

REQUEST FOR PROPOSAL

Special School District No.1
Request for Proposals # RFP 26-03
INDUSTRIAL HYGIENE CONSULTING SERVICES
Proposals Received 1:00 PM, local time, Thursday December 11, 2025
Virtual Proposal Delivery

PROPOSALS FOR INDUSTRIAL HYGIENE CONSULTING SERVICES

A complete set of Proposal Documents will be available Monday, November 10, 2025, at https://www.mpschools.org/departments/finance/procurement

A statement of Qualifications (SOQ) package must be submitted to Minneapolis Public Schools (MPS) with the proposals. Firms currently under contract with MPS or who have an approved SOQ on file with the District need to provide updated information only. If a SOQ is not submitted, the bid will be returned to the consultant. The SOQ package may be obtained at any time by contacting Diedra Geye at diedra.geye@mpls.k12.mn.us

Proposals will be received via email to RFX@mpls.k12.mn.us and diedra.geye@mpls.k12.mn.us until 1:00 P.M. CST Thursday, December 11, 2025 at which time they will be recorded and forwarded for review. All proposals received after that time will not be considered. The proposer assumes the risk of any delay in the receipt of the proposal. The proposer assumes all responsibility for having their proposal delivered by the time specified.

Special School District No. 1 reserves the right to award this proposal in part or in whole to a single supplier or to reject any or all proposals if it is in the best interest of the School District to do so. Proposals must be typewritten or handwritten and include handwritten signature in ink.

Special School District No. 1 is an Equal Opportunity School District.

REQUEST FOR PROPOSALS (RFP 26-03)

Special School District No. 1 Industrial Hygiene Consulting Services

Enclosed are the project documents for the Minneapolis Public Schools provision of services for Industrial Hygiene Consulting during 2026-2028.

TABLE OF CONTENTS:

- Statement of Qualifications (Submit)
- Industrial Hygiene Consultant Contract

Contract Exhibit A – Specification for Industrial Hygiene Consulting Services CS-06-15

Contract Exhibit B - Consultant's Insurance

Contract **Exhibit C** – MPS Asbestos Abatement Project Specification (CN-0701)

Contract **Exhibit D** – Annual Fee Schedule for Industrial Hygiene and Project Air Monitoring/Surveillance Services **(Submit)**

• Vendor Registration Form (Submit)

Please review the above items to ensure understanding of the scope of services MPS will expect your firm to consistently provide during all projects and the items of specification compliance and enforcement your firm will be expected to supervise.

Industrial Hygiene Consulting firms currently under contract with MPS are required to review all the above information. Updated Statement of Qualifications information is to be submitted with your proposal. New firms are to submit **all** responses to the Statement of Qualifications (SOQ) and are to present them in the sequential order found within the SOQ. If an SOQ is not submitted, the proposal will be returned.

For further information contact Diedra Geye at (612) 668-0055

STATEMENT OF QUALIFICATIONS

Special School District No. 1 Statement of Qualifications Industrial Hygiene Consultant

Submit Statements To:
Department of Facilities
Planning, Design and Construction
1250 West Broadway Avenue
Minneapolis, MN 55411

For further information contact Diedra Geye at (612) 668-0055

MINNEAPOLIS PUBLIC SCHOOLS INDUSTRIAL HYGIENE CONSULTANT STATEMENT OF QUALIFICATIONS REQUEST FOR PROPOSALS 26-06 REVISED OCTOBER 20, 2004

Submit	То:	Minneapolis Public Schools – CPCM					
Addres	s:	1250 West Broadway Avenue					
		Minneapolis, MN 55411					
Submit	ted By:						
Addres	s:						
Office:							
Phone:							
Type of	f Organ	Corporation Partnership Individual Joint Venture Other					
1.		Provide the address and telephone number of your local office belo	w:				
		Phone No.: ()					
	How m	nany years has your organization been in business under its pre	sent business				
	<u></u> а.	Under what other or former names has your organization operated?	?				

If a corporation, answer the following:

3.

	a.	Date of incorporation:
	b.	State of incorporation:
	C.	President's name:
	d.	Secretary's name:
4.	If an i	ndividual or a partnership, answer the following:
	a.	Date of organization:
	b.	General or limited partnership:
	c.	Name and address of all partners:
5.	If othe	er than a corporation or partnership, describe organization and name the principals:
	Princi	pals:
6.	List tl perso	ne type and percent of services normally provided by your organization's own nnel:
7.	This v	separate attachment, provide an outline of your organization's diversity program. vill include how your organization will involve minority/woman business enterprises, BE) individuals or partner with M/WBE firms or another form of Outreach.

8.

As a separate attachment, provide a Statement of Qualifications for analytical laboratory services your organization provides related to lead paint analysis. If your firm intends to

subcontract these services, provide a Statement of Qualifications from the appropriate analytical firm. The submittal is to include certifications and performance/proficiency ratings issued to the laboratory and/or laboratory personnel from the National Lead Laboratory Accreditation (NLLA) program administrated through AIHA or American Association of Laboratory Accreditation (A2LA) as well as a summary of the quality control procedures and any documents demonstrating successful quality control participation programs. MPS acceptable methods of analyses are EPA SW-846 Method No. 6010A, Revision 1, July 1992: Inductively Coupled Plasma Atomic Emission Spectroscopy and EPA SW-846 No. 7420, Revision 0, September 1986: Flame Atomic Absorption.

- 9. As a separate attachment, provide a Statement of Qualifications for analytical laboratory services your organization provides related to Phase Contrast Microscopy (PCM), and Polarized Light Microscopy (PLM). The submittal is to include the certifications and performance/proficiency ratings issued to your laboratory and/or laboratory personnel from NIOSH (or a NIOSH 582E), AIHA, and NVLAP as well as a summary of the quality control procedures and any documents demonstrating successful quality control participation programs.
- 10. As a separate attachment, provide a Statement of Qualifications for any analytical laboratory your firm intends to utilize for **subcontracted services** related to Polarized Light Microscopy (PLM). The submittal is to include the certifications and performance ratings issued to the laboratory and/or laboratory personnel from AIHA, and NVLAP as well as a summary of the quality control procedures and any documents demonstrating successful quality control participation programs.
- 11. As a separate attachment, provide copies of current asbestos and lead related EPA and Minnesota certifications for all your organization's personnel. These should include, at a minimum, the appropriate certifications and hardcards for Contractor, Inspector/Management Planner, Contractor/Supervisor, Project Designer, Lead Inspector and Lead Risk Assessor. Additionally, provide copies of any supervisory or field personnel's NIOSH 582 or 582E certifications and proof of completion of a Minnesota 2 day asbestos air-sampling course.
- **12.** Has your organization ever failed to complete any awarded work? If yes, describe when, where and why:
- **13.** Has your organization ever had to pay any contractual penalties for breach of or non-compliance with contract specifications, such as overruns of completion dates or liquidated damages? If yes, describe when, where and why:
- 14. Within the last five (5) years, has any officer, principal or partner or your organization ever been an officer, principal or partner of another organization when it failed to complete an asbestos abatement contract? If yes, attach a separate, detailed explanation.

- 15. Have any legal proceedings, lawsuits or claims ever been filed or levied against your organization, its principals or any past or present employee for asbestos-related activities? If yes, attach a separate and detailed description.
- 16. In the last 5 years, has your organization had any citations or enforcement actions levied against it by any federal government agency US Environmental Protection Agency (EPA), Occupational Safety and Health Administration (OSHA), US Department of Transportation (DOT) for violations of their regulations related to asbestos abatement practices and procedures, occupational exposures of asbestos to employees, containerization and transportation of asbestos-containing waste material (ACWM) or disposal of ACWM? If yes, identify the name and location of the project, owner of the project facility, date(s) of violation(s), and the resolution of the allegations or infractions.
- 17. In the last 5 years, has your organization had any citations or enforcement actions levied against it by the Minnesota Department of Health Asbestos Abatement Unit (MDH), Minnesota Department of Labor, Occupational Safety and Health Administration (MNOSHA), Minnesota Pollution Control Agency Division of Air Quality (MPCA-DAQ), or the Minnesota Department of Transportation (MNDOT) for violations of their regulations or jurisdictional authority related to:
 - **a.** Employee training and certification
 - **b.** Supervision of asbestos abatement work practices and procedures
 - **c.** Application for a Procedural Variance
 - **d.** Inadequate visual inspections before, during and after asbestos abatement projects
 - **e.** Final clearance air monitoring criteria

If yes, on a separate attachment identify the name and location of the project, owner of the project facility, date(s) of violation(s), and the resolution of the allegations or infractions. Also list any pending citations or enforcement actions.

- 18. In the last 5 years, has MDH, MNOSHA, MPCA-DAQ, or MNDOT established any files, records, and/or documents for your organization related to:
 - **a.** Alleged regulatory violations
 - **b.** Issued Letter(s) of Inquiry
 - **c.** Issued Letter(s) of Warning
 - **d.** Issued Notice(s) of Violation
 - e. Issued Stop Work Order(s)
 - f. Resolved regulatory allegations of non-compliance
 - g. Enforcement Actions

If yes, submit copies of those files, records and/or documents and provide additional information as a separate attachment that identifies the name and location of the project, owner of the project facility, date(s) of violation(s), and/or the resolution of the allegations or infractions or pending issues. If your organization indicates herein that no files, records or documents exist with these agencies, Minneapolis Public Schools will directly request verification.

- 19. In the last 5 years, has your organization had any citations or enforcement actions levied against it by any state or local government agency (outside of Minnesota and/or Minneapolis) for violations of their regulations related to asbestos abatement practices and procedures, occupational exposures of asbestos to employees, containerization and transportation of asbestos-containing waste material (ACWM) or disposal of ACWM? If yes, as a separate attachment identify the name and location of the project, owner of the project facility, date(s) of violation(s), and the resolution of the allegations or infractions. Also list any pending citations or enforcement actions.
- 20. As a separate attachment, supply a listing of your organization's equipment inventory for the performance of asbestos abatement project surveillance and air monitoring procedures including high and low volume air sampling pumps, air sampling pump calibration equipment, personal protection equipment, negative pressure differential monitoring equipment, etc.
- 21. As a separate attachment, list any asbestos abatement projects for which your organization is currently conducting project supervision/surveillance and air monitoring services as of the date of this Qualification Statement. Provide the name of the project and/or project facility, owner of the project facility, project architect, contract amount, percentage of completion, your organization's manpower and equipment dedicated to the project, and the scheduled project completion date.
- 22. As a separate attachment, list the asbestos abatement projects in schools for which your organization has provided project supervision/surveillance and air monitoring services during the last two (2) years. Provide the name of the project and/or project facility, owner of the project facility, project architect, abatement contractor, contract amount, date of project completion and the percentage of the work performed by your organization's own employee work force. Submit copies of air monitoring data collected during the performance of the project including, but not limited to, backgrounds (baselines), inside and outside the Work Areas during the project, final clearances and personnel exposure monitoring in compliance with 29 CFR 1926.1101 (OSHA Construction Standard).
- 23. As a separate attachment, list the asbestos abatement project supervision/surveillance and air monitoring experience of the key individuals of your organization.
- **24.** As a separate attachment, describe or provide a copy of your organization's current Employee Training Program.
- **25.** As a separate attachment, provide a copy of your organization's current Respiratory Protection Program.
- **26.** As a separate attachment, describe your organization's Employee Medical Surveillance Program and record keeping procedures.
- **27.** As a separate attachment, provide a copy of your organization's MNOSHA Right to Know Program.

28.	As a separate attachment, provide a copy of your organization's Confined Space Entry Program.
29.	As a separate attachment, provide a copy of your organization's Safety Program.

- **30.** As a separate attachment, provide specimen Certificates of Insurance for all insurance coverages carried by your organization. Please review Minneapolis Public Schools Industrial Hygiene Consulting Specification and Industrial Hygiene Consultant Contract (Exhibit B) for minimum required insurance coverages.
- **31.** As a separate attachment, provide a copy of each Insurance Policy document (complete copy) for each specimen Certificate of Insurance provided.
- **32.** List your organization's Trade References:
- **33.** List your organization's Bank References:

My Commission Expires:

34. As a separate attachment, provide a year-end audited financial statement and a compilation that is current within 90 days of this statement for your organization. Include your latest balance sheet and income statement. Will this organization act as guarantor of the contract for industrial hygiene consulting services?

