and personnel, disposal procedures, etc. This person is the Contractor's Representative responsible for compliance with all applicable federal, state and local regulations, particularly those relating to asbestos-containing materials.

- Experience and Training: The Project Manager must have completed a course at an EPA Training Center or equivalent certificate course in asbestos abatement procedures, and have had a minimum of five (5) years on-the-job training in asbestos abatement procedures. The Project Manager must also have adequate experience working on similar projects.

- Accreditation/Qualifications: The project manager is to be (1) a Competent Person as required by OSHA in 29 CFR 1926, and (2) accredited and certified in accordance with the AHERA regulation 40 CFR Part 763, Subpart E, Appendix C; (3) licensed in accordance with NH Asbestos Management Rules, Chapter He-P 5000 and (4) able to communicate in English both orally and in writing.

B. Pre-Construction Conference:
An initial progress meeting, recognized as "Pre-Construction Conference" will be convened by the State of New Hampshire prior to the start of work for each phase. This meeting will be held to review the scope-of-work, scheduling, coordination, and contractor plan of action and submittals, as applicable.
C. Daily Log:
Daily Log: Maintain at the work area a daily log documenting the dates and time of but not limited to, the following items:

- Visitations; authorized and unauthorized
- Personnel entering and leaving the work area (name, certification, expirations) – use specification form.
- Special or unusual events, i.e. barrier breaching, equipment failures, accidents
- Documentation of (1) daily inspections and test results, (2) removal of any sheet plastic barriers, (3) inspections prior to application of encapsulation, enclosure or any other operation that will conceal the condition of ACMs or the substrate from which such materials have been removed, (4) removal of waste materials from work area and site, including exact number of waste bags/containers, (5) decontamination of work area and equipment, and (6) final inspection/air test results.

1.10 STANDARDS
Applicability of Standards: It is the Contractor's responsibility to complete all work in accordance with (or exceeding) all applicable industry standards and guidelines. Except where Contract Documents include more stringent requirements, all applicable construction industry standards have the same force and effect as if bound or copied directly into Contract Documents. Standards are made a part of the Contract Documents by reference. Where compliance with an industry standard is required, comply with the most current standards in effect as of date of Contract Documents.

Conflicting Requirements: Where compliance with two or more standards is specified, and they establish different or conflicting requirements for minimum quantities or quality levels, the most stringent requirement will be enforced, unless the Contract Documents indicate otherwise. Refer to the State of New Hampshire and IH Consultant any requirements that are different or conflicting; outline the more stringent requirement before proceeding.

Comply with applicable standards including, but not limited to, American National Standards Institute (ANSI) standards and American Society for Testing and Materials (ASTM) standards.

1.11 CODES, REGULATIONS, AND STANDARDS - ASBESTOS ABATEMENT
Adhere to work practices and procedures set forth in applicable codes, regulations and standards. Obtain permits, licenses, inspections, and similar documentation, as well as payments and similar requirements associated with codes, regulations, and standards.

The Contractor shall assume full responsibility and liability for compliance with all applicable Federal, State, and local regulations pertaining to work practices, hauling, disposal, and protection of workers, visitors to the site, and persons occupying areas adjacent to the site. The Contractor is responsible for providing medical examinations and maintaining medical records of personnel as required by the applicable Federal, State, and local regulations. The Contractor shall hold the State of New Hampshire and the IH Consultant harmless for failure to comply with any applicable work, hauling, disposal, safety, health or other regulation on the part of himself, his employees, or his subcontractors.

All work performed under this contract shall comply with applicable provisions, including most current versions, and not limited to the listed codes and regulations.

Federal Requirements: which govern asbestos abatement work or hauling and disposal of asbestos waste materials include but are not limited to the following:

OSHA: U.S. Department of Labor, Occupational Safety and Health Administration, including but not limited to:

Occupational Exposure to Asbestos, Tremolite, Anthophyllite, and Actinolite; Final Rules

Title 29, Part 1910, Section 1001 and Part 1926, of the Code of Federal Regulations

Construction Industry
Title 29, Part 1926, of the Code of Federal Regulations

Respiratory Protection; Title 29, Part 1910 Section 134 of the Code of Federal Regulations

Access to Employee Exposure and Medical Records Title 29, Part 1910, Section 2 of the CFR

Specifications for Accident Prevention Signs and Tags Title 29, Part 1910, Section 145 of the CFR

Hazard Communication
Title 29, Part 1910, Section 1200 of the CFR

DOT: U. S. Department of Transportation, including but not limited to:

Hazardous Material Regulations
Title 49, Part 171-180 Code of Federal Regulations

EPA: U. S. Environmental Protection Agency (EPA), including but not limited to:

Asbestos Abatement Projects; Worker Protection Rule
Title 40 Part 763, Sub-part G of the Code of Federal Regulations

Asbestos School Hazard Abatement Reauthorization Act (ASHARA)
Training Requirements of (AHERA) Regulation
Asbestos Containing Materials in Schools Final Rule & Notice
Title 40, Part 763, Sub-part E, Code of Federal Regulations

National Emission Standard for Hazardous Air Pollutants (NESHAPS)
National Emission Standard for Asbestos, Title 40, Part 61, Sub-part A,
and Sub-part M (Revised Sub-part B) of the Code of Federal Regulations

State of New Hampshire Requirements: which govern asbestos abatement work or hauling and disposal of asbestos waste materials include but are not limited to the following:

- Asbestos Management Rules, N.H. Admn. Rules Sw-2100
- Asbestos Management and Control, N.H. Admn. Rules Ch. Env-A 1800
- Asbestos Management and Control, N.H. RSA Ch. 141-E
- Solid Waste Management Act, N.H. RSA Ch. 149-M and N.H.RSA Ch.147-A
- Solid Waste Rules, N.H. Admn. Rules Ch. Env-Wm 100-300 and N.H. Admn. Rule Env-Sw 400-1200

Local Requirements: Abide by all local requirement that govern asbestos abatement work or hauling and disposal of asbestos waste materials.

1.12 DEFINITIONS AS DEFINED IN BID SOLICITATION 1632-14

1.13 NOTICES:

1.13.1 U.S. Environmental Protection Agency

Send proper written notification as required by USEPA National Emission Standards for Hazardous Air Pollutants (NESHAPS) Asbestos Regulations (40 CFR 61, Subpart M) to the regional Asbestos NESHAPS Contact - Reno/Demo Clerk - at least 10 working days prior to beginning any work which will directly or indirectly result in disturbance of asbestos-containing materials. Post notifications at job site.

1.13.2 State and Local Agencies:
Send written notification as required by state and local regulations prior to beginning any work on asbestos-containing materials. At least 10 working days prior to the start of work, submit appropriate notification to the New Hampshire Department of Environmental Services, Air Resource Division, 64 N. Main Street, Concord, NH 03301. Post notifications at job site.

Notify all local emergency agencies of the abatement work to be completed as required. Obtain all necessary building permits as required.

1.13.3 Permits
All asbestos containing waste is to be transported by an entity maintaining a current "DOT Common Hauler Permit" specifically for asbestos-containing materials, as required for transporting of waste asbestos-containing materials to a disposal site.

1.13.4 Licenses:
Maintain current licenses as required by applicable state and local jurisdictions for the removal, transporting, disposal or other regulated activity relative to the work of this Contract. Post all worker licenses at work area entrance.

1.13.5 Posting and Filing of Regulations:
Posting and Filing of Regulations: Post all notices required by applicable federal, state and local regulations. Maintain at least one (1) copy of applicable federal, state and local regulations and standards at each job site. Post copies of the specification at the job site.

1.14 SUBMITTAL REQUIREMENTS

1.14.1 Submittal Schedule:
Submittals will be provided by the Contractor and as specified herein including (1) Preconstruction Submittal Documentation prior to start of work and (2) Project Closeout Submittals within 25 days upon completion of on-site work. Submit ongoing submittals as required herein and as specified by the State of New Hampshire and

the IH Consultant. Provide at the job site a copy of all current submittal packages and related documentation. Ongoing submittals will also be submitted as required for the Pre-construction and Closeouts and may not be limited to:

- Schedule updating or modifications as needed, including description and explanations as applicable.
- Revise proposed methods of work procedures as required. Requests for revisions in work procedures must be approved by the State of New Hampshire and the IH Consultant.
- Updated notifications and permitting.
- Updated licenses and training records for all personnel at the site or for new personnel to work at the site

1.14.2 Submittal Preparation
ackage and furnish each submittal appropriately and include statements detailing minor variations and limitations. Include Contractor's certification that the submittal information complies with the Contract Document and Specification requirements. Two complete copies of each submittal package shall be furnished to State of New Hampshire in accordance with the schedules stated herein.

Submittal packages shall be in a neat and orderly fashion, will include an index, and shall be compiled in the order requested herein. Clearly mark and label all sections of the submittal documents.

Do not include, as part of the Submittal Package required herein, other documents not specifically detailed herein. Additional submittal documentation to be provided by the Contractor as the Contractor deems appropriate shall be submitted as a separate supplemental submittal package and marked as such.

Submittal packages that do not meet the requirements herein may not be accepted and will be returned to the Contractor for re-submission.

By "approval" or acceptance of submittals, the State of New Hampshire and the IH Consultant do not express or claim any certification of completeness, compliance, or approval of programs and documentation, not limited to review of analytical results, historical information, and interpretations.

Contractor is solely responsible for compliance with Specification and regulatory requirements associated with the work and submittal documentation.

1.14.3 Preconstruction Submittal Documentation:
Provide the following Preconstruction Submittal Documentation prior to the start of each phase of work as indicated by IH Consultant:

- Notifications: Copies of dated EPA, State, and local notifications.
- Waste Hauler and Landfill Permits and notifications. Submit names, address, and licenses for the waste hauler and disposal facilities.
- Names, addresses, experience, and references for any subcontractors the Contractor proposes to utilize for Work. State if any subcontractor asbestos workers or supervisors are to be used or whether only Contractor employees.
- Names and 24-hour phone numbers/pagers for Project Manager and other key personnel for the Contractor.
- List of personnel to be on-site. Copies of all company, Project Manager, and worker licenses and certifications required and in accordance with this Specification. Copies of current training certificates for workers and Project Managers.
- Report from Medical Examination: conducted within last 12 months as part of compliance with OSHA medical surveillance requirements for each worker who is to enter the Work Area.

- Notarized Certifications: Submit certification signed by an officer of the abatement contracting firm and notarized that exposure measurements, medical surveillance, and worker training records are being kept in conformance with 29 CFR 1926. Certify the dates for primary and secondary HEPA filter changes for neg. air units.

- Respiratory Protection Schedule: Submit level of respiratory protection intended for each operation required by the project. Include supporting documentation of previous exposure monitoring on a sufficient number similar project and operations in accordance with OSHA requirements. Copy of written respiratory protection program.

- Proposed schedule and phasing, containment layouts, and summary of approach and detail of any special work procedures to be used if not included or addressed in the abatement specification.

- Material Safety Data Sheets: for all materials to be used on-site not limited to encapsulants, spray adhesives, etc. Note: It is Contractor's responsibility to notify other Contractors in accordance with applicable OSHA regulations.

- Contingency Plan: Prepare a site specific contingency plan for emergencies including fire, accident, power failure, pressure differential system failure, supplied air system failure, or any other event that may require modification or abridgement of decontamination or work area isolation procedures. Include in plan specific procedures for decontamination or work area isolation. Note that nothing in this specification should impede safe exiting or providing of adequate medical attention in the event of an emergency. The emergency contingency plan must be in accordance (meet or exceed the requirements of) with applicable OSHA requirements.

- Other submittals required by the Contract Documents or as indicated by the State of New Hampshire.

1.14.4 Closeout Submittals

At a minimum, the following Closeout Submittals will be provided upon substantial completion of each phase and prior to final completion of each phase of work.

- Copies of daily logs in accordance with this specification; Copies of analytical results and calculations for all air sampling completed by the Contractor during the project. Copies of specification daily sign in sheets.

- A copy of each waste manifest and chain-of-custody form, signed by the transporter and disposal facility operator, indicating that waste was packaged and disposed of properly. Include a description of any temporary storage facilities used including, dates, times, and locations of temporary storage. Note: In accordance with NESHAPS, submit all waste manifest documentation within 35 days from transport of waste from the site (provide interim submittals during the work as needed to comply with federal regulations).

- Copy of the Pre-construction Submittals for the work. Do not submit personnel training and licensing documentation (other than daily log information) unless the information is not included in the original Preconstruction Submittal Documentation. Other submittals required by Contract Documents.

1.15 AIR MONITORING:

1.15.1 Area Monitoring

Work Area Isolation: The purpose of the State of New Hampshire and the IH air monitoring is to aid in the detection of faults in the work area isolation such as:

- Contamination of areas outside of the work area isolation barriers
- Failure of filtration or rupture in the differential pressure system
- Contamination of air outside the building envelop with airborne asbestos fibers.

Should any of the above occur immediately cease asbestos abatement activities until the fault is corrected. Do not recommence work until authorized by the IH Consultant.

IH Consultant may monitor airborne fiber counts in the Work Area. The purpose of this air monitoring will be to detect airborne asbestos concentrations that may challenge the ability of the Work Area isolation procedures to protect the balance of the building or outside of the building from contamination by airborne fibers.

1.15.2 Clearance Air Monitoring
Work Area Clearance: To determine if the elevated airborne fiber counts encountered during abatement operations have been reduced to an acceptable level, the IH Consultant will sample and analyze air per applicable regulations and this specification.

1.15.3 Stop Action Levels:
Inside Work Area: Maintain an average airborne count in the Work Area of less than 0.10 fibers per cubic centimeter. If the fiber counts rise above this figure for any sample taken, revise work procedures to lower fiber counts. In this event, stop all work, leave pressure differential system in operation, and coordinate with the State of New Hampshire and the IH Consultant as needed.

Outside Work Area: If any air sample taken outside of the Work Area exceeds the base line concentration levels, immediately and automatically stop all work except corrective action.

If it is determined by the IH Consultant that the high reading was the result of a failure of Work Area isolation measures initiate the following actions:

- Immediately erect new critical barriers as set forth herein to isolate the affected area from the balance of the building. Erect Critical Barriers at the next existing structural isolation of the involved space (eg. wall, ceiling, floor).
- Decontaminate the affected area in accordance with the procedures stated herein.
- Require that respiratory protection as set forth herein be worn in affected area until area is cleared for re-occupancy in accordance with the work area clearance requirements.
- Leave Critical Barriers in place until completion of work and insure that the operation of the pressure differential system in the Work Area results in a flow of air from the balance of the building into the affected area.
- If the exit from the clean room of the personnel decontamination unit enters the affected area, establish a decontamination facility consisting of a Shower Room and Changing Room as set forth herein at entry point to affected area.
- After Certification of Visual Inspection in the Work Area remove critical barriers separating the work area from the affected area. Final air samples will be taken within the entire area.

If the high reading was the result of other causes initiate corrective action as determined by the State of New Hampshire and IH Consultant.

Effect on Contract Sum: Complete corrective work with no change in the Contract Sum if high airborne fiber counts were caused by Contractor's activities. The Contract Sum and schedule will be adjusted for additional work caused by high airborne fiber counts beyond the Contractor's control.

1.15.4 Analytical Methods:

The State of New Hampshire reserves the right to use either phase contrast microscopy (PCM) and/or transmission electron microscopy (TEM) to analyze air samples. PCM analysis will be performed using the NIOSH 7400 method at the job site or at an off-site laboratory. TEM will be used as the State of New Hampshire deems necessary and for analysis of samples collected for air clearance purposes. All TEM analysis will be performed using the analysis method set forth in the AHERA regulation 40 CFR Part 763 App. A.

1.15.5 Schedule of Air Samples:
Prior to the start of work: The IH Consultant may collect air samples to establish a base line before start of work. Base line is an action level expressed in fibers per cubic centimeter that is twenty-five percent greater than the largest of the following:

- Average of the PCM samples collected outside each Work Area
- Average of the PCM samples collected outside the building
- 0.01 fibers per cubic centimeter

Daily: From start of work involving Temporary Enclosures through the work of Project Decontamination, IH Consultant may be collecting samples on a regular basis. Sampling will be completed inside and outside of the work area.

- At HEPA Exhaust areas
- Non work-area portions of the building adjacent to Critical Barriers
- At entrance to the Decontamination Unit Clean Room
- At least one sample outside the building
- Adjacent occupied areas of the building

Clearances: See the Air Clearance Requirements.

1.15.6 Laboratory Testing:
The services of a testing laboratory will be employed by the State of New Hampshire or the IH Consultant to perform laboratory analyses of the air samples. A microscope and technician will be set up at the job site, or samples will be sent overnight on a daily basis, so that verbal reports on air samples (PCM analysis) can be obtained within 24 hours. The Contractor will have access to all air monitoring tests and results. Results of all air monitoring tests will be available at the job site on a daily basis. Also see the requirements for air clearance testing. TEM sample analysis may take longer than 24 hours.

1.15.7 OSHA Monitoring and Additional Testing:
Additional Testing: The Contractor may conduct his own air monitoring and laboratory testing. If he elects to do this the cost of such air monitoring and laboratory testing shall be at no additional cost to the State of New Hampshire.

OSHA Compliance Monitoring: Contractor must provide for collection and laboratory analysis services of Contractor's OSHA personal exposure samples, including daily TWA and STEL monitoring.

1.16 TEMPORARY FACILITIES
General: Provide temporary connection to existing building utilities or provide temporary facilities as required herein or as necessary to carry out the work. The State of New Hampshire must approve all connections to utilities and facility components. Provide temporary portable waste and power sources for all exterior work as indicated and coordinated with the State of New Hampshire.

1.16.1 Water Service:
Temporary Water Service Connection: All connections to the State of New Hampshire's water system shall include back-flow protection. Valves shall be temperature and pressure rated for operation of the temperatures and pressures encountered. After completion of use, connections and fittings shall be removed without damage or alteration to existing water piping and equipment. Leaking or dripping valves, on fresh water supply lines outside the work area only, shall be piped to the nearest drain or located over an existing sink or grade where water will not damage existing finishes or equipment.

Water Hoses: Employ heavy-duty abrasion-resistant hoses with a pressure rating greater than the maximum pressure of the water distribution system to provide water into each work area and to each Decontamination Unit. Provide fittings as required to allow for connection to existing wall hydrants or spouts, as well as temporary water heating equipment, branch piping, showers, shut-off nozzles and equipment.

Hot Water: as approved by the State of New Hampshire, may be secured from the building hot water system, provided back-flow protection is installed at point of connection as described in this section under Temporary Water Service connection, and if authorized in writing by the State of New Hampshire.

1.16.2 Electrical Service:
General: Comply with applicable OSHA, NEMA, NECA and UL standards and governing regulations for materials and layout of temporary electric service. Provide temporary power panels and extensions as required. Ground Fault Protection: Equip all circuits for any purpose entering Work Area with ground fault circuit interrupters (GFCI). Locate GFCI's exterior to Work Area so that all circuits are protected prior to entry to Work Area. Provide circuit breaker type ground fault circuit interrupters (GFCI) equipped with test button and reset switch for all circuits to be used for any purpose in work area, decontamination units, exterior, or as otherwise required by national electrical code, OSHA or other authority. Locate in panel exterior to Work Area.

Electrical Power Cords: Use only grounded extension cords; use "hard-service" cords where exposed to abrasion and traffic. Use single lengths or use waterproof connectors to connect separate lengths of electric cords, if single lengths will not reach areas of work. Provide sufficient power cords to complete the Work and for the IH Consultant to use as required for the performance of air monitoring and clearance testing.

Voltage Differences: Provide identification warning signs at power outlets that are other than 110-120 volt power. Provide polarized outlets for plug-in type outlets, to prevent insertion of 110-120 volt plugs into higher voltage outlets. Dry type transformers shall be provided where required to provide voltages necessary for work operations.

Lamps and Light Fixtures: Provide general service incandescent lamps or fluorescent lamps of wattage indicated or required for adequate illumination as required by the work or this section. Protect lamps with guard cages or tempered glass enclosures, where fixtures are exposed to breakage by construction operations. Provide vapor tight fixtures in work area and decontamination units. Provide exterior fixtures where fixtures are exposed to the weather or moisture.

1.16.3 First Aid:
First Aid Supplies: Comply with governing regulations and recognized recommendations within the construction industry.

1.16.4 Fire Extinguishers:
Fire Extinguishers: Provide Type "A" fire extinguishers for temporary offices and similar spaces where there is minimal danger of electrical or grease-oil-flammable liquid fires. In other locations provide type "ABC" dry chemical extinguishers, or a combination of several extinguishers of NFPA recommended types for the exposures in each case.

1.16.5 Execution
General: Use qualified tradesmen for installation of temporary services and facilities. Locate temporary services and facilities where they will serve the entire project adequately and result in minimum interference with the performance of the Work. Coordinate all such work with the State of New Hampshire.

- Require that tradesmen be licensed as required by local authorities.
- Relocate, modify and extend services and facilities as required during the course of work so as to accommodate the entire work of the project.

1.17 WORKER PROTECTION
Comply with respiratory protection requirements as specified in this specification and applicable regulations. Provide worker protection as required by the most stringent OSHA and/or EPA regulations and industry standards applicable to the work. The following procedures are minimums to be adhered to regardless of fiber count in the Work Area.

1.17.1 Worker Training:
AHERA Accreditation: All workers are to be accredited as Abatement Workers as required by the AHERA regulation 40 CFR 763 Appendix C to Subpart E, April 30, 1987. All training must be current. Workers that have training that expires during the work must either renew the training or must not be allowed to continue work until refresher training certification is provided.

All removal of thermal systems insulation is OSHA Class 1 asbestos work and shall be completed in strict accordance with 29 CFR Part 1926.1101. Recent EPA regulations and interpretations of certain nonfriable ACBM, such as floor tile and mastic, define it as Category I nonfriable ACM. However, Category I nonfriable

ACM that will be or has been subjected to sanding, grinding, cutting, or abrading is defined as Regulated ACM. The EPA NESHAPs regulation defines grinding as breaking into small pieces. In addition, OSHA defines ACM flooring abatement as Class II asbestos work. As such all flooring work must be completed in accordance with 29 CFR 1926.1101.