35.	Dated at							
	this						, 20 <u> </u>	
	Name of Organization:							
	By:	_	Title: _					
36.				being	duly	sworn,	deposes	and
	says that he/she is the				of			
		(-	Γitle)				(Firm)	
	and that answers to the attached are true and co		uestions and	all sta	temen	ts therei	n containe	ed or
Subsc	ribed and sworn before r	ne this	day of				, 20 <u> </u>	
Notary	Public:							



MINNEAPOLIS PUBLIC SCHOOLS

INDUSTRIAL HYGIENE CONSULTANT

This Agreement is entered into as of January 1, 2026, by and between SPECIAL SCHOOL DISTRICT NO. 1, MINNEAPOLIS MINNESOTA hereinafter called the OWNER, and INSERT NAME Hereinafter called the CONSULTANT.

This agreement is for services performed through December 31, 2028

The CONSULTANT is an individual/partnership/corporation duly organized and registered under the laws of the State of Minnesota.

The OWNER desires to retain the CONSULTANT for the performance of professional services for the design of removal and abatement of asbestos containing materials on the project as defined below and the CONSULTANT agrees to perform the services on the terms and conditions set forth herein.

1.0 BASIC SERVICES TO BE PERFORMED BY CONSULTANT.

Without limiting the generality of the foregoing, the CONSULTANT shall perform services as outlined in Industrial Hygiene Specification (Exhibit A) additional responsibilities not outlined in Exhibit A are listed below:

- 1.1 The CONSULTANT is a representative of the OWNER during the abatement phase and advises and consults with the OWNER. The CONSULTANT is an independent contractor and is not in any way considered an agent or employee of the OWNER.
- 1.2 Contract Documents shall consist of complete sets of scope of work documents for the Project, as well as other customary drawings, and documents necessary to fully explain the intention, requirements, and completion of the work. The OWNER's General and Supplementary Conditions of the Contract and the OWNER's standard Contract Documents shall not be modified without approval of the OWNER. All Documents shall be consistent with the OWNER's Asbestos Abatement Project Specification (Exhibit C), shall meet with the OWNER's approval, and shall comply with Environmental Protection Agency, Minnesota Department of Health, and other applicable regulatory agencies. Each area shall be detailed to adequately and fully explain the scope of the work and to enable the satisfactory abatement of the area by the contractor. The OWNER reserves the right to disapprove of the systems recommended and developed by the CONSULTANT together with the materials and equipment as shown on the Bid Documents without justifying any claim by the CONSULTANT for extra

costs, where such Bid Documents are inconsistent with a previously approved scope of work field survey.

- 1.3 The OWNER will review the proposed scope of work documents and recommend revisions or corrections as it deems necessary. These recommendations shall be reviewed with the CONSULTANT who shall make the necessary revisions or corrections before final Documents are issued. Previous acceptance of Documents will not limit the OWNER's rights to request the revision and/or corrections at this time, but may entitle the CONSULTANT to submit a claim for additional compensation.
- 1.4 The CONSULTANT shall insure the proper implementation of the intent of the Contract Documents and will have authority to require special inspection or testing of any work in accordance with the provisions of the Contract Documents. Except in case of emergency, the CONSULTANT shall not authorize or direct any stoppage, removal of work in place or changes in any work without prior approval of the OWNER. The CONSULTANT shall be responsible for ensuring compliance with any notice requirements of the Environmental Protection Agency, Minnesota Department of Health, and other applicable regulatory agencies or entities in connection with the abatement work.
- 1.5 The CONSULTANT shall, immediately upon the discovery of any defects or deviations from the drawings and specifications, report the same to the OWNER and shall, at the same time advise the OWNER of the corrective orders or instructions which were given to the Contractors. The CONSULTANT is responsible for any damages to the OWNER which result from the negligent errors or omissions in the asbestos abatement Scope of Work Drawings. Damages may include costs associated with rework and custodial overtime.
- 1.6 The CONSULTANT will review the amount owed to the Contractor(s) and will review Certificates for Payments and Schedule of Values in such amounts. These Certificates will constitute a representation to the OWNER, based on such visits and the data comprising the Application for Payment that the Work has progressed to the point indicated.
- 1.7 By reviewing a Certificate for Payment, the CONSULTANT will also represent to the OWNER that, to the best of the CONSULTANT'S knowledge, information and belief based on what observations have revealed, the quality of the Work is in accordance with the Contract Documents.
- 1.8 CONSULTANT will make inspections, review Contractor submittals and, shall promptly review the final Certificate for Payment stating that to the best of the CONSULTANT'S knowledge, information and belief, and on the basis of its observations, the Work has been completed in accordance with the terms and conditions of the Contract Documents and that the amounts in the final Certificate, are due and payable to the Contractor. The final Certificate for Payment will constitute a further representation that the conditions precedent to the Contractor being entitled to final payment as set forth in the Contract Documents have, to the best of the CONSULTANT's knowledge, information and belief, been fulfilled.
- 1.9 The CONSULTANT is required to provide a Contractor proposal request and OWNER approved change order tracking log. Change orders and proposal requests are to contain the following:
 - (a) Type of asbestos to be removed.

- (b) Estimated Quantity of asbestos to be removed.
- (c) Location of asbestos to be removed.
- (d) Required engineering controls.
- (e) Performance time frame (beginning and completion dates).
- (f) Date proposal request sent to Contractor.
- (g) Date Contractor is to submit proposal cost.
- (h) Date Contractor submitted proposal cost.
- (I) Contractor's proposed cost
- (j) Negotiated cost to the Owner for final approval.
- (k) Change order approval date.

Approved Contractor change orders are to be reviewed by the Consultant and submitted on AIA form G701.

- 1.10 The CONSULTANT shall endeavor to protect the OWNER against defects and deficiencies in the work performed and materials provided by the Contractor. The CONSULTANT shall also, in good faith and with due diligence, use reasonable care to safeguard the OWNER against defects and deficiencies in the work and the Contractor's failure to carry out the work in accordance with the Contract Documents and the construction schedule.
- 1.11 The CONSULTANT agrees to use all reasonable care and diligence to perform its work in a skillful manner, and the acceptance of the CONSULTANT's work by the OWNER does not act as a release of the CONSULTANT from its obligations and responsibilities under this Agreement.

2.0 SERVICES FURNISHED BY OWNER.

- 2.1 So far as the Project contemplated by this Agreement may require, the CONSULTANT shall be entitled to available survey information of the building. In addition, the OWNER shall furnish to the CONSULTANT the following:
 - (a) The OWNER's AHERA management plan.
 - (b) OWNER's Specification for asbestos abatement consulting services, project surveillance, and air monitoring procedures (Exhibit A).
 - (c) OWNER's Asbestos Abatement Project Specification (Exhibit C).
 - (d) General construction documents.

- (e) Review of asbestos abatement design phases.
- (f) Awarded contracts.
- (g) Periodic field inspection service. This service shall in no way limit or eliminate the CONSULTANT's responsibility under the provisions of this Agreement.
- (h) Check and review job progress notes.
- (i) The OWNER shall be responsible, through its duly authorized representatives, for the audit of all accounts presented for payment. This shall not relieve the CONSULTANT of the primary obligation to correctly certify as to the correctness of estimates and payments due as the work progresses and is completed.

3.0 THE CONSULTANT'S BASIC FEE.

- 3.1 The time of principals and staff of the CONSULTANT shall be paid based upon fixed hourly or rates as provided in the fee schedule (Exhibit D).
- 3.2 Payments to the CONSULTANT shall be made based on the hourly or daily unit rate times the number of units worked by the Consultant.
- 3.3 If the OWNER, at any time during the performance of this Agreement, shall require the omission of a substantial amount of such work or if at any time the OWNER shall deem it expedient or it shall become necessary for the OWNER to abandon or defer the Project under the construction contracts or any part thereof before completion of the services to be rendered hereunder, the CONSULTANT shall be entitled to received just and equitable compensation for all work satisfactorily performed prior to the date on which the CONSULTANT shall have received notice to discontinue the Project.

4.0 OWNERSHIP OF THE DOCUMENTS.

4.1 In the event that this Agreement is terminated, including any termination by the OWNER with or without cause, the OWNER shall have the right, itself or through its agents or designees, to use the Drawings, Specifications and Contract Documents for completion of the Project. The Owner shall indemnify and hold the CONSULTANT harmless for such use of said documents. The above mentioned items can be used if the CONSULTANT's name and seals are removed and Owner indemnifies CONSULTANT against claims for the reused portions of the CONSULTANT's work.

5.0 FAILURE OF OWNER TO CONSTRUCT THE PROJECT.

5.1 If, at any time, the OWNER abandons the Project contemplated by this Agreement, the CONSULTANT shall be entitled to and shall receive as full payment hereunder, reimbursement of his costs necessarily incurred incident to the Project to the date of such abandonment, together with a fair and reasonable compensation for his services rendered to that date.

5.2 If the OWNER abandons the Project, the CONSULTANT shall immediately deliver to the OWNER copies of all plans, inspection information, specifications and acceptable, reproducible drawings in whatever format these may exist.

6.0 RESPONSIBILITY OF CONSULTANT TO OWNER.

- 6.1 The CONSULTANT covenants with the OWNER to furnish his skill and judgment, pursuant to the standards, practices, and procedures adhered to by and available to consultants and to cooperate with the OWNER in furthering the OWNER's best interests.
- 6.2 The CONSULTANT agrees to furnish efficient administration, observation, and inspection of the Project and to perform all duties in the soundest, most expedient, exemplary, and economical manner consistent with the interests of the OWNER.

7.0 ENTIRE AGREEMENT.

7.1 The OWNER and CONSULTANT agree that it is the specific intent of this Agreement to define, grant, and specify the responsibility and authority of the CONSULTANT; and it is hereby specifically understood and agreed that in any matters during the work under this Agreement which are not specifically covered and defined by this Agreement, the authority and direction for such matters must come from the OWNER and that the CONSULTANT shall in all such matters request and receive direction and approval from the OWNER prior to carrying out any work regarding such matters.

8.0 MISCELLANEOUS PROVISIONS.

- 8.1 This Agreement and associated and subsequent agreements shall be governed by the laws of the State of Minnesota.
- 8.2 Terms used in the Agreement, unless otherwise defined herein, or unless inconsistent or in conflict with the Provisions of this Agreement, shall have the same meanings ascribed to such terms in the Contract Document.
- 8.3 Each of the Exhibits attached to this Agreement is hereby incorporated by reference and made a part of this instrument as if fully set forth herein.
- 8.4 The CONSULTANT agrees that all contracts and agreements which it has with subcontractors, agents and employees furnishing services or materials in connection with the Project or the services to be performed by the CONSULTANT under this Agreement shall be consistent with this Agreement and shall to the extent necessary impose appropriate obligations of the CONSULTANT under this Agreement upon such Contractors, agents and employees.
- 8.5 The remedies provided to the OWNER pursuant to the terms of this Agreement are cumulative and not exclusive of any other remedies available at law, in equity or otherwise.
- 8.6 This Agreement represents the entire integrated Agreement between the OWNER and the CONSULTANT and supercedes all prior negotiations, representations or agreements, whether written or oral.

8.7 This Agreement may be amended only by written instrument signed by the OWNER and the CONSULTANT.

9.0 INSURANCES.

9.1 Insurance policies and coverages are to be as stipulated in Industrial Hygiene Specification Exhibit A and Exhibit B. Certificates of insurance, acceptable to the OWNER, shall be filed with the OWNER within five (5) days of project award. The insurance certificates shall contain a provision that coverage afforded under the policy shall not be canceled until at least 30 days prior written notice has been given to the OWNER.

10.0 TERMINATION OF AGREEMENT.

10.1 This Agreement may be terminated by either party seven (7) calendar days after receipt of written notice by registered mail should the other party fail substantially to perform in accordance with its terms through no fault of the other. In the event of termination, due to the fault of others than the CONSULTANT, the CONSULTANT shall be paid for services performed to the termination date.