Train, in accordance with NESHAPs and 29 CFR 1926, all supervisors and workers in the dangers inherent in handling asbestos and breathing asbestos dust, in proper work procedures and personal and area protective measures, confined space, and other hazards anticipated during the work. All workers and supervisors must be licensed and certified as required by New Hampshire Admn. Rule He-P 5000 and other applicable State regulations. All workers must have adequate experience completing similar projects in accordance with New Hampshire and federal rules and regulations.

Train all workers in accordance with 29 CFR Part 1926 on the work place hazards present at the site, including but not limited to confined space entry, lock-out/tag-out, hazard communication, fall hazards, and other general construction hazards anticipated for the work.

1.17.2 Medical Examinations:
Provide medical examinations for all workers who may encounter an airborne fiber level of 0.1 f/cc or greater for an 8 hour Time Weighted Average. In the absence of specific airborne fiber data provide medical examinations for all workers who will enter the Work Area for any reason. Examination shall as a minimum meet OSHA requirements as set forth in 29 CFR 1926 and 29 CFR 1910.20. In addition, provide an evaluation of the individual's ability to work in environments capable of producing heat stress in the worker.

1.17.3 Protective Clothing:
Coveralls: Provide cloth full-body coveralls and hats, and require that they be worn by all workers in the Work Area. Require that workers change out of coverall in the Equipment Room of the Personnel Decontamination Unit. Dispose of coverall as asbestos waste at completion of all work.

Other: Provide other personal protective equipment as required by OSHA regulations and industry standards, not limited to: hard hats, eye protective (goggles), gloves, fall safety, and footwear.

1.17.4 Entering Work Area:
Each time Work Area is entered, remove all street clothes in the changing (clean) room of the personnel decontamination unit and put on new disposable coverall, new head cover, and a clean respirator. Proceed through shower room to equipment room and put on work boots. Only properly licensed/certified personnel shall enter the decontamination unit and work area. All personnel entering the work area must post their State license at the decontamination unit entrance.

1.17.5 Decontamination Procedures:
Require all workers to adhere to the following personal decontamination procedures whenever they leave the Work Area:

- HEPA vacuum all gross debris from the protective clothing prior to entering the equipment room of the decontamination unit. When exiting area, remove disposable coveralls, disposable head covers, and disposable footwear covers or boots in the equipment room.

- Still wearing respirators, proceed to showers. Showering is mandatory. Care must be taken to follow reasonable procedures in removing the respirator to avoid asbestos fibers while showering. The following procedure is required as a minimum:

- Carefully wash face piece of respirator inside and out. Each worker leaving the work area must shower completely with soap and water. Rinse thoroughly. Proceed from shower to clean room and change into street clothes or into new disposable work items.

1.17.6 Within Work Area:
Require that workers NOT eat, drink, smoke, chew tobacco or gum, or apply cosmetics in the Work Area. Maintain proper use of personnel protective equipment.

1.17.7 Respiratory Protection:
Provide sufficient respiratory protection in accordance with applicable OSHA requirements in addition to ANSI, NIOSH, and MSHA standards. Select proper level of protection based on personnel exposure monitoring and the applicable OSHA Permissible Exposure Limits.

Instruct and train each worker involved in asbestos abatement or maintenance and repair of asbestos-containing materials in proper respiratory use and require that each worker always wear a respirator, properly fitted on the face in the Work Area from the start of any operation which may cause airborne asbestos fibers until the Work Area is completely decontaminated. Use respiratory protection appropriate for the fiber level encountered and as required for other toxic or oxygen-deficient situations encountered.

Except to the extent that more stringent requirements are written directly into the Contract Documents, the following regulations and standards have the same force and effect (and are made a part of the Contract Documents by reference) as if copied directly into the Contract Documents, or as if published copies were bound herewith. Where there is a conflict in requirements set forth in these regulations and standards, meet the more stringent requirement.

OSHA - U.S. Department of Labor Occupational Safety and Health Administration, Safety and Health Standards 29 CFR 1910, Section 1001 and Section 1910.134. 29 CFR 1926.

CGA -Compressed Gas Association, Inc., New York, Pamphlet CGA G-7,"Compressed Air for Human Respiration", and Specification CGA G-7.1 "Commodity Specification for Air".

ANSI - American National Standard Practices for Respiratory Protection, ANSI Z88.2-1992, and most current revisions.

NIOSH - National Institute for Occupational Safety and Health
MSHA - Mine Safety and Health Administration

Respiratory Protection Program: Comply with ANSI Z88.2 - 1992 (and most current revisions) "Practices for Respiratory Protection" and OSHA 29 CFR 1910 and 1926. Require that respiratory protection be used at all times that there is any possibility of disturbance of asbestos-containing materials whether intentional or accidental.

Require that a respirator be worn by anyone in a Work Area at all times, regardless of activity, until the area has been cleared for re-occupancy.

Regardless of Airborne Fiber Levels: The minimum level of respiratory protection used must be half-face negative pressure respirator with high efficiency filters during pre-cleaning and abatement of nonfriable ACBM and PAPR's during abatement of friable ACBM. Provide and complete all necessary fit testing for respiratory protection in strict accordance with applicable OSHA regulations.

In the event that applicable OSHA PEL's (8-hour TWA and 30-minute STEL) are exceeded, stop work. Do not recommence work until work procedures, including use of engineering controls, are modified to maintain exposures within the acceptable PEL's.

1.18 TEMPORARY ENCLOSURES
Work areas are to be considered contaminated during the work and shall be completely isolated from other parts of the building such that asbestos fibers cannot pass through or beyond the perimeters of the work area and into non work areas. Should areas beyond the work area become contaminated with asbestos as a result of the Contractor's work, the Contractor shall be responsible for cleaning non-work areas as required. All costs including cleaning, decontaminating, monitoring and testing shall be borne by the Contractor.

Contractor shall construct temporary containment enclosures in each work area as required in the Contract Documents and as required by the State of New Hampshire or the IC Consultant. Prior to proceeding with work of each of the following Specification Sections, coordinate and complete inspections of the work in progress with the IH Consultant as indicated and requested by the State of New Hampshire and the IH Consultant. Proceed with work sequentially as listed or indicated.

Prior to conducting pre-cleaning work, completely isolate the Work Area from other parts of the building so as to prevent asbestos-containing dust or debris from passing beyond the isolated area. Should the area beyond the Work Area(s) become contaminated with asbestos-containing dust or debris as a consequence of the work, clean those areas in accordance with the decontamination and cleaning procedures indicated in this Specification. Perform all such required cleaning or decontamination at no additional cost to the State of New Hampshire.

Place all tools, scaffolding, staging, etc. necessary for the work in the area to be isolated prior to completion of Work Area isolation. The State of New Hampshire and/or the State of New Hampshire's representative will remove of all uncontaminated, non-fixed equipment, furniture, and other items from the Work Areas. Disable ventilating systems or any other system bringing air into or out of the Work Area. Disable system by disconnecting wires, removing circuit breakers, by lockable switch or other positive means that will prevent accidental premature restarting of equipment.

Complete all lock-out and tag-out of power and air handling systems to, and within, the Work Area. Coordinate all lock-out and tag-out with the State of New Hampshire. Provide lock-out and tag-out in strict accordance of applicable OSHA regulations. Complete lock-out and tagging of all other equipment and systems as needed to complete the work in a safe manner. Coordinate with the State of New Hampshire and local fire department authorities the handling of heat and smoke detectors in the work areas, including sealing of detectors during work and removal of seals at the completion of work or shifts.

1.19 REGULATED ACM
All ACM (and ACBM) to be removed during the Work of the Contract Documents shall be handled as Regulated ACM (RACM). This is based on the types of ACBM present, conditions of the material, anticipated impact of removal and decontamination methods, and other related conditions.

PART 2 - PRODUCTS

2.1 RELATED DOCUMENTS

General provisions of the Contract, including General and Supplementary Conditions and other Division 2 Abatement Specification Sections, apply to the work of each of this Section.

2.2 PRODUCTS

Provide new or used materials and equipment that are undamaged and in serviceable condition. Provide only materials and equipment that are recognized as being suitable for the intended use and in strict compliance with appropriate standards. Do not bring products, materials, and equipment to the State of New Hampshire's site or State of New Hampshire work areas that are damaged or contain construction or potential contaminated debris.

Warning Signs, Caution Signs and Demarcation: Provide all demarcation, warning signs, caution signs, and other postings required for the work and in accordance with State and federal codes and regulations.

Polyethylene Sheet: Provide single polyethylene film in the largest sheet size possible to minimize seams, in 6.0mil thickness, clear or black as indicated.

Duct Tape: Provide duct tape in 3" widths with an adhesive which is formulated to stick aggressively to sheet polyethylene.

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

Foam Pack: Provide foam pack for sealing small crevices and cracks at critical barriers as required. All foam packs must be approved by the State of New Hampshire and local authorities, not limited to the Fire Department.
Scaffolding: Provide all scaffolding, ladders and/or staging, etc. as necessary to accomplish the work of this Contract. Scaffolding may be of suspension type or standing type such as metal tube and coupler, tubular welded frame, pole or outrigger type or cantilever type. The type, erection and use of all scaffolding shall comply with all applicable OSHA provisions.

-Equip rungs of all metal ladders, etc. with an abrasive non-slip surface.
-Provide a nonskid surface on all scaffold surfaces subject to foot traffic.

First Aid Supplies: Comply with governing regulations and recognized recommendations within the construction industry.

Fire Extinguishers: Provide Type "A" fire extinguishers for temporary offices and similar spaces where there is minimal danger of electrical or grease-oil-flammable liquid fires. In other locations provide type "ABC" dry chemical extinguishers, or a combination of several extinguishers of NFPA recommended types for the exposures in each case.

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

Amended Water: Provide water to which a surfactant has been added. Use a mixture of surfactant and water 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 the use of one ounce of a surfactant consisting of 50% polyoxyethylene ester and 50% polyoxyethylene ether mixed with five gallons of water.

Disposal Bags: Provide 6 mil thick leak-tight polyethylene bags labeled as required by applicable sections of this Specification and federal and state regulations.

Fiberboard Drums of Equivalent: Provide sufficient quantity of fiber board drums or equivalent (as determined by IH Consultant) for packaging of wire mesh and other contaminated materials with sharp or rough edges.

Disposal Bag/Container Labels and Signs: Provide leak-tight waste bags or containers for disposal of asbestos-containing materials with labels in accordance with OSHA, EPA, and the latest revisions to the US Department of Transportation requirements, not limited to material identification number (#NA2212), material packaging group (PGIII), and labels. Warning labels will also include:

Legend:

DANGER
CONTAINS ASBESTOS FIBERS
AVOID CREATING DUST
CANCER AND LUNG DISEASE HAZARD

In accordance with NESHAPS, label each waste bag with the name of the waste generator and address where the material was generated. Include the Contractor name and address on each label also. Attach label in a sufficient manner such that they are properly sealed to or on the containers.

Label all waste bags, containers, and transport vehicles as required by applicable U.S. Department of Transportation Rules and Regulations.

Coveralls: Provide disposable full-body coveralls and head covers in accordance with State and federal regulations. Provide a sufficient number for all required changes, for all workers in the Work Area. Provide sufficient number for use by IH Consultant.

Other PPE: Provide other personal protective equipment as required by OSHA regulations and industry standards, not limited to: hard hats, eye protective, gloves, and footwear.