11.0 INDEMNIFICATION.

11.1 The CONSULTANT will indemnify, hold harmless, and protect the OWNER, its agents, officers and employees against any defect in the Project or any damages, claims, liability, and costs including attorneys' fees proximately caused by or attributable to any intentional or negligent error or omission in the performance of any services or in any plan or specification within the responsibility of the CONSULTANT or its employees, subcontractors, consultants, or to any breach of duty or obligation assumed by or required of him or them under the terms of this Agreement.

12.0 NOTICES.

When it is provided that notice, demand, request, or other communication shall be given or served on another party hereto, such notice, demand, request, or other communication shall be effective when sent by electronic facsimile or by air express, or when deposited in the United States mail, registered or certified, postage prepaid and addressed as follows:

The OWNER:
Special School District No. 1
Attention: Facilities Department, Asbestos Project Manager
1250 West Broadway Street
Minneapolis, MN 55411

The CONSULTANT

13.0 STANDARD OF PROFESSIONAL SERVICES.

The CONSULTANT, by execution of this Agreement, represents that it is familiar with the requirements of the Project and contracts that is possessed of that degree of care, learning, skill, and ability which is ordinarily possessed by other members of its profession employed on similar Projects in major metropolitan areas of the United States and further contracts that in the performance of the duties herein set forth he will exercise such degree of care, learning, skill, and ability as is ordinarily employed by consultants under similar conditions and like circumstances. The CONSULTANT will review and become familiar with the OWNER's requirements for and intended use of the Project, and the CONSULTANT agrees that the Project, as designed and described by or under the direction of the CONSULTANT pursuant to the final plans and Specifications and Working Drawings, will satisfy normal requirements and be suitable for such intended use.

14.0 CONSULTANT'S ACCOUNTING RECORDS

Records of the CONSULTANT'S Direct Personnel, consultant and expenses pertaining to this project and records of payment requests between the OWNER and the Contractor shall be securely stored, maintained and made available to the OWNER or his authorized representatives at mutually convenient times for a period of three (3) years after completion of the project.

15.0 COMPLIANCE

The consultant agrees to comply with all Federal, State and local laws, ordinances and all applicable rules, regulations, and standards established by any agency of such governmental units, which are now, or hereafter promulgated insofar as they relate to the company's performance of the provisions of this agreement.

CONSULTANT's data collected, stored, created, received, maintained or disseminated as a result of this contract shall be subject to the provisions of the Minnesota Data Practices Act. Consultant must comply with the provisions of the Minnesota Data Practices Act and will diligently respond to all inquiries subject to public data disclosure at no additional cost to the Owner.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be duly executed as of the day and year first above written.

			SPECIAL SCHOOL DISTRICT NO. 1
Dated:	, 20	Ву:	[Authorized Signatory]

			[Title]	
			Consultant	
Dated:	, 20	Ву:	[Authorized Signatory]	

EXHIBITS

EXHIBIT A Industrial Hygiene Specification

EXHIBIT B Consultant's Insurance

EXHIBIT C Asbestos Abatement Project Specification

EXHIBIT D Fee Schedule

EXHIBIT A Industrial Hygiene Specification

2026

ABATEMENT PROJECTS IN FACILITIES

OF THE

MINNEAPOLIS PUBLIC SCHOOLS FACILITIES DEPARTMENT – DESIGN & CONSTRUCTION DIVISION

SPECIFICATION FOR INDUSTRIAL HYGIENE CONSULTING SERVICES

FACILITY ASSESSMENTS-PROJECT SURVEILLANCE-AIR MONITORING PROCEDURES

SPECIFICATION NUMBER: CS-06-15

MINNEAPOLIS PUBLIC SPECIAL SCHOOL DISTRICT NO. 1 1250 WEST BROADWAY STREET MINNEAPOLIS, MINNESOTA 55411

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2026

ABATEMENT PROJECTS IN FACILITIES OF THE MINNEAPOLIS PUBLIC SCHOOLS

SPECIFICATION FOR INDUSTRIAL HYGIENE CONSULTING SERVICES FACILITY ASSESSMENTS-PROJECT SURVEILLANCE-AIR MONITORING PROCEDURES

SPECIFICATION NUMBER: CS-06-15

PREFACE:

This document is intended to specify the scope of services required of Industrial Hygiene Consulting Firms regarding abatement projects within facilities of Minneapolis Public Schools (MPS). These specifications include the performance criteria for facility inspections, scope of work surveys, on site surveillance/air monitoring of asbestos abatement projects, post project activities, and final submittals. The Industrial Hygiene Consulting Firm is required and presumed to be familiar with the stipulations of this document for the performance of their contracted services. Additionally, the Industrial Hygiene Consulting Firm is required and presumed to be familiar with the requirements of the current MPS "Asbestos Abatement Project Specification" in effect during a particular project for the surveillance, supervision and compliance of the Asbestos Abatement Contractor project activities.

SECTION 101: INDUSTRIAL HYGIENE CONSULTING FIRM DUTIES

- **A**. MPS will assign a specific number that will be utilized to track facility name, individual project, and phase. This number is required to be included on all project correspondence, including but not limited to, insurance certificates, reports, daily logs, invoicing, and the Attachment F (Scope of Work).
- B. The Industrial Hygiene Consulting Firm will provide an original Certificate of Insurance within five (5) days after the award of a project. The Certificate of Insurance will specify Minneapolis Public Schools as the certificate holder, name MPS as an additional insured up to the tort liability limit \$1,500,000 and will reference the specific project site by facility name, project number, and address. Certificates listing multiple project sites will not be accepted. Such insurance will be in effect at all times during projects awarded. Applicable coverages are to be of the "Occurrence Type" and the policy document forwarded to MPS will clearly reference that specific coverage type. The certificates shall contain a provision that coverage afforded under the policy shall not be canceled until at least 30 days prior written notice has been given to the Owner. Amounts of coverage shall be as listed in Exhibit B of the Industrial Hygiene Consultant Contract.
- C. MPS will require the Industrial Hygiene Consulting Firm to develop an Asbestos Abatement Scope of Work based on the scheduled construction activities for each assigned facility. The Industrial Hygiene Consulting Firm will be notified to attend meetings prior to the development of the Asbestos Abatement Scope of Work during which the scheduled construction scope of work will be delineated. MPS will provide a copy of the specific

facility AHERA Management Plan to the Industrial Hygiene Consulting Firm. The inspection report will aid with the identification of previously sampled and assessed asbestos containing material (ACM) within the project facility. The Industrial Hygiene Consulting Firm will additionally be provided with project construction drawings (if applicable) for each project by MPS and/or its representative(s) including, but not limited to, architects, engineers and project managers to identify the area(s) of construction impact.

- **D.** The typical scope of services for each project are as follows:
 - 1. Attendance at the architectural Abatement Scope of Work Meeting(s)
 - 2. Limited & Comprehensive Inspections and Development of the Abatement Scope of Work
 - a. Inspection Report review
 - b. Review of Construction Drawings to delineate the total required abatement
 - c. Facility inspections and additional bulk sampling
 - d. Development of Work Area drawings for Asbestos Abatement Scope of Work
 - **3.** Attendance at the project Pre-Construction Meeting by the Project Manager and the on-site Air Monitoring Specialist.
 - **4.** Review and recommendation for approval/rejection of Asbestos Abatement Contractor pre-project submittals.
 - **5.** Project schedule coordination.
 - **6.** Asbestos Abatement Project air monitoring and site supervision/surveillance.
 - **7.** Attendance at general construction project progress meetings during concurrent projects as needed.
 - **8.** Work Area pre-abatement, daily and visual clearance inspections/collection of Final Clearance Air Monitoring.
 - 9. Development and supervision of project punch lists. Punch lists are to be delivered to the Contractor within 5 days following completion of each project work area. Following the completion of all punch list items by the Contractor, all items are to be inspected and endorsed by the Industrial Hygiene Consulting Firm.
 - **10.** Review and approval of Contractor partial and final Applications for Payments.
 - 11. Review and recommendation for approval/rejection of Asbestos Abatement Contractor post-project submittals. At the completion of on-site project surveillance and air monitoring for a project, the final consultant invoice will be held until all Contractor Post Project Submittals are approved and delivered to MPS.
 - **12.** AHERA Documentation Provide final project report and sbestos survey reports as per Section 105. The final consultant invoice will be held until all reports are delivered to and approved by MPS.

Note: any and all recommendations for approval/rejection of Asbestos Abatement Contractor submittals, at a minimum, will be based upon compliance with the applicable requirements of the MPS Asbestos Abatement Project Specification.

- E. Sampling of suspect lead paint within the identified Work Areas shall be performed by a MDH certified lead inspector or lead risk assessor. All lead paint sampling information will be forwarded to MPS in reports formatted as stipulated in Section 105 of this document.
- **F**. The Industrial Hygiene Consulting firm will provide current proof of their in-house laboratory's Certificate of Accreditation from the National Lead Laboratory Accreditation

(NLLA) program administrated through the American Industrial Hygiene Association (AIHA) or the American Association of Laboratory Accreditation (AALA). Laboratory accreditation information is to be submitted with each report for the lead paint analyses. If lead paint analyses are performed by a sub-contracted MPS-approved laboratory, the appropriate proof of NLLA accreditation will be required as a component of each of the laboratory analysis reports. At no time will MPS allow lead paint analysis to be performed by a laboratory that has not been approved by MPS. At no time will MPS allow samples to be shipped or analyzed outside of the Minneapolis metropolitan area. MPS acceptable methods of analyses are EPA SW-846 Method No. 6010A, Revision 1, July 1992: Inductively Coupled Plasma Atomic Emission Spectroscopy and EPA SW-846 No. 7420, Revision 0, September 1986: Flame Atomic Absorption. No other method of lead paint analyses will be acceptable without prior approval from MPS.

- G. Sampling of suspect building materials within the identified Work Areas shall be performed by an MDH-certified AHERA Inspector. Sampling frequency and locations shall conform to AHERA sampling protocol. MPS requires that limited additional samples of suspect materials previously identified as non-ACM be sampled within the delineated Work Area where disturbance is to occur to verify these materials as non-ACM. This inspection is to fulfill the requirements of EPA NESHAPS for demolition or renovation. In most situations, submit a sufficient number of samples to prove the homogeneous area to be non-asbestos containing and have further analysis stopped when the building material is confirmed to be ACM. Site specific Work Area drawings utilized for bidding will be reviewed by a MDH/AHERA certified Project Designer. All information will be forwarded to MPS in reports formatted as stipulated in Section 105 of this document.
- H. The Industrial Hygiene Consulting firm will provide current proof of their in-house laboratory's Certificate of Accreditation from the National Voluntary Laboratory Accreditation Program (NVLAP) with each submitted laboratory report for the Polarized Light Microscopy (PLM) analysis of bulk samples. If PLM analyses are performed by a sub-contracted MPS-approved laboratory, the appropriate proof of NVLAP accreditation will be required as a component of each of the laboratory analysis reports. At no time will MPS allow PLM analyses to be performed by a laboratory that has not been approved by MPS. At no time will MPS allow samples to be shipped or analyzed outside of the Minneapolis metropolitan area.
- I. The Asbestos Abatement Scope of Work (Attachement F) developed by a MDH/AHERA certified Project Designer to comply with MDH Regulation 4620.3480 and shall also include:
 - 1. Type and Location of ACM. *
 - **2.** Quantity of ACM, per Work Area and building material.
 - **3.** Required removal protocol (e.g., full containment, mini enclosure, etc.) per material and/or location.
 - **4.** Approximate duration of ACM removal and phasing of Work Area(s), if applicable.
 - **5.** Site specific and work area(s) specific notes and procedures.

^{*} This information is to be included on the appropriate floor plans to be part of the MPS documents Attachment F.