Respiratory Protection: Provide respiratory protection in strict accordance with ANSI Z88.2 - 1992 "Practices for Respiratory Protection" and 29 CFR 1926 and 1910.134. The respirators will be sanitized and maintained in accordance with manufacturer's specifications and recommendations. Provide sufficient respiratory protection based on applicable ANSI, NIOSH, and MSHA standards. Select proper level of protection based on personnel exposure monitoring and the applicable OSHA Permissible Exposure Limits. Use only respirators and filter that are NIOSH-approved for use with asbestos and other atmospheres anticipated during the work.

Solvents: Provide appropriate solvent materials to aid in the removal of flooring materials and mastics. Such materials should be "low-odor" rated and all MSDS's shall be submitted to the State of New Hampshire for approval prior to storing or using such materials at the job site. Contractor is solely responsible for all environmental and worker protection precautions required for the safe use, clean-up, and disposal of such materials. Additional air testing (area and personal exposure monitoring) must be completed by the Contractor (at no additional cost to the State of New Hampshire) depending on the solvents to be used and as necessary to ensure a safe environment for site workers and adjacent public. Assure compatibility with replacement materials prior to installation of solvents. Note: Charcoal pre-filters will be required on all HEPA exhaust/filter equipment during use of solvents.

Construction Materials: Provide other construction materials such as plywood, strapping, studs, other related abatement materials, etc., as required to complete the work in accordance with this Specification.

2.3 PRESSURE DIFFERENTIAL AND FILTRATION-interior work areas only:

General: Supply the required number of HEPA filtered fan units to the site in accordance with this Specification. Use units that meet the following requirements. Provide certification of filter change dates.

Cabinet: Constructed of durable materials able to withstand damage from rough handling and transportation. The width of the cabinet should be less than 30 inches to fit through standard-size doorways. Provide units whose cabinets are:

-Factory-sealed to prevent asbestos-containing dust from being released during use, transport, or maintenance
-Arranged to provide access to and replacement of all air filters from intake end
-Mounted on casters or wheels

Fans: Rate capacity of fan according to usable air-moving capacity under actual operating conditions.

HEPA Filters: Provide units whose final filter is the HEPA type with the filter media (folded into closely pleated panels) completely sealed on all edges with a structurally rigid frame. Certify most recent dates for filter changes and approximate hours of usage.

Provide units with a continuous rubber gasket located between the filter and the filter housing to form a tight seal.

Provide HEPA filters that are individually tested and certified by the manufacturer to have an efficiency of not less than 99.97 percent when challenged with 0.3 um dioctylphthalate (DOP) particles when tested in accordance with Military Standard Number 282 and Army Instruction Manual 136-300-175A. Provide filters that bear a UL586 label to indicate ability to perform under specified conditions.

Provide filters that are marked with: the name of the manufacturer, serial number, air flow rating, efficiency and resistance, and the direction of test air flow.

Pre-filters: which protect the final filter by removing the larger particles, are required to prolong the operating life of the HEPA filter. Two stages of pre-filtration are required. Provide units with the following pre-filters:

First-stage pre-filter: low-efficiency type (e.g., for particles 100 um and larger)
Second-stage (or intermediate) filter: medium efficiency (eg. effective for particles down to 5 um)

Provide units with pre-filters and intermediate filters installed either on or in the intake grid of the unit and held in place with special housings or clamps.

Provide appropriate charcoal pre-filters during all work involving use of solvents to minimize odors. Allow HEPA units to run for a sufficient period of time after use of solvents to allow for adequate number of air changes and filtration.

Instrumentation: Provide units equipped with:

- Magnehelic gauge or manometer to measure the pressure drop across filters and indicate when filters have become loaded and need to be changed
- A table indicating the usable air-handling capacity for various static pressure readings on the Magnehelic gauge affixed near the gauge for reference, or the
- Magnehelic reading indicating at what point the filters should be changed, noting Cubic Feet per Minute (CFM) air delivery at that point
- Elapsed time meter to show the total accumulated hours of operation

Safety and Warning Devices: Provide units with the following safety and warning devices:

Electrical (or mechanical) lockout to prevent fan from operating without a HEPA filter
Automatic shutdown system to stop fan in the event of a rupture in the HEPA filter or blocked air discharge
Warning lights to indicate normal operation (green), too high a pressure drop across the filters (i.e., filter overloading) (yellow), and too low of a pressure drop (i.e., rupture in HEPA filter or obstructed discharge)
Audible alarm if unit shuts down due to operation of safety systems

Electrical components: Provide units with electrical components approved by the National Electrical Manufacturers Association (NEMA) and Underwriter's Laboratories (UL). Each unit is to be equipped with overload protection sized for the equipment. The motor, fan, fan housing, and cabinet are to be grounded.

Monitoring: Continuously monitor and record the pressure differential between the Work Area and the building outside of the Work Area. Maintain accurate records of time and locations of testing on-site and in daily logs.

2.4 AUXILIARY GENERATOR

As deemed necessary by Contractor's OSHA asbestos- competent person, provide a gasoline-powered self-starting generator with a capacity adequate to power a minimum of 50% of the HEPA filtered fan units in operation at any time during the work as needed for emergency use and backup.

PART 3 - EXECUTION

3.1 RELATED DOCUMENTS

General provisions of the Contract, including General and Supplementary Conditions and other Division 2 Abatement Specification Sections, apply to the work of this Section.

3.2 TEMPORARY ENCLOSURES

3.2.1 Control Access:

Isolate the Work Area to prevent entry by building occupants and the public into Work Area or surrounding controlled areas. Notify the State of New Hampshire of all doors and other openings that must be secured to isolate Work Area. Access to stairwells and building exits must be maintained as indicated by the State of New Hampshire and State of New Hampshire's representatives Construct work area containments and isolation barriers as required allowing for
State of New Hampshire operations and as approved by the State of New Hampshire and State of New Hampshire's representatives.

Secured Access: Arrange Work Area so that the only access into Work Area is through securable doors to personnel and equipment decontamination units.

Solid Construction Barriers: Provide solid construction barriers as indicated by the State of New Hampshire to prohibit unauthorized access and visibility by adjacent occupants and public. At a minimum provide solid barriers as necessary to isolate all work areas with abatement activity that is conducted during periods of operation.
Provide Warning Signs at each door and barrier leading to Work Area reading as follows:

LEGEND

DANGER
KEEP OUT
BEYOND THIS POINT
CONSTRUCTION WORK
IN PROGRESS

Immediately inside door (leading to Work Area) and outside all accessible critical barriers post an manufactured caution sign, approximately 20 inch by 14 inch, displaying the following legend with letter sizes and styles of a visibility required by 29 CFR 1926:

LEGEND

DANGER
ASBESTOS
CANCER AND LUNG DISEASE HAZARD
AUTHORIZED PERSONNEL ONLY
RESPIRATORS AND PROTECTIVE CLOTHING ARE REQUIRED
IN THIS AREA

3.2.2 Respiratory and Worker Protection:

Before proceeding beyond this point in providing Temporary Enclosures:

- Provide Worker Protection per specification and regulatory requirements
- Provide Respiratory Protection per specification and regulatory requirements
- Provide Decontamination Units per specification and regulatory requirements

3.2.3 Water Service:

Hot water shall be supplied at a minimum temperature of 100 F. Supply hot and cold water to the Decontamination Unit as required herein. Supply water as required for work of the project.

Maintain hose connections and outlet valves in leak-proof condition. Where finish work below an outlet might be damaged by spillage or leakage, provide a drip pan of suitable size to minimize the possibility of water damage. Drain water promptly from pans as it accumulates.

3.2.4 Electrical Service:

Provide all required lock out and tag out of all existing power in the work areas as required by OSHA and industry standards. Coordinate all such work and related requirements with the State of New Hampshire. Use licensed electrician in accordance with local codes and regulations for all electrical service work.

Temporary Electrical Panel: Provide temporary electrical panel as needed sized and equipped to accommodate all electrical equipment and lighting required by the work. Connect temporary panel to existing building electrical system. Protect with circuit breaker or fused disconnect. Locate temporary panel as directed by the State of New Hampshire. Protect each circuit with a GFCI of proper size located in the temporary panel. Do not use outlet type GFCI devices.

NOTE:
Section 3.2.5 – 3.2.12 are applicable to Interior Building Work Areas only.

3.2.5 Critical Barriers:

Completely separate the Work Area from other portions of the building, and the outside by closing all openings with sheet plastic barriers at least 6 mil in thickness, or by sealing cracks leading out of Work Area with duct tape. Seal the perimeter of all sheet plastic barriers with duct tape or spray cement. Individually seal all ventilation openings (supply and exhaust), lighting fixtures, clocks, doorways, windows, convectors and speakers, roof exhausts, and other openings into the Work Area with duct tape alone or with polyethylene sheeting at least 6 mil in thickness, taped securely in place with duct tape. Maintain seal until all work including Project Decontamination is completed. Take care in sealing of lighting and other fixtures, as applicable, to avoid melting or burning of sheeting, as applicable.

3.2.6 Pressure and Circulation in the Work Area and Decontamination Units:

Isolate the Work Area from all adjacent areas or systems of the building with a Pressure Differential that will cause a movement of air from outside to inside at any breach in the physical isolation of the Work Area.

Relative Pressure in Work Area: Continuously maintain the work area at an air pressure that is lower than that in any surrounding space in the building, or at any location in the immediate proximity outside of the building envelope. This pressure differential when measured across any physical or critical barrier must equal or exceed a static pressure of: 0.02 inches of water. Continuously monitor and record the pressure differential between the Work Area and the building outside of the Work Area. Maintain accurate records of time and locations of testing on-site and in daily logs.

Accomplish the pressure differential by exhausting a sufficient number of HEPA filtered fan units from the work area. The number of units required will depend on machine characteristics, the seal at barriers, and required air circulation. The number of units will increase with increased make-up air or leaks into the Work Area.

3.2.7 Circulation in the Work Area and Decontamination Units:

Determining the Air circulation Requirements: Provide a fully operational air circulation system supplying a minimum of the following air circulation rate: 8 air changes per hour. Provide a minimum of two additional air units for emergency purposes.

3.2.8 Exhaust System:

Exhaust all units from the Work Area (to outside of the building) to meet air circulation requirement of this section. Vent to outside of building, unless authorized by the State of New Hampshire and the IH Consultant. Locate fan unit(s) so that makeup air enters work area primarily through decontamination facilities and traverses Work Area as much as possible. This may be accomplished by positioning the HEPA filtered fan unit(s) at a maximum distance from the worker access opening or other makeup air sources. Contractor shall be responsible for all temporary construction required to seal off exhaust penetration points for security and critical barrier purposes.

3.2.9 Use of Pressure Differential and Air Circulation Systems:

Demonstrate operation of the pressure differential system including, but not limited to, the following: plastic barriers and sheeting move lightly in toward Work Area; curtain of decontamination units move lightly in toward Work Area; noticeable movement of air through the Decontamination Unit; use smoke tube to demonstrate air movement from Clean Room through Shower Room to Equipment Room; use smoke tubes to demonstrate a definite motion of air across all areas in which work is to be performed; use a differential pressure meter or manometer to demonstrate the required pressure differential at every barrier separating the Work Area from the balance of the building, equipment, duct work or outside. Note: Provide continuous manometer measurements and printouts for all work performed adjacent to public occupied spaces if such spaces are occupied during the work.

Use of System During Abatement Operations: Start fan units before beginning work (before any asbestos-containing material is or may be disturbed). After abatement work has begun, run units continuously to maintain a constant pressure differential and air circulation until decontamination of the work area is complete and the air clearance criteria has been met as required herein. Do not turn off units at the end of

the work shift or when abatement operations temporarily stop. Do not shut down air pressure differential system during encapsulating procedures. Supply sufficient pre-filters to allow frequent changes.

Start cleaning and abatement work at a location farthest from the fan units and proceed toward them. If an electric power failure occurs, immediately stop all abatement work and do not resume until power is restored and fan units are operating again. At completion of abatement work, allow fan units to run as specified under Project Decontamination requirements, to remove airborne fibers that may have been generated during abatement work and cleanup and to purge the Work Area with clean makeup air.

When a final visual inspection of all accessible areas and the results of final air tests indicate that the area has been decontaminated, fan units may be removed from the Work Area. Before removal from the Work Area, remove and properly dispose of pre-filter, decontaminate exterior of machine and seal intake to the machine with 6 mil polyethylene to prevent environmental contamination from the filters.

3.2.10 Pre-Clean Work Area:

Pre-clean all work area surfaces using HEPA vacuums and wet wiping. As applicable, detach all electrical and mechanical items, such as lighting fixtures, clocks, diffusers, registers, escutcheon plates, etc. which cover any part of the surface to be worked on or which may be impacted during work. Do not complete any work that may result in disturbance to the ACM until all other work area preparations are completed. Coordinate all such work with the State of New Hampshire. Complete the following after installation of (1) critical barriers, (2) pressure differential/air filtration systems, and (3) decontamination facilities as indicated below and in other Specification Sections.

- Pre-clean fixtures and equipment in the work area as needed and then seal non-removable fixtures and with polyethylene sheeting. Provide a minimum of 12" of overlap, sealed with spray adhesive and duct tape on both flap ends, on all joints in the barriers. Do not damage materials and items to be covered.
- Coordinate with State of New Hampshire and the IH Consultant for the handling of any other hazard materials or conditions encountered during the work.
- PCB Ballasts: All ballasts encountered which do not have PCB-Free labels affixed to the ballast shall be handled as PCB-containing. The State of New Hampshire is to reuse lighting and fixtures. Clean, decontaminate materials of asbestos and dust for reuse by the State of New Hampshire. If leaking ballasts are encountered, properly package the material and immediately notify the State of New Hampshire and the IH Consultant.
- All fluorescent light bulbs and thermostat switches in the building may contain mercury. Do not damage bulbs and switches. Save all such materials for reuse by the State of New Hampshire following decontamination by Contractor. In the event any bulbs or switches break, package, labeled, and transport materials for disposal of in accordance with current local, State, and Federal regulations as indicated by the State of New Hampshire and in accordance with Contract Documents. Provide waste manifests to the State of New Hampshire within 30 days of shipment for all fluorescent light bulbs disposed. In lieu proper hazardous waste determinations, waste shall be assumed to be hazardous and handled accordingly. Bulbs that are to be disposed are subject to applicable hazardous waste rules. Bulbs that are broken may not be recycled and must be disposed of. See below sections.
- Coordinate handling of heat and smoke detectors with the State of New Hampshire and Local Fire Department. Include written description of handling of such detection equipment and existing sprinklers in the notification to the local emergency authorities, as applicable.

3.2.11 Primary Barrier:

Protect building and other surfaces in the Work Area from damage from water and high humidity or from contamination from asbestos-containing debris, slurry or high airborne fiber levels by covering with a primary barrier as described below.

Primary Barrier Sheet Plastic: Protect floor surfaces with a minimum of 2 layers of 6-mil plastic sheeting on floors. Provide additional floor protection as required to prevent damage to carpets and other existing flooring surfaces to remain after construction. Protect all existing wall, ceiling (non-ACM), fixed equipment, and other

building surfaces with a minimum of 1 layer of 6-mil plastic sheeting in addition to critical barrier systems as needed to protect building surfaces. For areas with flooring abatement (flooring only and removed as nonfriable), provide a minimum of 48" (extending up from the floor) polyethylene sheeting barrier as a splash-guard. For friable removal work all walls, floors, and ceilings must be covered with 6-mil sheeting.

Provide a minimum of 12" of overlap, sealed (poly-to-poly) with spray adhesive and duct tape on both flap ends, on all joints in the barriers Extend floor sheeting up adjoining walls a minimum of 18 inches. Do not place seams at, or within 18" of any wall, ceiling, or floor joints. Stagger all joints by at least 18 inches.

Protect all existing building surfaces and fixed equipment/items, also including non-ACM insulations in the work areas, with a minimum of 2 layers of 6-mil plastic sheet as required to maintain existing conditions and to prevent contamination, water damage, or other damages due to the work. Provide a minimum of 12" of overlap, sealed with spray adhesive and duct tape on both flap ends, on all joints in the barriers.

Provide and install transparent inspection windows in the containment barriers as indicated by the IH Consultant. Maintain inspection window clean of debris to allow for inspection of work in progress.

3.2.12 Ventilation Systems

Coordinate with the State of New Hampshire and/or the State of New Hampshire's representatives, shut-down and lock-out/tag-out of all air handling equipment either in or running through the work areas. Seal all ducts and equipment with primary barriers as indicated above and in applicable Specification Sections, in addition to OSHA requirements. Isolate and shut down air systems in work area during abatement.

3.2.13 Stop Work:

If the Critical or Primary Barrier falls or is breached in any manner stop work immediately and repair the breach as required. Do not start work until authorized by the IH Consultant. Any contamination and/or suspect contamination, as determined by the State of New Hampshire and the IH Consultant, resulting from a breach in the barriers or other neglect by the Contractor shall be thoroughly abated in accordance with this Specification at no additional cost to the State of New Hampshire.

3.2.14 Decontamination Units:

Provide personnel and equipment decontamination facilities and require that the personnel decontamination unit be the only means of ingress and egress for the Work Area. Require that all materials exit the Work Area through the equipment decontamination unit. Provide portable shower units, sufficient for personnel decontamination in accordance with State of New Hampshire and OSHA regulations, and cascaded filter units on drain lines from showers or any other water source carrying asbestos-contaminated water from the Work Area. Provide units with disposable filter elements as indicated below. Connect so that discharged water passes primary filter and output of primary filter passes through secondary filter and final filter.

- Primary Filter - Passes particles 20 microns and smaller
- Secondary Filter - Passes particles 10 microns and smaller
- Final Filter - Passes particles 5 micron and smaller

Do not discharge filtered water unless testing and permitting has been completed as applicable in accordance with State and local requirements.

Provide a personnel decontamination unit contiguous to the Work Area consisting of a serial arrangement of connected rooms or spaces, changing (clean) room, shower room, equipment room. Require all persons without exception to pass through this decontamination unit for entry into and exiting from the Work Area for any purpose. Do not allow parallel routes for entry/ exit.

Personnel decontamination units may be constructed out of wood, metal, or plastic supports as necessary. The units must be completely sealed and water-tight. A minimum of 2 layers of 6-mil polyethylene sheeting shall be installed on all interior walls and floors in the unit. Install all sheeting in the manner indicated for critical and primary barriers in this specification. Install black sheeting as necessary for privacy. Construct each section of the unit with sufficient size to adequately accommodate decontamination and other work activities.

Construct the unit such that traffic out of the Work Area proceeds (1) into the equipment room, (2) through an airlock, (3) into the shower room, (4) through an airlock, (5) into the clean room, and (6) exit the containment system. Install air locks between the clean room, shower room, and equipment room. At a minimum, air-locks must be 24" in length. Install polyethylene sheeting in the air-locks in the same manner as noted above.

Clean Room: Do not allow any asbestos-contaminated material in this room. Access is only from the non-work area (or non-containment areas) or from the shower room after complete decontamination.

Shower Room: Shower room shall contain one or more showers with proper fixtures and hot and cold water supply. Provide an adequate supply of soap, shampoo, and towels for personnel entering the work area. Collect all shower water and filter through the primary, secondary, and final filters. Provide additional protective coverings as needed to protect the building surface from water or humidity damage. Provide water source continuously and during all phases of work.

Flap Doors: Provide flap doors separating each section of the unit. Fabricate from two (2) overlapping sheets with openings a minimum of three feet (3') wide. Configure so that sheeting overlaps adjacent surfaces. Weigh sheets at bottoms as required so that they quickly close after being released. One sheet shall be secured at the top and left side, the other sheet at the top and right side.

Provide an equipment decontamination unit contiguous to the Work Area consisting of a serial arrangement of connected rooms or spaces, constructed in the manners indicated for the personnel decontamination unit. Require all materials, equipment, other contaminated items used during the work, and waste containers to exit through the equipment decontamination unit.

Clean debris and residue from inside of Decontamination Units on a daily basis. Damp wipe or hose down all surfaces after each shift change. If the clean room of the personnel decontamination unit becomes contaminated with asbestos-containing debris, abandon the entire Decontamination Unit and erect a new Decontamination Unit. Use the former clean room as an inner section of the new equipment room.

Post an approximately 20 inch by 14 inch manufactured caution sign at each entrance to the Work Area displaying the following legend with letter sizes and styles of a visibility required by 29 CFR 1926:

LEGEND

DANGER
ASBESTOS
CANCER AND LUNG DISEASE HAZARD
AUTHORIZED PERSONNEL ONLY
RESPIRATORS AND PROTECTIVE CLOTHING ARE REQUIRED
IN THIS AREA

Adequately secure door to entrance of decontamination unit at the completion or each shift.

3.2.15 Containment Locations

Construct and install containment barriers around each work area as coordinated and indicated by the State of New Hampshire and the IH Consultant. Provide access and adequate airflow to all other areas of the building and mechanical areas. Coordinate with the State of New Hampshire the isolation of mechanical equipment to be abated during each phase of the work.

Coordinate with the State of New Hampshire and the IH Consultant (as indicated) for placement of containments within buildings to be abated to facilitate pipe renovations and tie-in's.

All exterior containment barriers and work areas will be placed and demarcated as directed by the State of New Hampshire and the IH Consultant, and in accordance with the final State approved site plan for exterior abatement.

3.3 REMOVAL OF ASBESTOS-CONTAINING MATERIALS
The following are examples of methods to be used and types of ACM to be removed. Contractor shall conduct site work in accordance with site specific scope of work document prepared by IH Consultant for each specific project

3.3.1 Inspections:
Prior to commencing Work of this Section, the affected Work Area(s) must pass an inspection by the IH Consultant to document that sufficient area preparations are completed. Commence with Work of this Section only after authorization is received from the IH Consultant. Maintain all work area isolation and controls during work of this section. The Contractor is responsible for conducting routine and regular inspections of surrounding areas beneath, as applicable, and adjacent to the work areas for containment breeches and leaks. The Contractor is responsible for completing any clean up and decontamination work that is necessitated due to breeches and leaks as determined by the State of New Hampshire and the IH Consultant.