- J. Provide assistance with the conducting of the Asbestos Abatement Pre-Construction Meeting. The staff personnel assigned to attend this meeting will be the person(s) who performed the Scope of Work survey for the facility in order to ensure familiarity with and knowledge of the Project details. The Industrial Hygiene Consulting Firm is required to provide a minimum of 5 copies of the Scope of Work at the time of the meeting.
- K. Supply daily Project surveillance and air monitoring results to verify the Asbestos Abatement Contractor is complying with all applicable OSHA, EPA, Minnesota regulations as well as the current MPS Asbestos Abatement Project Specification. All OSHA-required personnel air monitoring is the responsibility of the Asbestos Abatement Contractor. The on-site AMS is not allowed to perform OSHA personnel monitoring for the Asbestos Abatement Contractor. The AMS will provide on site laboratory analysis of OSHA personnel monitoring at no cost to the Contractor. The Contractor is to use their own air sampling equipment and supplies and perform their own sampling. Industrial Hygiene Consulting Firm will be responsible for documenting the required analytical turnaround times and posting of air monitoring results for Contractor personnel. The AMS is to provide OSHA personnel monitoring results to the Contractor for inclusion in their post project submittal.
- L. Provide daily analysis of specified Project air samples by Phase Contrast Microscopy (PCM) utilizing the NIOSH 7400 Method of analysis. Microscopists performing PCM analysis shall provide proof of successful completion of a NIOSH 582 or NIOSH 582 Equivalency course.
- **M.** The Industrial Hygiene Consulting firm will provide, at a minimum, proof of their in-house laboratory's accreditation by AIHA or analysts considered proficient by the AIHA Asbestos Analyst Registry Program with each submitted laboratory report for the PCM analysis of air samples.
- **N.** Ten percent (10%) of the Project air samples must be reported using a blind recount analysis on a daily basis and these results shall be reported with all air sample analytical results in the Final Project Report.
- O. Ten percent (10%) or a minimum of two (2) samples per day, whichever is greater, of the total number of samples collected per day shall be submitted for analysis as field blank samples and shall be reported with the daily sample analyses.
- P. Documentation of on-site calibration of air monitoring equipment before and after air sampling periods shall be required for all project air samples. If a secondary standard (rotameter) is utilized for air sampling equipment calibration procedures, documentation of calibration against a primary standard (e.g. Bubble Burette, Gilibrator, Buck Calibrator, etc.) is to be maintained.
- Q. Industrial Hygiene Consulting Firm is required to provide current copies of MPS Specification for Industrial Hygiene Consulting Services and MPS Asbestos Abatement Project Specification to on-site Air Monitoring Specialists (AMS). These documents are to remain on-site during all Project activities.
- R. <u>Affirmative Action Plan Participation:</u> There is a MPS Affirmative Action Plan goal for the Project participation of women and minority personnel within the work force and

Disadvantaged Business Enterprise (DBE) firms. The goal is to show evidence of a good faith effort for specific percentages (dependent on the contract value) of the labor force to be women or other minority individuals. There is also a goal for specific percentages (dependent on the contract value) of the dollar amount of the contract to be performed or supplied by DBE firms. Every reasonable effort shall be made by the Industrial Hygiene Consulting firm to encourage minority participation in the Work of the Project.

- **S.** MPS requires all Industrial Hygiene Consulting Firm personnel to wear an identification badge when at a MPS facility. The identification badge is to remain on personnel and visible at all times. Industrial Hygiene Consulting Firm personnel will not be allowed on-site without an identification badge. The identification badge will contain at a minimum; a legible photograph of the individual (passport size), name of the Industrial Hygiene Firm (minimum of 14 font), name of the individual (minimum of 14 font), and plastic laminated. The minimum identification badge size is to be 2.5" X 3.5".
- **T.** All Industrial Hygiene Consulting Firm personnel who enter a construction environment are required to wear the proper personal protective equipment. The minimum personal protective equipment required to enter the construction environment includes:
 - **1.** Hard hat
 - **2.** Safety glasses with side shields
 - **3.** Long pants/slacks (no synthetic or sweat pants)
 - **4.** Shirt/blouse (shirt must have at least 2 inch sleeves)
 - **5.** Construction type footwear (no tennis, lightweight hiking, canvas, or nylon type shoes)

SECTION 102: QUALIFICATIONS OF AIR MONITORING SPECIALIST (AMS)

- **A.** Industrial Hygiene Consulting Firm assigned personnel must, at a minimum, show proof of:
 - **1.** Current EPA certification as a Contractor/Supervisor to meet current EPA regulations.
 - **2.** Current MDH certification as a Site Supervisor.
 - 3. Current Respirator Fit Testing and Medical Surveillance records to meet regulatory requirements.
 - **4.** MNOSHA Right To Know Program.
 - **5.** Material Safety Data Sheets (MSDS) for chemicals on-site (if applicable).
 - **6.** Confined Space Entry Program (if applicable).
 - Successful completion of a NIOSH 582 or NIOSH 582 Equivalency Course by the on-site AMS.
 - **8.** Proof of completion of a Minnesota 2 day asbestos air sampling course.
- **B.** Industrial Hygiene Consulting Firm will be required to submit records for all employees involved in this Project. Records provided will include the names, training certifications, MDH certifications, respirator fit test and medical surveillance documentation (refer to Section 105 A. 7.).

C. Only employees of approved Industrial Hygiene Consulting Firms will be authorized to perform air-monitoring services on any MPS Project. No Subcontracting of the Air Monitoring Services will be permitted.

SECTION 103: AIR MONITORING SPECIALIST (AMS) ON SITE DUTIES

- **A.** The AMS shall conduct all required and specified sampling for MPS.
- **B.** The AMS shall conduct air sampling and analysis in accordance with the NIOSH 7400 Method and within all requirements of MDH and EPA AHERA regulations.
- **C.** The AMS shall witness and verify Asbestos Abatement Contractor compliance with applicable regulations and MPS Asbestos Abatement Project Specifications.
- **D.** The AMS shall cooperate with agents of public or regulatory agencies in the event of site visitations or inspections.
- E. The AMS is responsible for the completion of all on-site project documentation. At a minimum documentation is to include all air monitoring data, and daily logs. Daily logs at a minimum must include: number of workers on-site, contractor hours on-site, consultant hours on site, the number of air samples taken, identify if more than one AMS was on site, identify site visitors, arrival and departure times, detailed abatement activities including Work Area/Room numbers and provide incident reports. All paperwork must be complete and legible.
- F. The AMS shall remain on site during all abatement activities including baseline air sample collection, Project pre-cleaning and preparation procedures, asbestos abatement activities and procedures, final cleaning procedures, final clearance air sample collection, post-clearance Project Work Area tear down and Asbestos Abatement Contractor demobilization. AMS is responsible to verify the proper and thorough removal of all critical barriers, containment area components, duct tape, spray glue residue, barrier tape, warning signs, fastening devices and project equipment by the Asbestos Abatement Contractor during the Work Area tear down and Project demobilization.
- **G.** The AMS shall notify the designated, approved TEM laboratory sufficiently in advance of Final Clearance Air Monitoring procedures to allow for laboratory assignment of personnel and scheduling for all TEM Final Clearance Air Sample analyses.
- **H.** Provide performance of specified inspections as follows:
 - 1. The AMS will accompany MPS representative during or, in the absence of the MPS representative, conduct the pre-abatement visual inspection of the prepared Project Work Areas for compliance with all applicable regulations and MPS specified requirements.
 - 2. Provide inspection of Project Work Areas for compliance with applicable federal, state, and local regulations as well as the current MPS Asbestos Abatement Project Specification, (inside and outside containment) at least **one** time daily **(for each active containment)**. The AMS is required to utilize the asbestos abatement contractor's sign-in/out log each time a containment inspection is performed.

- 3. ACM-Contaminated Soil in Crawl Spaces Special Clearance Procedures: following the successful completion of the visual inspection by the AMS, randomly selected soil samples will be collected for PLM analysis (US EPA Interim Method EPA 600/M4-82-020). It is the responsibility of the AMS to adequately divide the Work Area(s) into nine (9) or more approximately equal-sized grids for the collection of one (1) bulk sample from each grid within the Work Area(s) at a randomly selected location within each grid area. MPS will authorize the AMS to divide each Work Area into more than nine (9) grid sample areas if nine (9) are deemed inadequate. At no time will a Work Area be divided into less than nine (9) grid sample areas nor will less than a total of nine (9) bulk samples be collected per Work Area.
- I. Provide prompt notification to MPS of any and all observed irregularities or deficiencies of work or products and document all observations and related conversations.
- J. Air monitoring PCM analyses will be performed within the same Project day the air samples are collected and MPS will receive immediate verbal notification in the event of one or more air sample results indicating a Project-related problem. Any and all air monitoring conducted during evening or night hours must be analyzed before the start of the next school day. Any and all analytical results indicating a Project-related problem must be reported to the MPS Project Manager immediately. This will facilitate immediate action for proper measures at the facility to prevent potential asbestos-related exposures. AMS will post the daily analytical results of the Project air samples in an onsite location at the Project site. Each sample report shall include:
 - **1.** Date issued.
 - **2.** Project facility, project phase, and MPS Job Number.
 - **3.** Testing laboratory name, address and telephone number.
 - **4.** Name and signature of the microscopist performing the analyses.
 - **5.** Name and signature of the AMS collecting the air samples.
 - **6.** Date and time of air sample collection.
 - **7.** Description of air sample locations on project.
 - **8.** Analytical results of air samples.
- **K.** In the event that an airborne fiber concentration of 0.01 fibers per cubic centimeter (f/cc) is exceeded outside any containment area or within any interior portions of a facility, the AMS will immediately notify MPS. The AMS is to submit the air sample cassettes to an MPS-approved laboratory for Transmission Election Microscopy (TEM) analysis and arrange for a six (6) hour turn around time.
- L. Upon completion of the scheduled Asbestos Abatement Project, the Industrial Hygiene Consulting Firm will draft a Project punch list. The punch list must be drafted and submitted to MPS and the Asbestos Abatement Contractor immediately following the completion of the last Project Work Area. Following the completion of all punch list items by the Contractor, all items are to be inspected and endorsed by the Industrial Hygiene Consulting Firm. The Industrial Hygiene Consulting Firm is to include a copy of the Project punch list and endorsement of completion in the Final Project Reports (refer to Section 105 A. 11.).
- **M.** Air Monitoring Procedures and Requirements:

- 1. Air sampling flow rates are to be less than 14 liters per minute, this includes but is not limited to Pre-Abatement, Daily and Final Clearance air sampling.
- 2. Pre-Abatement Air Sampling (Baselines) Collect a sufficient number of baseline air samples inside and outside the building prior to commencement of all abatement activities (within 24 hours of Work Area(s) preparation, but prior to abatement contractor Work Area(s) mobilization). Baseline air samples are required to be analyzed prior to abatement contractor mobilization. Baseline air samples are not required to be taken in asbestos contaminated regulated areas scheduled for abatement.
 - a. Air Samples shall be collected to establish normal conditions for comparison if required against future ambient air sample analyses. Baselines are not to be analyzed utilizing TEM methodology unless specified by the MPS representative or indoor air quality exceeds 0.01 f/cc. In the event that Baseline air samples exceed 0.01 f/cc, the AMS will immediately notify MPS. An alternative indoor air standard is not to be established without permission from MPS.
 - **b.** Baseline air samples shall be collected under normal existing air movement (all air handling equipment on).
 - **c.** The AMS shall perform hourly air sampling equipment inspections to verify and document proper sample loading and equipment operation.
 - **d.** Collected volumes of air shall be in sufficient quantities to comply with MDH Regulation 4620.3597 Subpart 3.
- **3.** Baseline Air Samples shall be collected in the following minimum quantities:
 - a. Scheduled Abatement Work Area: Air samples per each Work Area shall be at a frequency that will allow the establishment of a new indoor air quality standard, if required.
- **4.** Abatement Air Monitoring shall be performed daily and for the duration of all abatement activities as outlined below.
- **5.** Air sampling will be performed at the following locations and in the specified approximate quantities as follows (5 Hours = 1 Work Shift):
 - **a.** Outside Containment: Minimum air samples per Work Shift includes the following:

Decontamination Unit Entrance: Minimum of one (1) air sample outside the entrance to the clean room (per Work Shift).

Outside Containment/Inside Building (Ambient Air): Minimum of one air sample per work shift representative of containment make-up air.