3.3.2 Secondary Barrier:

Over any floors and surfaces beneath ACBM to be removed in the work areas, install as a drop cloth a clear 6-mil sheet plastic in all areas where asbestos removal work is to be carried out. Completely cover floor with sheet plastic. Install Secondary Barrier at the beginning of each work shift. Install only sufficient plastic for work of that shift. Remove Secondary Barrier at end of each work shift or as work in an area is completed. Carefully pack in disposal bags.

3.3.3 Other Hazardous Materials or Conditions

Immediately notify the State of New Hampshire and the IH Consultant, and other contractors at the site of any other hazardous or potentially hazardous materials or conditions encountered during the work.

3.3.4 Wet Removal - General:

Thoroughly wet ACBM to be removed prior to stripping and/or tooling to reduce fiber dispersal into the air. Maintain materials as adequately wetted during Work and as required by NESHAPS. Accomplish wetting by a fine spray (mist) of amended water or removal encapsulant (use amended water for wetting unless otherwise approved by IH Consultant). Saturate material sufficiently to wet to the substrate without causing excess dripping. Allow time for amended water to penetrate material and seams thoroughly. Spray materials and area repeatedly during the work process to maintain adequately wet conditions. Continuously clean and do not allow excessive water to build up containment surfaces."

Where necessary, carefully strip away while simultaneously spraying amended water on the insulation to minimize dispersal of asbestos fibers into the air. Mist work area continuously with amended water whenever necessary to reduce airborne fiber levels. Do not allow ACBM to dry out. As it is removed, simultaneously pack material into appropriate disposal bags. Twist neck of bags, bend over and seal with minimum three wraps of duct tape. Clean outside and move to the equipment decontamination unit for further cleaning and packaging.

3.3.5 Airborne Fiber Counts:

General: Use work procedures that result in 8-hour TWA and STEL airborne fiber counts less than the required limits established by OSHA and as described herein. If airborne fiber counts exceed this level immediately mist the area with amended water to lower fiber counts and revise work practices and engineering controls to maintain level within the required limits.

3.3.6 Gross Removal of Tank, Breeching, Boiler, Pipe and Fitting Insulation:

Coordinate shut-off and lock-out/tag-out of systems with the State. Using adequate wetting cut bands holding preformed insulation, slit jackets at seams, remove, and hand place into a disposal bag. Remove job-molded fitting insulation in chunks and hand-place to the bottom of the waste bag. Spray amended water continuously such that ACM is adequately wetted. Do not drop any material or allow material or water to fall on to the floor or other lower surfaces. Remove any residue on substrate with stiff-bristle-nylon hand brush. Place all waste directly into a waste bag by hand.

Remove fiberglass in contact with the ACM and damaged fiberglass insulation in the general vicinity of damaged ACM as asbestos contaminated waste. All other non-ACM insulation shall be precleaned, sealed in primary barriers and left in place unless otherwise designated by State. Cut back (and remove as asbestos waste) all fiberglass insulation within 4" of ACM insulation removed.

In areas of soil/dirt floor, prior to removal and final preparation work, wet ground/floor areas with amended water. Hand-pick or HEPA vacuum gross debris from all surfaces. Fine cleaning or contaminated soil removal will be completed following abatement of insulation. Once all gross debris has been removed, install negative pressure enclosures and polyethylene sheeting drop cloths.

For boilers to be demolished as specifically indicated by State, fully disassemble and demolish entire boiler as needed to remove ACM. Properly dispose of or recycle all boiler components in accordance with local, state and federal requirements in addition to State demolition specification sections. All assumed ACM and confirmed ACM insulation, gasket, packing, brick, and other ACM within and on the boiler shall be removed using the above stated methods by the Contractor.

For areas to undergo contaminated soil removal, after gross removal and final cleaning of insulation, remove drop cloths and ground/floor polyethylene sheeting in areas of soil contamination. Remove all visible debris to a minimum depth of 3" and lightly rake surface while conducting misting operations. Start from furthest point (away from decontamination unit) and do not track debris or walk from dirty areas to newly removed areas. Then inspect and rake through remaining soil areas and remove any debris. Continue process until no visible debris is present or can be brought easily to the surface. All soil generated by this process and debris will be handled, packaged, and disposed of as ACM waste.

3.3.7 Glovebag Removal of Pipe and Pipe Fitting Insulation:

Glovebags shall be used to remove pipe and pipe fitting insulation within negative pressure enclosures in strict accordance with 29 CFR 1926.1101 (OSHA) and other applicable regulations. Pre-clean all work areas prior to conducting removal or installation of negative pressure enclosures and polyethylene sheeting drop cloths under all pipes to be abated and along all walkways.

In areas of soil/dirt floor, prior to removal and final preparation work, wet ground/floor areas with amended water. Hand-pick or HEPA vacuum gross debris from all surfaces. Fine cleaning or contaminated soil removal will be completed following abatement of pipe insulation as indicated below. Once all gross debris has been removed, install negative pressure enclosures and polyethylene sheeting drop cloths.

Once completely sealed around the pipe to be worked on, inspect glovebag visually and using smoke testing as needed. Using adequate wetting cut bands holding preformed insulation, slit jackets at seams, remove, and hand place in a disposal bag or bottom of glovebag as applicable. Provide dedicated water supply to each glovebag during the entire removal and cleaning operation within the glovebag. Remove job-molded fitting insulation in chunks and hand place to the bottom of the glovebag. Spray amended water continuously such that ACM is adequately wetted. Do not drop any material or allow material or water to fall out of the glovebag or to fall to the floor. Remove any residue on pipe or fitting with stiff-bristle-nylon hand brush. Once all cleaning is complete, twist the glovebag with the debris at the bottom of the glovebag and seal with duct tape. Remove the glovebag, bend the top over, and then reseal the neck with duct tape.

3.3.8 Gross Removal of Ceiling Troweled on Surfacing Material

Spray surfacing material with a mist of amended water. Allow amended water to saturate material to substrate. With a second worker holding a waste bag below the area to be worked on, remove troweled on ceiling surfacing material in chunks and hand place into a disposal bag. Spray amended waster continuously such that ACM is adequately wetted. Do not drop any material or allow material or water to fall on to the floor or other lower surfaces. Remove any residue on substrate with stiff bristle nylon hand brush. Again, place all waste directly into a waste bag. Install wet wrap over all remaining ACBM edges.

Fully clean all dust and debris in the work area, including but not limited to suspect debris, and other dust. Horizontal surface areas immediately surrounding the troweled on ceiling surfacing material removal areas and

all areas where ACBM is and was present shall be cleaned. Use wet wiping and HEPA vacuums to conduct the cleaning. Do not cause visible emission.

3.3.9 Roofing Materials:

Coordinate with State and other Contractors at the site as applicable for phasing and work area delineation. All ACM roof (asphalt products, flashings, caulk, and sealants) work will be completed in accordance with current State requirements in addition to this specification and federal requirements. The ACM to be removed will be adequately wetted. Install critical barriers, consisting of 6-mil polyethylene sheeting, over all roof top ducts, vents or other openings in the work area. The ACM will be removed using hand tools, wetting, and, as deemed necessary by the Asbestos Contract, HEPA-equipped saws.

The Contractor shall install barrier tape and otherwise properly demarcated the work site areas to prevent unauthorized access in accordance with 29 CFR 1926.1101. Employee and/or general contracting operations in the surrounding areas will also be restricted as deemed necessary by the OSHA competent persons on site. The Contractor will conduct necessary inspections to ensure safe working conditions and install necessary supports, engineering controls and fall protection to allow for the safe removal of the ACM.

The ACM and associated debris generated during the work shall be either placed into proper asbestos waste bags or sealed and labeled in two layers of 6-mil polyethylene sheeting. Care will be used to cover rough edges and prevent tearing of waste packaging. Properly packaged waste will be transported by hand, lowered to the ground, and placed within the waste dumpster to be provided by the Contractor adjacent to the work area. In the event the waste chutes are used for roofing materials, the chute system will be air-tight and chute directly to an ACM waste dumpster which is lined with a minimum of 2 layers of 10-mil polyethylene sheeting, labeled, and seal with duct tape and spray adhesives, as needed.

Coordinate daily removal schedules with State and other Contractors at the site, as applicable, such that the total quantity and areas of removal each day are scheduled for re-roofing such that the building remains weather tight. Provide temporary sealing and covers as required in the event of rain and as necessary to prevent water damages to the roof substrate and building. The IH Consultant will be providing representative perimeter area air monitoring during exterior ACM removal work. The acceptable perimeter air monitoring result is 0.01 f/cc.

3.3.10 Exterior Asbestos Waste Disposal Site:

Complete removal of asbestos waste and asbestos contaminated material and soils in accordance with current State regulations and in accordance with the NH Department of Environmental Services approved ADS work plan for the work site. As applicable, coordinate all work with the Heavy Equipment Contractor and other operators at the site to be provided for separate from this Scope of Services. Work is to be performed by the licensed asbestos disposal site Contractor and certified asbestos disposal site workers. In accordance with the State–approved Site Specific ADS Work Plan Contractor shall complete all ADS work plan preparation and submittals, work area isolation, demarcation, establishment of work zones, permitting, notifications, recordkeeping, asbestos site work and Contractor shall at all times use appropriate engineering controls, wetting, appropriate ground coverings, and proper personnel and equipment decontamination. Contractor shall ensure no asbestos is released into the environment during or as a result of work operations. Contractor shall conduct asbestos related work as necessary to achieve the clearance criteria set forth for the work site in the State approved ADS work plan.

3.4 INITIAL CLEAN-UP WORK:

Once gross removal is completed, clean all visible debris on the substrate and primary barrier using HEPA vacuums, scrub brushes, and wet-wiping. Do not allow materials to dry out. As material is removed and clean-up is completed, simultaneously pack wetted material into proper waste disposal bags or package as noted above. For waste bags, twist the neck of the bags, bend the neck over, and seal with a minimum of three wraps of duct tape. Clean the outside of the bags with wet wiping and HEPA vacuum and move to the wash down station in the Equipment Decontamination Unit. Once washed clean, place the clean disposal bags into a second asbestos disposal bag and seal the bag in the same manner as the first. Bags will then be transported from the work area to the asbestos waste dumpster. Note: Waste dumpster must remain labeled and locked at all times when loading is complete or idle.

Label waste dumpsters in accordance with 29 CFR 1910.145: Legend

DANGER
ASBESTOS DUST HAZARD
CANCER & LUNG DISEASE HAZARD
AUTHORIZED PERSONNEL ONLY

Change all filters on the pressure differential systems and properly dispose of as asbestos waste. Maintain adequate filtration and pressure differential during all filter changes.

3.5 PROJECT DECONTAMINATION

General: Complete decontamination of the Work Area following asbestos abatement in accordance with regulatory requirements and industry standards.

Work of This Section includes the decontamination of air in the Work Area which has been, or may have been, contaminated by the elevated airborne asbestos fiber levels generated during abatement activities, or which may previously have had elevated fiber levels due to friable asbestos-containing materials in the space.

Work of This Section includes cleaning, decontamination, and removal of temporary facilities installed prior to abatement work, including:

- Primary and Critical Barriers
- Decontamination Unit
- Pressure Differential System

Work of This Section includes the cleaning, and decontamination of all surfaces (ceiling, walls, floors, and Contractor equipment and materials) of the Work Area, and all other furniture or equipment in the Work Area.