- **6.** Volumes of all air samples collected outside of the Work Area(s) shall comply with MDH Regulations 4620.3597, Subpart 3.
- 7. Final Clearance Air Monitoring Perform air sampling in accordance with requirements of the AHERA regulations (40 CFR Part 763) and MDH Regulations for Final Clearance Air Monitoring purposes.
 - **a.** Final Clearance Air Samples shall be collected according to the following requirements:

TEM Final Clearance Air Monitoring- As per all requirements stipulated in AHERA Regulations (40 CFR Part 763) and MDH Regulations.

PCM Final Clearance Air Monitoring - Perform aggressive procedures according to the requirements of all applicable federal, state and local regulations prior to collecting a minimum of five (5) Final Clearance Air Samples per Work Area of the Project.

- **b.** All Final Clearance Air Samples Shall be collected in sufficient volumes as follows:
 - TEM As per the requirements of EPA AHERA Regulations.
 - PCM As per the requirements MDH Regulations 4620.3596, Subpart 2.
- 8. Final Clearance Air Samples shall meet the following criteria for the release of Work Areas: MPS requires that each of the five (5) inside Final Clearance Air Samples are equal to or below the clearance criteria of 70 structures per square millimeter (TEM analysis) and/or 0.01 fibers per cubic centimeter (PCM analysis). Averaging of the five (5) inside Final Clearance Air Sample analytical results will not be permitted for the final clearance of any MPS projects.

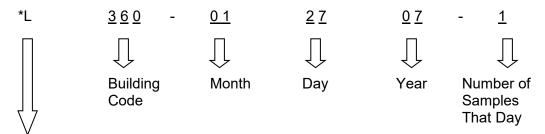
SECTION 104: LIMITATIONS OF AUTHORITY - INDUSTRIAL HYGIENE CONSULTING FIRM

- **A.** Industrial Hygiene Consulting Firm personnel are not authorized to:
 - **1.** Release, revoke, alter or enlarge on the requirements of contract documents.
 - 2. Approve or accept any portion of the Work, unless previously authorized by MPS.
 - 3. Perform any duties of MPS, unless in the event of an emergency (breach of containment, accidental or uncontrolled asbestos spills, etc.). Immediate correctional action shall be required and under these conditions authority will be extended to the Industrial Hygiene Consulting Firm to dictate action after all attempts have been made to contact MPS representative(s).
 - **4.** Grant procedural variances to the MPS Project Specifications without approval by MPS. Variances, if granted by MPS will be on a per case basis only.

SECTION 105: AHERA DOCUMENTATION

- A. Upon completion of the scheduled Asbestos Abatement Project, the Industrial Hygiene Consulting Firm will submit one (1) paper and one (1) electronic PDF Final Project Report to MPS formatted for inclusion into the existing MPS AHERA Management Plan for the facility. Room or functional space identification is to be as listed in the MPS AHERA Management Plan provided to the Industrial Hygiene Consulting Firm. This report will be sufficiently detailed to comply with AHERA operating requirements and will include, at a minimum, the following documentation:
 - 1. Summary description of the Asbestos Abatement Project Scope of Work, including a copy of the Attachment F.
 - 2. Summary description of the Asbestos Abatement Project activities.
 - **3.** Description of any deviations from the scope of work or project specifications.
 - 4. Project Daily Log forms.
 - **5.** Copies of EPA/MDH certifications and licenses for the Industrial Hygiene Consulting Firm and project personnel (reference Section 102.B.).
 - **6.** Provide all Project PCM and TEM Air Sample Analysis Reports.
 - **7.** Copies of credentials and qualifications of analytical laboratory and personnel.
 - **8.** Copies of air sample Chain of Custody forms.
 - **9.** Any other Project-related information and documentation including; letters, transmittals, minutes, cost estimates, incident reports and change order back-up, etc.
 - All information included in this report will be formatted in sections consistent with the listing above, both in content and sequence. The report will be submitted to MPS within sixty (60) calendar days of the Asbestos Abatement contract completion date.
 - **11**. Copy of the Project punchlist and endorsement of completion by the Contractor.
- **B.** The Industrial Hygiene Consulting Firm will submit **one (1) paper and one (1) electronic PDF** inspection reports to MPS, independent of the report described in Section 105.A. of this document, formatted for inclusion into the existing MPS AHERA Management Plan for the facility and to be provided to the General Contractor. This report will be sufficiently detailed to comply with AHERA, MDH and EPA NESHAPS requirements and will include, at a minimum, the following documentation:
 - 1. Inspectors' names, signatures, copies of certifications, and MDH licenses.
 - **2.** Appropriate laboratory signatures and certifications.

- **3.** Copies of bulk sample Chain of Custody forms.
- 4. Bulk sample locations and homogeneous areas. Provide a floor plan with sample locations identified on the drawing. The homogeneous area numbers utilized will be as delineated by the existing AHERA Inspection Report. The creation of a new or additional homogeneous area will require the assignment of a new homogeneous area number consistent with the existing system.
- **5.** PLM laboratory test reports. Sample numbers are to identify the 3 digit building code, the sample date and consecutive numbering. See the example below.



- * If appropriate an "L" is to preceed the building code number for lead paint sampling.
- 6. ACM not previously identified in the MPS Management Plan and remaining in place shall be identified, quantified and assessed. This comprehensive quantification will be specifically divided per functional space area within the facility.
- 7. All information included in this report will be formatted in sections consistent with the listing above, both in content and sequence. The report will be submitted to MPS to be provided to the General Contractor at project award.

SECTION 106: PROJECT SCHEDULE COORDINATION RESPONSIBILITIES

- A. The Industrial Hygiene Consulting Firm shall be responsible to provide assistance with the coordination of Asbestos Abatement activities and scheduled construction/renovation activities for their assigned Projects when the two activities are concurrent.
- **B.** The Industrial Hygiene Consulting Firm will provide a representative (familiar with the logistical details of each project) at all weekly construction project progress meetings. This representative will provide Asbestos Abatement Contractor schedule information and updates to the General Contractor representative or the appropriate MPS representative during these meetings. It will be the responsibility of the Industrial Hygiene Consulting Firm's representative for each Project to provide current schedule monitoring and updating information during each progress meeting.
 - **C.** The Industrial Hygiene Consulting Firm representative(s) will be authorized to approve, on behalf of Minneapolis Public Schools, Asbestos Abatement Contractor schedule changes, specifically completion date extensions. This authorization for approval is contingent upon notification to the General Contractor and his/her agreement with said completion date extension(s). The Industrial Hygiene Consulting Firm is only authorized to approve

completion date extensions that do not involve any additional costs to Minneapolis Public Schools from any of the Contractor firms involved. MPS is to be notified immediately of any Project completion date extensions.

SECTION 107: INDUSTRIAL HYGIENE CONSULTING SERVICES INVOICING

- A. The Industrial Hygiene Consulting Firm will submit invoices according to the Annual Fee Schedule for Industrial Hygiene Consulting and Project Air Monitoring/Surveillance Services. The invoices will be sufficiently detailed for coherence to the Annual Fee Schedule and requirements will include, at a minimum, the following information:
 - 1. All invoicing is to include the MPS project specific identification number and facility (reference Section 101.A.).
 - 2. For project surveillance and air monitoring invoicing prior to completion of the project report, include copies of all daily logs with the invoice. All invoices are to be itemized per day/date as follows:
 - **a.** Description of individual service provided.
 - **b.** Number of hours per individual service.
 - **c.** Unit cost per individual service.
 - **d.** Total cost per individual service.

This additional information can be submitted as a separate attachment to the invoice.

- **3.** At the completion of all on-site project surveillance and air monitoring, the Industrial Hygiene Consulting Firm is to invoice through the completion of on-site services. All invoicing after this date will be held until all Contractor Post Project Submittals and Consultant Reports are approved by MPS.
- **4**. MPS will not accept billings for on-site employee training time.
- 5. MPS will not accept billings for travel time to and from the site. MPS will allow travel time to the TEM Lab at the end of a shift. Courier services can be billed for the transportation of TEM samples.

EXHIBIT B Consultant's Insurance

EXHIBIT C Asbestos Abatement Project Specification

MINNEAPOLIS PUBLIC SCHOOLS

ASBESTOS ABATEMENT PROJECT SPECIFICATION

SPECIFICATION NUMBER: CN-0701

January 1, 2026

MINNEAPOLIS PUBLIC SCHOOLS
FACILITIES DEPARTMENT – Planning, Design & Construction
1250 WEST BROADWAY STREET
MINNEAPOLIS, MINNESOTA 55411

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ATTACHMENT G

PREFACE

It is to be understood that these specifications are not regulations. While this document refers in some cases to certain federal, state, and local regulations, it is not intended to supersede or supplement any law or regulation, nor is it intended to identify all laws and regulations applicable to asbestos abatement in school buildings.

All Project activities shall be performed, at a minimum, in full compliance with the requirements of all applicable federal, state, and local regulations regarding the abatement of asbestos-containing materials (ACM) in effect at the time of the Project.

In addition to the rules and regulations set forth by the US Environmental Protection Agency (EPA), Occupational Health and Safety Administration (OSHA), State of Minnesota Department of Health - Asbestos Abatement Unit (MDH), Minnesota Department of Labor, Occupational Safety and Health Administration (MNOHSA), Minnesota Pollution Control Agency - Division of Air Quality (MPCA-DAQ), Minnesota Department of Transportation (MNDOT), the Project requirements outlined in this specification document shall be enforced.

It is expected that the Asbestos Abatement Contractor (Contractor) will perform abatement activities within full compliance of the required Standards and Regulations, and all methods and designs will be executed as specified. Any damage to Minneapolis Public Schools (MPS) property, equipment or structures, be it physical or cosmetic, will be repaired by or at the expense of the Contractor. MPS reserves the right to stop all work by the Contractor and take whatever actions are deemed necessary should the guidelines of the submitted Project Design and this specification document as well as the applicable regulations not be strictly followed.

It is expected that the Contractor is familiar with all applicable federal, state and local regulations regarding the abatement of ACM as well as this specification document in its entirety. The Contractor is expected to be familiar with MPS's "General Conditions of the Contract" and "Supplementary General Conditions for Asbestos Abatement Projects". Specification items within the "Asbestos Abatement Project Specification" and "Supplementary General Conditions for Asbestos Abatement Projects" which are more stringent than or exceed the requirements of the same subject referenced within the "General Conditions of the Contract" shall he the enforced items for compliance.

101 BONDING REQUIREMENTS (If Applicable)

All proof of bonding shall be originals only. No copies or FAX transmittals will be accepted. The companies providing the Bid Bonding, Performance Bonding, and Payment Bonding are required to be licensed in the State of Minnesota and have a minimum of an A- rating according to AM Best. The Contractor should note that the Performance and Payment Bond are one (1) form and are included in Attachment B with the contract. The following Bonds are required for work on this Project:

A. Bid Bond (If Applicable)

1. The Bid Bond (or Cashier's Check) is required for all bids. The Bid Bond is to be in the amount of not less than two percent (2%) of the total aggregate amount of the Bid and is due with the Bid.

B. Performance And Labor and Materials Payment Bond (If Applicable)

- **1.** All projects will require bonding in the form of a Performance Bond (Attachment B).
- 2. The Performance Bond, in the amount of one hundred percent (100%) of the contract sum, is due within five (5) business days after receipt of Notice of Award.
- 3. The Contractor shall furnish a Contractor's Performance Bond on forms supplied by MPS (Owner), executed by a corporate bonding company licensed to transact business in the State of Minnesota and acceptable to the Owner, in the full amount of the contract price. The expense of this bond shall be borne by the Contractor.
- 4. If at any time a surety on such a bond becomes irresponsible or loses its right to do business in the State of Minnesota, the Owner may require another surety acceptable to the Owner, which the Contractor shall furnish within ten (10) days after receipt of written notice to do so.
- 5. In the event of any Change Order resulting in the performance of additional work in connection with the Project, the amounts of such bonds pertaining thereto shall be increased to include the cost of additional work or materials or fixtures to be incorporated into such Project.

102 INSURANCE REQUIREMENTS

A. The Contractor shall purchase and maintain such insurance as will protect him/her from claims set forth below which may arise out of or result from the Contractor's operations under the Contract, whether such operations be by himself or by any subcontractor or by anyone directly or indirectly employed by any of them, or by anyone for whose acts any of them may be liable:

1.	Workers' Compensation	Statutory
2.	Employer's Liability with Asbestos/Lead exclusion removed	Bodily Injury by Accident \$1,500,000 each accident Bodily Injury by Disease \$1,500,000 each employee Bodily Injury by Disease \$1,500,000 policy limit
3.	Commercial Comprehensive	General Aggregate

General Liability with Asbestos/Lead exclusion removed

\$1.500.000

Products/Completed Operations

Aggregate \$1,500,000

Personal and Advertising Injury

\$1,500,000

Bodily Injury & Property Damage

Each Occurrence Limit

\$1,500,000

Medical Payments \$10,000 Maximum \$10,000 Retention

4. Comprehensive Automobile Liability

Each Occurrence

\$1.500.000

Combined Single Limit

5. Owners' Protective Liability (including MPS & I. H. Consultant) with Asbestos/Lead exclusion removed

Each Person \$500,000 Per Claim \$1,500,000

6. Umbrella with Asbestos/Lead exclusion removed

Each Occurrence \$5,000,000 Aggregate \$5,000,000

- **B.** Insurance that excludes asbestos abatement shall not be acceptable to MPS.
- **C.** Contractor will submit proof of insurance coverages for the active transportation of asbestos-containing waste materials from the project site to an approved asbestos landfill site or the same proof of insurance coverages for any and all transporters subcontracted by the Contractor to provide that service.
- **D.** MPS and I. H. Consultant shall be named as additional insured as respects liability coverage. MPS is only to be listed as an additional insured to the State of Minnesota Tort Liability Limit of \$1,500,000. MPS shall be the holder of the original certificate. Certificate holder shall be listed as follows:

Minneapolis Public Schools 1250 West Broadway Street Minneapolis, Minnesota 55411

Upon award of a contract, the Contractor will provide to MPS, <u>prior</u> to the commencement of work, a complete copy of the insurance policy, which is in effect for the specific Project. Contractor is responsible for the applicable coverages to be of the "Occurrence Type" and the policy document forwarded to MPS will clearly reference that specific coverage type.

- E. Certificates of Insurance acceptable to MPS shall be submitted to MPS within five (5) business days prior to commencement of the Work. It should be noted that MPS will not allow any work to commence without original project specific insurance certificates. MPS will assign a specific number that will be utilized to track facility name, individual project, and phase. This number in addition to the Official Publication (OP) number is required to be included on all Certificates of Insurance. These Certificates shall contain a provision that coverages under the policies will not be canceled or amended unless at least thirty (30) days prior written notice has been given to MPS. Contractor is responsible for the applicable coverages to be of the "Occurrence Type" and the project-specific Certificate of Insurance forwarded to MPS will clearly reference that specific coverage type. Contractor shall additionally submit original Certificates of Insurance executed accordingly as outlined above for all subcontractors performing any portion of the contracted Work for the Contractor.
- F. Contractor shall indemnify and hold MPS harmless from any and all claims, liabilities, losses and causes of action which may arise out of the fulfillment of the Contractor's contractual obligations. The Contractor shall pay all claims and losses of any nature whatever in connection therewith, and shall defend all suits, in the name of MPS when applicable, and shall pay all costs and judgments which may issue thereon.
- **G.** Contractor will be responsible for all loss or damage to all tools, equipment, automotive vehicles, protective fencing, scaffolding, temporary structures, stockpiled and staged materials, property of employees and any other property, the capital cost of which is not included in the cost of work.

103 DAMAGES FOR DELAY

- **A.** The contract time is the period allotted in the Attachment F.
- **B.** The Contractor shall be responsible for damages incurred by the Owner and any other separate contractors for delay resulting from the Contractor's failure to complete the Work within the contract time or resulting from the progress of the Work failing to substantially conform to the Work Schedule.
- **C.** If the Contractor is delayed by the Owner, I.H. Consultant or any agent or employee of any of the foregoing, the contractor's sole and exclusive remedy for the delay shall be the right to a time extension for completion of the contract and not damages. This paragraph does no preclude contractor's recovery of damage for contractor-caused delays under other provisions of the Contract Documents.

104 STANDARD FORM OF CONTRACT

- A. The "Contract" Form of MPS District No. 1 in the City of Minneapolis and State of Minnesota will be the contract document utilized for the Work of this Project.
- **B.** Contractor is required and presumed to be familiar with this document.

105 APPLICATIONS FOR PAYMENT

- **A.** MPS will assign a specific number that will be utilized to track facility name, individual project and phase. This number in addition to the OP number is required to be included on all Applications for Payments.
- **B.** Each Application for Payment shall be consistent with previous applications and payments as certified by the I.H. Consultant and paid for by the Owner. Use the current edition of AIA Form G702 and Continuation Sheets G703 as the form for Application for Payment. Continuation Sheet G703 must be broken down by work areas. Applications for partial payment require **5**% retainage to be withheld. Complete every entry on the form(s), including notarization and execution by the person authorized to sign legal documents on behalf of the Contractor. Incomplete Applications for Payment will be returned to Contractor. No rounding of dollar amounts will be allowed, use the correct dollars and cents.
- **C.** Submit 1 executed forms, with signatures, of each Application for Payment to the I.H. Consultant by means ensuring receipt within 24 hours.
- **D.** Waivers of Mechanics Lien: With each Application for Payment, submit waivers of mechanics lien from every entity who may lawfully be entitled to file a mechanics lien arising out of the Contract, and related to the work covered by the previous payment. The Owner reserves the right to designate which entities involved in the work must submit waivers.
- **E.** Waiver Delays: Submit each Application for Payment with the Contractor's waiver of mechanics lien for the period of abatement covered by the application. Submit final Application for Payment with or preceded by final waivers from every entity involved with performance of work covered by the application that could lawfully be entitled to a lien.
- **F.** Submit waivers of lien on forms, and executed in a manner, acceptable to Owner.
- **G.** Certified Payroll: With each Application for Payment submit certified payroll reports. The dates on submitted certified payroll reports are to correspond with the "Payment to Date" found on the Application for Payment AIA Form G702.
- **H.** Final Payment Application: Administrative actions and submittals which must precede or coincide with submittal of the final Application for Payment include, but are not limited to the following:
 - **1.** Completion of Project close-out requirements, including all submittals stated within this specification.
 - **2.** Assurance that unsettled claims will be settled.
 - 3. Listing of items incomplete and reasons they are not complete and their estimated value.
 - **4.** Proof that taxes, fees and similar obligations have been paid.
 - **5.** Evidence of Payment: Submit 1 original Contractor's affidavit of Payments of Debts and Claims, AIA Form G706.

- **6.** Release of Liens: Submit 1 original Contractor's affidavit of Release of Liens, AIA G706A.
- 7. Consent of Surety for Final Payment: Submit 1 original affidavit from Surety Company consenting to final payment (in the full amount of the Contract) being made, AIA Form G707.
- 8. Final Settlement of Contract with State of Minnesota: Submit Form IC-134, Affidavit for Obtaining Final Settlement of Contract with the State of Minnesota and its Political or Governmental Subdivisions. Form IC-134 is a certificate of compliance with Minnesota Statutes 290.92 and 290.97. The Form requires that a contractor, prime contractor or subcontractor that has a contract with the State of Minnesota or its political or governmental subdivision, complete and submit Form IC-134. In addition, prime contractors that have subcontractors are required to list each subcontractor's name and address on their IC-134 affidavit and attach a certified Form IC-134 from each of the subcontractors to their Form IC-134 when submitting it for certification. The form(s) must be completed in its entirety in order to obtain certification. Refer to Attachment B of bid documents for Form IC-134 and addresses/phone numbers for ordering the Form.

200 GENERAL REQUIREMENTS

201 SCOPE OF WORK

- **A.** The Project Scope of Work will be defined within the Consultants Attachment F document issued prior to the Project.
- **B.** Quantities of asbestos containing material (ACM) specified for removal within the Consultants Attachment F will be approximate estimates. It is the responsibility of the Contractor to verify the amount(s) of application and location(s) of ACM specified for removal in the Scope of Work for the Project. This responsibility shall include the removal of any non-ACM materials necessary to gain access to any of the ACM specified for removal. Notification of the MPS Project Manager or his/her representative is required prior to the removal/demolition of any non-ACM materials.
- **C.** On Multiple-Phase Abatement Projects the Contractor will attend mandatory weekly progress meetings. The function of these meetings is to provide updated abatement schedule information to the construction General Contractor, Subcontractors and on site MPS personnel.

202 CONTRACTOR QUALIFICATIONS

- **A.** Contractor will provide (per project) proof of a current Minnesota Asbestos Abatement License.
- **B.** Contractor will provide (per project) proof of Project personnel certifications and documentation. The MPS requirements for EPA-certified and MDH-certified contractor/worker personnel shall be expanded to include ALL contractor personnel assigned to the project with any potential for airborne or waterborne asbestos contamination. This includes, but is not limited to, truck drivers, vacu-loading equipment operators, contractor delivery personnel, etc.

- 1. Project Site Supervisors, Foremen and all Project Management Personnel:
 - **a.** Proof of current EPA Contractor/Supervisor Certification.
 - **b.** Proof of current MDH Contractor/Site Supervisor Certification and hard card.
 - c. The Contractor shall provide a full-time Project Site Supervisor who is experienced in administration and supervision of asbestos abatement projects including work practices, protective measures for building and personnel, disposal procedures, etc. The project Site Supervisor is to be the "Competent Person" as defined by OSHA 1926.58(b). This person shall have had a minimum of three years on the job training in asbestos abatement procedures. Prior to commencing work, the Contractor shall submit the name of the Project Site Supervisor to MPS. The designated Project Site Supervisor shall remain assigned to the Project until it is complete and the Project cannot be reassigned to another Site Supervisor without written notification from the Contractor and the approval by MPS.
- 2. The Contractor, for and on behalf of the Contractor and Contractor's representatives, hereby agrees to indemnify and hold Owner harmless of and from any and all claims, demands, losses, compensatory damages, punitive damages, treble damages, actions, causes of actions, expenses, costs, attorney's fees or other liabilities of whatsoever kind or nature, whether legal or equitable, arising out of, resulting from or relating to any alleged or actual infringement, whether direct or indirect, of any such patent, including, but not limited to, US Patent No. 4,604,111, issued August 5, 1985, and reaffirmed by the United States Patent and Trademark Office Board of Patent Appeals and Interferences on March 31, 1989, which patent covers a filtration system for asbestos containment and removal utilizing reduced pressurization and filtration. The Contractor and the Contractor's representatives shall be solely responsible for the payment of all royalties, license fees or other sums due to the owner or holder of any such patent rights. The Contractor acknowledges that the Owner, in the negotiation of this Contract, the execution of this Contract and in the performance of the Owner's obligations under this Contract, has relied and will rely upon this warranty, representation and indemnification.

3. Project Workers:

- a. Proof of current EPA Worker Certification.
- **b.** Proof of current MDH Worker Certification and hard card.

4. All Project Personnel:

a. Proof of current Medical Surveillance in compliance with OSHA Regulations.

- **b.** Proof of current Respirator Fit Test Protocol and Records in compliance with OSHA Regulations.
- Contractor will submit proof of compliance with MNOSHA Right to Know regulations for employees, including, but not limited to Material Safety Data Sheets (MSDS). MSDS's must be submitted for each material proposed for use on the Project. Include a separate attachment for each MSDS indicating the specific worker protective equipment proposed for use with the material indicated and/or manufacturer's specification.
- **6.** It shall be the requirement of the Contractor to submit requests for Procedural Variances to the MDH. MPS will not be involved in this submittal process.
- 7. If applicable, the Contractor will submit a Confined Space Entry Program and provide documentation of worker awareness of Confined Space Entry procedures.
- **C.** All phases of the Project will be performed by Contractor personnel with current MDH certification as Workers and Site Supervisors. No Project activities, including containment construction and non-abatement functions, will be performed by personnel non-certified by MDH.
- **D.** Contractor will provide copies of Notices of Violations (NOVs), citations, and warnings issued to them by federal, state, or local regulatory agencies within the last two (2) calendar years. This includes pending issues.
- **E.** At no time is Contractor personnel to loiter on MPS property. Interaction between Contractor personnel and the MPS student population will be grounds for immediate Contractor dismissal.