3.5.1 Start of Work:

Previous Work: During completion of the asbestos abatement work specified in other sections, all Secondary Barriers of polyethylene sheeting will have been removed and disposed of along with any gross debris generated by the asbestos abatement work.

Start of Work: Work of this section begins with the cleaning of the Primary Barrier. At start of work the following will be in place and fully operational: primary barriers, critical barriers, decontamination units, and pressure differential/air filtration systems.

3.5.2 First Cleaning:

First Cleaning: Carry out a first cleaning of all surfaces of the work area including items of remaining sheeting, tools, scaffolding and/or staging by use of damp-cleaning and mopping, and/or a High Efficiency Particulate Air (HEPA) filtered vacuum. (Note: A HEPA vacuum may fail if used with wet material.) Do not perform dry dusting or dry sweeping. Use each surface of a cleaning cloth one time only and then dispose of as contaminated waste. Continue this cleaning until there is no visible debris from removed materials or residue on plastic sheeting or other surfaces.

Provide adequate lighting on all surfaces being cleaned, sufficient number of ladders as applicable, sufficient number of personnel misting the area as needed, and adequate numbers of HEPA vacuum equipment.

Contractor's Testing: At the completion of the above cleaning visually inspect all surfaces. Reclean if any dust, debris, etc. is found. Inspect the area and if any debris or dust is found, repeat the cleaning. Continue this process until no debris dust or other material is found while sweeping of all surfaces with forced-air equipment.

Remove all filters in Air Handling System(s) and dispose of as asbestos-containing waste in accordance with specification requirements. Use oscillating fans as necessary to assure circulation of air in all parts of work areas during this period. Maintain Pressure Differential System in operation for adequate settling period.

3.5.3 Second and Third Cleaning:

Second Cleaning: Carry out a second cleaning of all surfaces in the work area in the same manner as the first cleaning. Remove all drop-cloth layers of polyethylene sheeting on the floor leaving one layer of the primary barrier remaining. Clean newly exposed areas as outlined above. Third Cleaning: Carry out a third cleaning of all surfaces in the same manner as the first cleaning. Change filters on pressure differential systems and properly dispose of as asbestos waste. Allow for sufficient settling period prior to clearance testing. Complete additional cleaning as required.

3.5.4 Visual Inspection:

Accompanied by the IH Consultant, perform a complete visual inspection of the entire Work Area including: all surfaces, ceiling, walls, floor, decontamination unit, all plastic sheeting, seals over ventilation openings, doorways, windows, and other openings; look for debris from any sources, residue on surfaces, dust or other matter. During visual inspection sweep entire work area including walls, ceilings, ledges, floors, and other surfaces in the room with exhaust from forced air equipment (leaf blower with approximately 1 horsepower electric motor or equivalent). If any debris, residue, dust or other matter is found repeat final cleaning and continue decontamination procedure from that point. Visual inspection is complete when the area is visually clean, and if after sweeping of all surfaces with leaf blower, no debris, residue, dust or other material is found.

Provide adequate lighting during the visual inspection. Provide ladders, scaffolding, and lifts as required to provide access to all surfaces in the area to be subjected to visual inspection. Encapsulation of substrate: After successful visual inspection, perform encapsulation of substrate as directed. Only apply encapsulant materials that are compatible to any replacement materials to be installed. Owner, General Contractor, and IH Consultant must approve all encapsulants to be applied. Maintain Pressure Differential System in operation during encapsulation work.

3.5.5 Clearance Testing:

Air clearance sampling will be conducted by the IH Consultant in strict accordance with State of New Hampshire regulations and as required below. Air clearance testing will not be completed until the work area has adequate air changes and surfaces have had sufficient time to dry.

3.5.6 Removal of Work Area Isolation:

Only after all requirements of this section and the work area clearance sections have been met and verified by the IH Consultant. Remove all Primary Barrier sheeting and equipment decontamination unit(s), leaving only: critical barriers, personnel decontamination unit, and operational pressure differential/air filtration systems. Properly dispose of sheeting as asbestos-waste. Use care to prevent damage to building surfaces and materials during tear down. All damages to surfaces and materials shall be repaired by Contractor unless otherwise noted and agreed to in writing by the State of New Hampshire.

Re-inspect all work area surfaces and adjacent areas for any dust and debris that may have originated from the work. With critical barriers and pressure differential/air filtration systems still in place and in operation, clean all surfaces using HEPA-vacuums and wet-wiping as required and until all surfaces are clean of visible debris. Shut down and remove the Pressure Differential System. Seal HEPA filtered fan units, HEPA vacuums and similar equipment with 6 mil polyethylene sheet and duct tape to form a tight seal at intake end before being moved from Work Area.

Remove personnel decontamination unit. Remove the critical barriers and properly dispose of as asbestos-waste. Remove any small quantities of residual material found upon removal of critical barrier plastic sheeting with wet wiping, HEPA filtered vacuum cleaners and local area protection.

If ACBM or suspect ACBM debris is encountered during containment tear down, the entire area affected shall be decontaminated as specified herein using newly installed critical barriers and negative pressure. Once fully cleaned, remove all equipment, materials, debris from the work site. Dispose of all asbestos-containing waste material as specified herein.

3.5.7 Final Cleaning:

General: Complete work upon completion of Removal of Work Area Isolation as required above. This cleaning is now being applied to existing room conditions. Take care to avoid water marks or other damages. Wet-wipe and HEPA vacuum surfaces in the work area until clean and free from dust and debris. Complete final cleaning in accordance with the project close-out requirements.

3.6 WORK AREA CLEARANCE

3.6.1 Contractor Release Criteria:

The Work Area is cleared when the Work Area meets the visual inspection criteria described in the project decontamination sections of this specification and airborne asbestos structure concentrations have been reduced to the level specified below.

3.6.2 Air Monitoring:

To determine if the elevated airborne asbestos structure concentration encountered during abatement operations has been reduced to the specified level, the IH Consultant will secure samples and analyze them according to the procedures stated herein. Contractor must provide at least 48 hours advance notice to the IH Consultant for any clearance testing or other inspections required, or for any changes to existing schedules.

3.6.3 Analytical Method:

The number and volume of air samples taken will be as determined by the Consultant and will be in accordance with the applicable current State and Federal regulations. Sample volumes given may vary depending upon the analytical instruments used. Phase Contrast Microscopy will be used for analysis of clearance samples collected. The State of New Hampshire reserves the right to collect and analyze TEM clearance samples. TEM clearance methods and clearance criteria will be as stated in 40 CFR Part 763 (AHERA).

3.6.4 Laboratory Testing:

The services of a testing laboratory will be employed by the State of New Hampshire to perform laboratory analysis of the air samples. A microscope and technician will be set up at the job site, or samples will be sent daily by overnight mail, so that verbal reports on air samples can be obtained within 24 hours (Monday through Fridays).

Air clearance samples will be collected by the IH Consultant in all containment areas using aggressive sampling techniques in accordance with State of New Hampshire regulations.

3.6.6 PCM Air Clearance Testing:

After completion of all cleaning work, clearance samples will be collected inside the Work Area and analyzed as described below. Each sample will be collected on a 25mm sample cassette with a nonconductive extension cowl and 0.8 micron pore size, mixed cellulose ester filter media. The detection limit for final clearance samples will be at least 0.005 fibers per cubic centimeter (f/cc).

Analysis: Fibers on each filter will be measured using the NIOSH Method 7400 entitled "Fibers" published in the NIOSH Manual of Analytical Methods, 3rd Edition, Second Supplement, August 1987. Fibers referred to in this section include fibers regardless of composition as counted by the phase contrast microscopy method used.

For work areas requiring PCM clearance testing only: When every Work Area sample collected is at or below the 0.01 f/cc then work will proceed including remaining work area clearance work and close-out requirements. A minimum of 2 samples will be collected in each Work Area. If any sample is above 0.01 f/cc then the decontamination is incomplete and re-cleaning per the specification is required. The Contractor shall be responsible for all costs for each subsequent and additional round of PCM analysis required until the clearance criteria is met.

Release Criteria: Decontamination of Work Areas requiring PCM air clearance testing only is complete when every Work Area sample collected is at or below the 0.01 f/cc. If any sample is above 0.01 f/cc then the decontamination is incomplete and re-cleaning per this specification is required. The Contractor shall be responsible for all costs for each subsequent and additional round of PCM analysis required until the clearance criteria is met.

3.6.7 TEM Air Clearance Testing:

As deemed necessary by the State of New Hampshire, TEM air clearance testing will be completed in the work area after completion of all cleaning work; a minimum of 13 samples will be taken and analyzed as follows:

- Samples will be collected at 9.9 liters per minute (LPM);
- A minimum of 5 samples inside of the work area and 5 samples outside of the work area will be collected;
- A minimum of 1200 liters of air will be collected for each sample, and samples will be collected simultaneously.
- A total of 3 blanks will be used in accordance with AHERA for each work area clearance.

Each sample will be collected on a 25mm sample cassette with a nonconductive extension cowl and 0.45 micron pore size, mixed cellulose ester filter media. Analysis will be performed using the analysis method set forth in the AHERA Regulation 40 CFR Part 763 Appendix A. Asbestos Structures referred to in this Section include asbestos fibers, bundles, clusters or matrices, as defined by method of analysis.

Release Criteria: Decontamination of the work site is complete if either of the following condition is met:

Work Area Samples are below filter background levels:

- All Work Area sample volumes are greater than 1,199 liters for a 25 mm. sampling cassette.
- The average concentration of asbestos on the five Work Area Samples does not exceed the filter background level of 70 structures per square millimeter of filter area.

If these conditions are not met then the decontamination is incomplete and the cleaning procedures shall be repeated.

The Contractor shall be responsible for all costs for each subsequent and additional round of TEM analysis required until the clearance criteria is met. Note, if a work area fails to meet the clearance criteria and in the event that the Contractor requests (Contractor must notify the State of New Hampshire and the IH Consultant in writing within 24 hours of the clearance analysis) the use of the Z-test clearance criteria in accordance with 40 CFR Part 763, then the Contractor will be responsible for the costs for analyzing the 5 outside samples and 3 blanks in the event that the results Z-Test Method still fails to meet the clearance criteria. All such costs shall be deducted by the State of New Hampshire from final payment(s) to the Contractor.

Termination of Analysis: if the arithmetic mean (average) asbestos concentration on the blank filters (if analyzed) exceeds 70 structures per square millimeter of filter area the analysis will cease and new samples collected.

3.7 DISPOSAL OF ASBESTOS-CONTAINING WASTE MATERIAL

3.7.1 General:

Asbestos-containing waste materials and debris which is packaged in accordance with the provisions of this Specification may be disposed of at designated sanitary landfills when certain precautions are taken not limited to: notice to appropriate EPA Regional Offices and notice and permit from appropriate State and local agencies are completed.

Waste disposal site(s) must be properly licensed, permitted, and qualified to accept and handle ACM waste in accordance with all applicable local, State, and federal codes and regulations.

3.7.2 Disposal:

Comply with the following sections during all phases of this work: worker protection requirements and respiratory protection requirements. All waste is to be hauled by a waste hauler with all required licenses form all state and local authority with jurisdiction.