203 CONTRACTOR DUTIES

- **A.** Except as specifically noted, the Contractor shall provide and pay for all labor, materials, tools, construction equipment and machinery, and other facilities and services necessary for proper execution and completion of the Work.
- **B.** The Contractor shall pay all legally required state, city, sales, consumer, use, payroll, privilege and other taxes.
- C. The Contractor shall secure and pay for all Permits, Government Fees, Licenses and Waste Disposal Permits and Costs as necessary for proper execution and completion of the work and as applicable at the time of the Project Bid submittal.
- **D.** The Contractor shall be responsible for serving all required notices including, but not limited to, Minneapolis Fire Department and Minneapolis Police Department with reference to the type of work being performed at the MPS facility, hours of operation per day, days of week scheduled for work, and scheduled duration of the Project.

- E. The Contractor shall comply with all codes, ordinances, rules, regulations, orders and other legal requirements of public authorities (including Environmental Protection Agency, NESHAPS, Occupational Safety and Health Administration, Minnesota Department of Health Asbestos Abatement Unit, Minnesota Department of Labor Occupational Safety and Health Administration, Minnesota Pollution Control Agency Division of Air Quality, Minnesota Uniform Fire Codes and the Minnesota Department of Transportation) which bear on work performance. Where conflicts occur between these specifications and/or the above-mentioned regulations, the more stringent shall govern.
- **F.** The Contractor shall comply with all applicable federal, state and local laws regarding job discrimination and payment of prevailing wage rates.
- **G.** The Contractor shall use the best available technology, procedures and methods for preparation, execution, cleanup, disposal and safety.
- **H.** The Contractor assumes all responsibility for the proper and safe execution of the Work.
- I. The Contractor shall prepare a listing of damage to the structure, surfaces, equipment or surrounding properties, which could be misconstrued as damage resulting from the Work of the Project. The Contractor shall document the existing conditions, including photographs and/or videotape as necessary, for submission to the MPS Project Manager prior to the start of work.
- J. Contractor will be responsible for any and all damages to MPS facilities resulting from the Project activities. Any damages appearing to be a result of the project activities for which the Contractor can not prove, through photographs or video recordings, were preexisting will be the responsibility of the Contractor to repair or replace to the satisfaction of MPS and/or its representative(s).
- K. Contractor will be responsible for the professional quality replacement/refinishing of all items and/or surfaces damaged as a result of the Project activities. Any repair work performed that does not meet the requirements of MPS or its designated representative(s) (including, but not limited to architects, engineers, and project managers) will be subsequently repaired or replaced by a professional in the specific trade at the Contractor's expense. Damages to items include, but are not limited to: floor tiles, sheet floor coverings, carpeting, wall/ceiling finishes (paint, paint color, paint finish, textures, acoustical materials, etc.), molding finishes (paint/stain colors and finishes, varnishes), door finishes (paint, stain, varnish) and hardware, flooring substrates. building structural components, roof membranes, roof flashing, ductwork systems, light fixtures and switches, electrical outlets, fire alarm systems, public address systems, irrigation systems, vegetation (e.g., shrubs, grass, trees), facility furnishings, computer equipment and systems, telephone equipment and systems, etc. All repair work will be completed no later than seven (7) business days after receiving the itemized punch list from the I.H. Consulting Firm. Any and all Final Settlement payments and/or retainages will be withheld by MPS at their discretion until such time as the punch list work is performed and completed to the satisfaction of MPS and their representative(s).
- L. Contractor will be responsible for the repair and/or replacement work required for any and all building modifications implemented to facilitate the needs of a Project Design. Building modifications would include, but not be limited to, such items as: floor

penetrations, wall penetrations, foundation penetrations, roof penetrations, dismantling of windows and doors, fencing systems, playground equipment, athletic field equipment, HVAC equipment and components, lighting equipment and components, electrical equipment and components, etc. Any and all building modifications require pre-approval by MPS. All required repairs and/or replacement of building modification items will be in strict accordance with the engineering and/or architectural specifications per modification provided by MPS to the Contractor prior to the work or to original condition. All work will be performed as required by MPS and/or its representative(s) and subject to their approval.

- **M.** Contractor will be responsible for the installation of prefabricated access panels at all access locations to work areas for the purpose of abatement staging and access. Work areas that will potentially require new access panels include but are not limited to attics, ceiling spaces, chases, tunnels and crawlspaces. Access panels are to be prefabricated lockable metal fire rated panels sized to facilitate personnel access. The required fire rating will be identified in Attachment F.
- N. Contractor will be responsible for the identification of any underground utilities at all locations where digging, foundation access or excavation procedures are required. Underground utilities would include, but is not limited to, such items as: Sewer, gas, water and electrical services. Any and all required excavation locations will require preapproval by MPS. All required repairs/or replacement of underground utility items will be in strict accordance with all owner requirements. At all locations where grass is damaged or destroyed it is required to be replaced using sod. Grass seed application for lawn replacement will not be accepted. The contractor is responsible for any required watering and must guarantee the new sod for thirty days. All work will be performed as required by MPS and/or its representative(s) and subject to their approval.
- O. MPS requires all Contractor personnel (including subcontractors) to wear an identification badge when at a MPS facility. The identification badge is to remain on personnel and visible at all times. Contractor personnel will not be allowed on-site without an identification badge. The identification badge will contain at a minimum; a legible photograph of the individual (passport size photo), name of the Contracting firm (minimum of 14 font), name of the individual (minimum of 14 font), and plastic laminated. The minimum identification badge size is to be 2.5" X 3.5".
- **P.** All Contractor personnel (including subcontractors) who enter a construction environment are required to wear the proper personal protective equipment. The minimum personal protective equipment required to enter the construction environment includes:
 - **1.** Hard Hat
 - **2.** Safety glasses with side shields
 - **3.** Long pants/slacks (no synthetic or sweat pants)
 - **4.** Shirt/blouse (shirt must have at least 2 inch sleeves)

- **5.** Construction type footwear (no tennis, lightweight hiking, canvas, or nylon type shoes)
- Q. Contractor is required to submit AIA Form G703 (Continuation Sheet) to the MPS Project Manager within 5 business days of Contractor acceptance of Project. The AIA Form is to be broken down by work area.
- **R.** Daily logs generated by the Contractor are to be **legible** and at a minimum are to contain the following:
 - **1.** Date and day of week.
 - **2.** Contractor hours on-site.
 - 3. Number of abatement workers on-site.
 - **4.** Document OSHA compliant air monitoring is performed and OSHA compliant air monitoring test results are posted on-site.
 - **5.** Identify site visitors pertinent to the asbestos abatement.
 - **6.** Document incidents/injuries occurring on-site.
 - 7. Document asbestos abatement activities, including number of active containments, work area number (per Attachment F)/location, engineering controls employed (per work area), amount of asbestos containing waste generated.

204 CODES AND REGULATIONS

A. Contractor Responsibility

- 1. The Contractor shall assume full responsibility and liability for compliance with all applicable federal, state and local regulations pertaining to work practices, transportation, disposal, and protection of workers, visitors to the site and persons occupying areas adjacent to the site.
- 2. The Contractor is responsible for providing medical examinations and maintaining medical records of personnel as required by the applicable federal, state and local regulations.
- 3. The Contractor shall hold MPS harmless for failure to comply with any applicable work, transport, disposal, safety, health or other regulation on the part of himself, his employees or his subcontractors.

B. Federal Codes and Regulations

1. Federal regulations and/or requirements that govern asbestos abatement work or transportation and disposal of asbestos waste materials include, but are not limited to, the following:

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

Occupational Exposure to Asbestos, Tremolite, Anthophyllite, and Actinolite: Final Rules Title 29, Part 1910, Section 1001 and Part 1926, Section 1101 of the Code of Federal Regulations.

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

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

Access to Employee Exposure and Medical Records: Title 29, Part 1910, Section 2 of the Code of Federal Regulations.

Hazard Communication: Title 29, Part 1910, Section 1200 of the Code of Federal Regulations.

Specifications for Accident Prevention Signs and Tags: Title 29, Part 1910, Section 145 of the Code of Federal Regulations.

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

Hazardous Substance: Title 29, Part 171 and 172 of the Code of Federal Regulations.

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

Asbestos Abatement Projects: Worker Protection Rule, Title 40 Part 763, Subpart G of the Code of Federal Regulations.

Asbestos Hazard Emergency Response Act (AHERA) Regulation: Asbestos in Schools Final Rule and Notice, Title 40, Part 763, Subpart E of the Code of Federal Regulations.

Training Requirements of the AHERA Regulation: ACM in Schools, Final Rule and Notice, Title 40, Part 763, Subpart E, Appendix C of the Code of Federal Regulations.

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

3. State Codes and Regulations

State requirements that govern asbestos abatement work or transportation/disposal of asbestos waste materials include, but are not limited to State of Minnesota, Department of Health Regulations, Minnesota Pollution Control Agency and Minnesota Uniform Fire Codes.

4. Standards

- a. The Contractor shall assume full responsibility and liability for the compliance with all standards pertaining to work practices, transport, disposal, and protection of workers, visitors to the site and persons occupying areas adjacent to the site. The Contractor shall hold MPS harmless for failure to comply with any applicable standard on the part of the Contractor, the Contractor's employees or the Contractor's subcontractors.
- **b.** Standards that govern asbestos abatement work or transport and disposal of asbestos waste materials include, but are not limited to, the following:

American National Standards Institute (ANSI) 1430 Broadway New York, NY 10018 (212) 354-3300

Fundamentals Governing the Design and Operation of Local Exhaust System Publication 29.2-1979.

Practices for Respiratory Protection Publication A288.2-1980.

American Society for Testing and Materials (ASTM)
1916 Race Street
Philadelphia, PA 19103
(215) 299-5400

Safety and Health Requirements Relating to Occupational Exposure to Asbestos, E849-82.

Specification for Encapsulants for Friable Asbestos-Containing Building Materials, Proposal P-189.

5. EPA Guidance Documents

a. EPA guidance documents that discuss asbestos abatement work or transport and disposal of asbestos waste materials are listed below for the Contractor's information only. These documents do not describe the Work and are not a part of the Work of this Contract.

Asbestos-Containing Materials in School Buildings A Guidance Document, Part 1 and 2 (Orange Book). EPA C00090 (Out of print).

Guidance for Controlling Asbestos-Containing Material in Buildings (Purple Book) EPA 560/5-85-024.

Friable Asbestos-Containing Materials in Schools: Identification and Notification Rule (40 CFR Part 763).

Evaluation of the EPA Asbestos-in-Schools Identification and Notification Rule. EPA 560/5-84-005.

Asbestos in Buildings: National Survey of Asbestos-Containing Friable Materials. EPA 560/5-84-006.

Asbestos in Buildings: Guidance for Service and Maintenance Personnel. EPA 560/5-85-018.

Asbestos Waste Management Guidance. EPA 530-SW-85-007.

Asbestos Fact Book. EPA Office of Public Affairs.

Asbestos in Buildings. Simplified Sampling Scheme for Friable Surfacing Materials.

Commercial Laboratories with Polarized Light Microscopy Capabilities for Bulk Asbestos Identification.

A Guide to Respiratory Protection for the Asbestos Abatement Industry, EPA-560-OPTS-86-001

6. Notifications and Permits

- a. Minnesota Pollution Control Agency: notification, as required by the USEPA NESHAPS Asbestos Regulations (40 CFR 61, Subpart M), to the Minnesota Pollution Control Agency contact at least ten (10) business days prior to beginning any work on a Project.
- **b.** All asbestos-containing waste is to be transported by an entity maintaining a current "Industrial Waste Hauler Permit" specifically for ACM, as required for transporting of asbestos-containing waste to an approved disposal site.
- 7. Asbestos Abatement Contractor License
 - **a.** Maintain current license as required by MDH Regulations.
- **8.** Posting and Filing of Regulations
 - **a.** Post all notices required by applicable federal, state and local regulations.