Carefully load all containerized asbestos-containing waste material on sealed and lined trucks or other appropriate vehicles for transport. Exercise care before and during transport, to insure that no unauthorized persons have access to the materials.

All materials are to be properly containerized in one of the following: (1) Two 6 mil disposal bags, or (2) Two 6 mil disposal bags and a fiberboard drum, or (3) as otherwise indicated in the final approved site plan for exterior work. Do not store disposal bagged material outside of the work area. Take bags or drums from the work area directly to a sealed truck or dumpster. Glovebags shall not be used as waste disposal bags.

The State of New Hampshire will provide a designated location for placement of proper waste dumpster. Waste dumpster(s) will not be allowed to remain at the job site for longer than 72 hours upon completion of each phase (work area) of work by the Contractor. Do not transport disposal bagged materials on open trucks. Label drums with same warning labels as bags. Uncontaminated drums may be reused. Treat drums that have been contaminated as asbestos-containing waste and dispose of in accordance with this specification. During loading and unloading, properly demarcate and label dumpster on all 4 sides. Dumpster shall be sealed, labeled and locked during all non-loading periods. Line waste dumpster with a minimum of 2 layers of 6 mil polyethylene sheeting and such that a minimum total of 20 mils of lining exists (including waste bags).

In accordance with NESHAPs and State regulations, advise the landfill operator or processor in advance of transport, of the quantity of material to be delivered. At disposal site unload containerized waste: At a disposal site, sealed plastic bags may be carefully unloaded from the truck. If bags are broken or damaged, leave in truck and clean entire truck and contents using procedures set forth herein. Retain receipts from landfill or processor for materials disposed of. At completion of hauling and disposal of each load submit copy of waste manifest, chain of custody form, and landfill receipt to the State of New Hampshire and the IH Consultant. Properly package, transport and dispose (or recycle) all any hazardous waste generated during the abatement work in accordance with the most current local, State and federal rules and regulations. Coordinate with the State of New Hampshire and the State of New Hampshire's representatives for existing EPA hazardous waste generator number or obtain new identified number(s) in accordance with current regulations.

Provide copy of waste shipment record (complete to date) to the State of New Hampshire and the IH Consultant prior to removing waste from the site. Provide final copy of completed waste shipment record to the State of New Hampshire and the IH Consultant within 30 days of removing waste from the site.

3.8 RESTORATION AND REPLACEMENT

Conduct restoration and replacement work in accordance with the Contract Documents and provide certification that all materials used in the construction, restoration, renovation and other work are asbestos-free. Repair all damaged surfaces, tape damage, adhesive and other damages resulting from the work or other damages caused by the Contractor as indicated by the State of New Hampshire to meet or exceed existing conditions, and as otherwise stated in the Contract Documents.

3.9 ASBESTOS PROJECT CLOSEOUT

Before requesting inspection for certification of Substantial Completion, complete the following: complete all abatement and decontamination, interim or ongoing submittal requirements, final air clearance requirements, and removal of containment barriers.

Before requesting final inspection for Final Acceptance, complete the following: (1) Submit Closeout Submittals and (2) complete any remaining punch-list items. The State of New Hampshire will reinspect the Work upon

receipt of notice that the Work, including inspection list items from earlier inspections, has been completed, except items whose completion has been delayed because of circumstances acceptable to the State of New Hampshire and the IH Consultant.

Record Specifications: Maintain one complete copy of the Specification, including addenda, and one copy of other written construction documents such as Change Orders and modifications issued in printed form during construction. Mark these documents to show substantial variations in actual work performed in comparison with the text of the Specifications and modifications.

Execution:

General: General cleaning during construction is required by the General Conditions and included in Section "Temporary Facilities". Complete all final, general house-keeping and cleaning in the work areas in accordance with such activities in accordance with 29 CFR Part 1910 and 29 CFR Part 1926, as applicable. Remove temporary protection and facilities installed for protection or security of the work during construction. Comply with regulations of authorities having jurisdiction and safety standards for cleaning. Do not burn waste materials. Do not bury debris or excess materials on the State of New Hampshire's property. Do not discharge volatile, harmful or dangerous materials into drainage systems. Remove waste materials from the site and dispose of in a lawful manner. Where extra materials of value remaining after completion of associated Work have become the State of New Hampshire's property, arrange for disposition of these materials as directed.

Conduct all other related work, non-asbestos work, and general construction activity in accordance with the Contractor Documents.

EXHIBIT B

The Contractor agrees to provide NH State Agencies with the services indicated in the Exhibit A of this agreement at the prices as listed below.

INVOICE
Itemized invoices must include the following:

Date work was done
Brief description of work done
Cost of job by Contract item Numbers, as provided.
Location of work

Itemized invoices shall be submitted in duplicate after the delivery of job/services to the individual agency that work was performed. Each agency will make payment through the normal state payment process, which is up to 30 days following the receipt of an approved invoice.

SCHEDULE OF RATES:

MATERIALS

RATES FOR MATERIALS WILL BE ONE PRICE FOR ALL TEN COUNTIES

ALL RATES FOR MATERIALS ARE INCLUSIVE RATES THAT INCLUDE **ALL** PERSONAL PROTECTIVE EQUIPMENT / SUPPLIES. ALL EQUIPMENT AND SUPPLIES NECESSARY TO COMPLETE THE REMOVAL AS SPECIFIED, PACKAGING, STORAGE AND PROPER DISPOSAL OF THE ACM.

PLEASE NOTE SECTIONS 2.2, 2.3 AND 2.4 FOR A PARTIAL LIST OF ITEMS THE VENDOR SHOULD INCLUDE IN THE RATES FOR MATERIAL

PERSONNEL

PLEASE NOTE THAT AFTER HOURS AND WEEKENDS/HOLIDAYS WILL BE REQUIRED
ALL RATES WILL START WHEN PERSONNEL ARRIVES AT THE WORK SITE

ALL RATES WILL STOP WHEN PERSONNEL LEAVES THE WORK SITE

ALL RATES ARE INCLUSIVE RATES THAT INCLUDE LABOR, MILEAGE, PARKING, TOLLS TRANSPORTATION, LODGING AND MEALS

THE PERSONNEL SHALL BE REQUIRED TO BRING THE PROPER AND BASIC TOOLS AND SUPPLIES APPLICABLE WHEN FIRST ARRIVING AT THE WORK SITE.

THE PERSONNEL SHALL OBTAIN ANY SUPPLIES NEEDED TO COMPLETE THE JOB AT THE MOST EXPEDITIOUS AND COST EFFECTIVE MANNER.

ENVIROVANTAGE	COOS	GRAFTON	CARROLL	SULLIVAN	MERRIMACK
	PRICE PER	PRICE PER	PRICE PER	PRICE PER	PRICE PER
PROJECT MANAGER	HOUR	HOUR	HOUR	HOUR	HOUR
7:00AM - 4:00 PM M-F	15.00	15.00	15.00	15.00	15.00
WEEKENDS AND HOLIDAYS	15.00	15.00	15.00	15.00	15.00
ABATEMENT WORKER					
7:00AM - 4:00PM M-F	70.00	70.00	70.00	70.00	70.00
WEEKENDS AND HOLIDAYS	55.00	55.00	55.00	55.00	55.00
	BELKNAP	**STRAFFORD**	**CHESHIRE**	**HILLSBOROUGH**	**ROCKINGHAM**
	PRICE PER	PRICE PER	PRICE PER	PRICE PER	PRICE PER
PROJECT MANAGER	HOUR	HOUR	HOUR	HOUR	HOUR
7:00AM - 4:00 PM M-F	15.00	15.00	15.00	15.00	15.00
WEEKENDS AND HOLIDAYS	15.00	15.00	15.00	15.00	15.00
ABATEMENT WORKER					
7:00AM - 4:00PM M-F	70.00	70.00	70.00	77.00	70.00
WEEKENDS AND HOLIDAYS	55.00	55.00	55.00	55.00	55.00
MATERIALS					
PIPE-(per sq ft)					
AIRCELL <6"	$0.00				
>6"	$0.00				
CAL/MAG <6"	$0.00				
>6"	$0.00				
PLASTER(per sq ft)					
CEILING: WOOD UNDER	$1.00				
METAL UNDER	$1.00				
WALLS: WOOD UNDER	$1.00				
METAL UNDER	$1.00				
FLOOR TILE (per sq ft)					
UNDER 1000 SQ FT					
CONCRETE UNDER	$0.00				
WOOD UNDER	$0.00				
REMOVE CARPET	$0.00				
ENVIROVANTAGE					
FLOOR TILE (per sq ft)					
1000 SQ FT OR MORE	$0.00				
CONCRETE UNDER	$0.00				
WOOD UNDER	$0.00				
REMOVE CARPET	$0.00				
FLOOR TILE-MASTIC					
UNDER 1000 SQ FT					
CONCRETE UNDER	$0.00				
WOOD UNDER	$0.00				
REMOVE CARPET	$0.00				
FLOOR TILE-MAST					
1000 SQ FT OR MORE					
CONCRETE UNDER	$1.00				
WOOD UNDER	$1.00				
REMOVE CARPET	$0.00				

VINYL FLOOR					
UNDER 1000 SQ FT					
CONCRETE UNDER	$0.00				
WOOD UNDER	$0.00				
REMOVE CARPET	$0.00				
1000 SQ FT OR MORE					
CONCRETE UNDER	$0.00				
WOOD UNDER	$0.00				
REMOVE CARPET	$0.00				
VINYL FLOOR-MASTIC					
UNDER 1000 SQ FT					
CONCRETE UNDER	$0.00				
WOOD UNDER	$0.00				
REMOVE CARPET	$0.00				
1000 SQ FT OR MORE					
CONCRETE UNDER	$0.00				
WOOD UNDER	$0.00				
REMOVE CARPET	$0.00				
GYPSUM/DRYWALL					
per sq ft CEILINGS	$0.50				
per sq ft WALLS	$0.50				
TRANSITE (per sq ft)	$0.00				
CEILING TILE (per sq ft)					
SUSPENDED	$0.00				
FIXED	$0.00				
FIXED WITH GLUE	$0.00				
INSULATION BRD	$0.00				
(per sq ft)					
VINYL COVE BASE					
per linear ft					
WITHOUT MASTIC	$0.00				
WITH MASTIC	$0.00				
CAULKING COMPOUND	$0.00				
per linear ft					
GLAZING COMPOUND	$0.00				
per linear ft					
ASBEST SHINGLE SIDING					
per sq ft					
ASBEST SHINGLE SIDING	$0.00				
ASBEST PAPER UNDER	$0.00				
ASPHALT ROOF					
UNDER 1000 SQ FT					
SHINGLE	$0.00				
ROLL ROOFING	$0.00				
ASPHALT BUILD UP	$0.00				
ASPH BLD UP W/STONE	$0.00				
1000 SQ FT OR MORE					
SHINGLE	$0.50				
ROLL ROOFING	$1.00				
ASPHALT BUILD UP	$1.00				
ASPH BLD UP W/STONE	$1.00				

SPECIAL PROVISIONS

Delete Paragraph 14.1.1 and substitute the following: "comprehensive general liability insurance against all claims of bodily injury, death or property damage, in amounts of not less than $250,000 per claim and $1,000,000 per incident and no less than $1,000,000 in excess/umbrella liability each occurrence; and".

There are no other special provisions of this Contract.