205 AIR MONITORING AND WORK AREA CLEARANCE

A. Personnel Air Monitoring

- 1. Air monitoring required by OSHA for the asbestos abatement personnel (workers) is the work of the Contractor. Contractor is <u>not</u> responsible for the required OSHA-compliance air monitoring of on-site Air Monitoring Specialist (AMS) personnel.
- 2. Contractor shall be required to provide OSHA compliance personnel monitoring (including the required 30-minute Short Term Excursion Limit (STEL) air monitoring) as part of the Contract sum.
- 3. The individual conducting the OSHA-compliance personnel monitoring is required to be qualified for the work as defined in MDH Regulations "General Requirements for Air Monitoring Sample Collection".
- 4. Contractor shall be required to post at the work site laboratory results of the personnel monitoring within twenty-four (24) hours of collection. This documentation will be provided to MPS on the analytical laboratory's letterhead and posted at the Project as required by OSHA. This information is to be included with the Contractor submittals
- 5. The MPS-retained I.H. Consulting Firm AMS will provide on site laboratory analysis at no cost to the Contractor. The Contractor is to use their own air sampling equipment and supplies and perform their own sampling.

B. Project and Work Area Air Monitoring

- 1. This section describes air monitoring provided by MPS to verify that the building beyond the work area and the outside environment remain unaffected and uncontaminated. These procedures are not to be part of the Project Bid submitted by the Contractor.
- **2.** Project and Work Area Air Monitoring Procedures Conducted by MPS-retained I.H. Consulting Firm AMS.
- 3. Air sampling flow rates are to be less than 14 liters per minute; this includes but is not limited to Pre-Abatement, Daily, and Final Clearance air sampling. MPS will not allow air sampling flow rates to be 14 liters per minute or greater without prior approval.
- 4. Pre-Abatement Air Sampling (Baselines) Collect a sufficient number of baseline air samples inside the building prior to commencement of all abatement activities (within 24 hours of Work Area(s) preparation and/or abatement contractor Work Area(s) mobilization). Baseline air samples are not required to be taken in asbestos contaminated regulated areas scheduled for abatement.
 - a. Air Samples shall be collected to establish normal conditions for comparison if required against future ambient air sample analyses. Baselines are not to be analyzed utilizing TEM methodology unless specified by the MPS representative or indoor air quality exceeds 0.01 f/cc.

- **b.** Baseline air samples shall be collected under normal existing air movement (all air handling equipment on).
- **c.** The AMS shall perform hourly air sampling equipment inspections to verify and document proper sample loading and equipment operation.
- **d.** Collected volumes of air shall be in sufficient quantities to comply with MDH Regulation 4620.3597 Subpart 3.
- **5.** Baseline Air Samples shall be collected in the following minimum quantities.
 - a. Scheduled Abatement Work Area: Air samples per each Work Area shall be at a frequency that will allow the establishment of a new indoor air quality standard, if required. Baseline Air Samples will not be collected inside Work Areas that are posted asbestos regulated areas. Adjacent staging and ambient air locations are to be sampled.
- **6.** Abatement Air Monitoring shall be performed daily and for the duration of all abatement activities as outlined below.
- 7. Air sampling will be performed at the following locations and in the specified approximate quantities as follows and as required by MDH Regulations. (5 Hours = 1 Work Shift).
 - **a.** Outside Containment: Minimum air samples per work shift including the following.
 - **b.** Decontamination Unit Entrance: Minimum of one (1) air sample outside the entrance to the clean room (per work shift).
 - **c.** Waste Loadout Unit Entrance: Minimum of one (1) air sample outside the entrance to the clean room (per work shift).
 - **d.** Outside Containment/Inside Building (Ambient Air): Minimum of one (1) air sample per work shift representative of containment make-up air.
- **8.** Volumes of all air samples collected outside of the Work Area(s) shall comply with MDH Regulations 4620.3597, Subpart 3.
- 9. Volumes of all air samples collected inside containment areas shall be in sufficient quantities to achieve, at a minimum, an analytical sensitivity of 0.01 f/cc, if possible. If acceptable filter surface loading for proper analysis requires an analytical sensitivity of greater than 0.01 f/cc, the conditions within the containment area(s) causing this condition must be documented within the daily Project submittals and the daily air monitoring analytical reports.
- 10. Final Clearance Air Monitoring AMS shall perform air sampling in accordance with requirements of the AHERA regulations (40 CFR Part 763) and MDH Regulations for Final Clearance Air Monitoring purposes. The AMS, based on collection area

square footage and configuration, may determine that additional Final Clearance Air Samples are required.

- a. TEM Final Clearance Air Samples- MPS requires that each of the five (5) inside Final Clearance Air Samples are equal to or below seventy structures per square millimeter (70 s/sq. mm.). If the analytical result of any of the five (5) inside Final Clearance Air Samples is above the clearance criteria level of 70 s/sq.mm., the sample collection area is required to be immediately re-cleaned and re-encapsulated. The TEM final clearance process is then to be repeated.
- b. PCM Final Air Clearances as per all the requirements of the EPA AHERA regulations and MDH Regulations. This includes a requirement that each of the five (5) Final Clearance Air Samples are equal to or below 0.01 fibers per cubic centimeter (f/cc). Failure of one (1) or more of the five (5) PCM Final Clearance Air Samples will require the Contractor to re-clean and re-encapsulate the entire failed Work Area(s). A new set of five (5) Final Clearance Air Samples will then be collected for PCM analysis.
- c. Final Clearance Air Monitoring Costs for projects requiring TEM or PCM analysis of final clearance samples, MPS shall provide for payment of only the first set of samples per containment area. Failure on the part of the Contractor to achieve the clearance level criteria (less than or equal to 0.01 f/cc by PCM analysis and less than or equal to 70 s/sq mm by TEM analysis) will require additional sets of Final Clearance Air Samples. Additional Final Clearance Air Sample procedural costs for Industrial Hygiene Consulting Services (including sampling labor costs) and TEM or PCM analysis costs shall be borne by the Contractor. Any and all subsequent analyses shall be performed only by the MPS-approved laboratory or laboratories assigned to the specific project.

206 TEMPORARY FACILITIES

A. General

- 1. Provide temporary connections to the existing building utilities or provide temporary facilities as outlined herein or as necessary to carry out the Work.
- 2. Advance notice must be provided to the MPS Project Manager prior to the anticipated interruption of existing utility services for the connection or removal of abatement temporary facilities.

B. Scaffolding

1. Provide all scaffolding, ladders and/or staging, etc., as necessary to accomplish the work of this contract. Scaffolding may be 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 requirements.

- 2. The rungs of all metal ladders, etc., must be covered with an abrasive non-slip surface.
- 3. A non-skid surface is required on all scaffold surfaces subject to foot traffic.

C. Water Service

- 1. Temporary Water Service Connection: If available, existing domestic water service to the building may be used during construction. All connections to the MPS water system shall include back flow protection. Valves shall be temperature and pressure-rated for operation of the temperatures and pressures encountered. MPS will pay all service costs for water used from existing facilities. When domestic water service is unavailable, the Contractor shall be responsible for providing water at the job site.
 - **a.** After completion of use, connections and fittings shall be removed without damage or alteration to the existing water piping and equipment.
 - **b.** Leaking or dripping valves shall be repaired or replaced immediately. Contractor is responsible for all damage to existing finishes or equipment due to leaking or dripping valves.
- 2. Hot Water: If available, hot water may be secured from the building hot water system providing back flow protection is installed at the point of connection as described in Paragraph 1 of this Section, and if authorized by MPS.
- 3. Hot Water Heater: When domestic hot water service is unavailable, the Contractor shall be responsible for providing a self-contained water heater at the job site. Provide a UL-rated, electric hot water heater to supply hot water for the Decontamination Unit shower as needed.
 - **a.** Activate the heater from a 30-amp circuit breaker located within the Decontamination Unit sub-panel.
 - **b.** Wiring of the hot water heater shall be in compliance with NEMA, NECA, and UL Standards.

D. Electrical Service

- 1. Contractor shall be required to provide Ground Fault Circuit Interrupter (GFCI) temporary electrical power panel connections and disconnections by a state licensed electrician. MPS will not provide any connection and disconnection services for temporary power panels. All temporary electrical power panel connections shall comply with all City of Minneapolis electrical code requirements.
- **2.** General: Comply with applicable NEMA, NECA and UL Standards and Governing Regulations for materials and layout of temporary electric service.

- 3. Temporary Power: Provide service to the decontamination unit sub-panel with a minimum 60-amp, 2-pole circuit breaker or fused disconnect connected to the building's main distribution panel. The subpanel and disconnect shall be sized and equipped to accommodate all electrical equipment required for completion of the work.
- **4.** Voltage Differences: Provide identification warning signs at power outlets that are other than 100-120 volt power.
- **5.** GFCI Protection: Provide receptacle outlets equipped with ground fault circuit interrupters, a reset button and a pilot light, for plug-in connection of power tools and equipment. All negative pressure differential equipment will be powered through GFCI outlets.
 - a. If the Contractor utilizes a negative pressure differential system that employs HEPA-filtered, forced make-up air within the containment area from additional Negative Pressure Differential Machines, these machines will be installed on the same electrical circuit as the machines establishing the negative pressure differential for the containment area(s). This will prevent a positive air pressure within the containment area(s) if the established negative pressure differential (minimum -0.02 inches/water) is reduced or interrupted.
- **6.** Electrical Power Cords: Use only grounded extension cords. Use "hard-service" cords in areas where the cords will be exposed to abrasion and traffic. Use single lengths or, in areas where single cords will not reach Work Areas, use waterproof connectors to connect separate lengths of electric cords.
- 7. Lamps and Light Fixtures: Provide general service lamps for all areas of work when natural light is not adequate.
 - **a.** Protect lamps with guard cages or tempered glass enclosures where fixtures are exposed to breakage by abatement operations.
 - **b.** Provide exterior fixtures where fixtures are exposed to the weather or moisture.

E. Temporary Heat

1. Provide temporary heating units that have been tested and labeled by UL, FM or another recognized trade association related to the fuel being consumed. Use steam or hot water radiant heat where available, and, where not available, use electric resistant fin radiation supplied from a branch circuit with GFCI. Under no circumstances shall forced air or fan-type units be utilized inside a Work Area.

F. Temporary Cooling

1. Provide temporary cooling units as required to maintain adequate environmental conditions to facilitate progress of the Work, to meet specified minimum

conditions for the installation of materials, and to protect materials and finishes from damage due to temperature or humidity. Provide adequate forced ventilation of enclosed areas for curing of installed materials, to disperse humidity, and to prevent hazardous accumulations of dusts, fumes, vapors or gases.

G. Sanitary Facilities

- **1.** Existing toilet facilities in the containment may not be used by the Contractor's personnel during performance of the Work.
- 2. Designated toilet facilities outside the containment may be used by the Contractor's personnel during performance of the Work. Contractor shall maintain assigned toilet rooms in a clean and sanitary condition.
- 3. Where existing toilet facilities are unavailable, provide single-occupant, self-contained toilet units of the chemical type, properly vented and fully enclosed with a shell of glass fiber, reinforced polyester or some other similar nonabsorbent material.

H. Temporary Fire Protection

- 1. Provide and maintain temporary fire protection during construction in accordance with requirements of the local protection code.
- 2. Comply with local regulations and the applicable recommendations of NFPA Standard 10, "Standard for Portable Fire Extinguishers." Locate the fire extinguishers where they are most convenient and effective for their intended purpose. Provide not less than one extinguisher in each work area, one in the equipment room, and one outside the Work Area in the clean room.

I. Execution of Electrical Service

- 1. Provide a weatherproof, grounded temporary electric power service and distribution system of sufficient size, capacity and power characteristics to accommodate performance of the work during the abatement period. Install temporary lighting adequate to provide sufficient illumination for safe work and traffic conditions in every portion of the Work Area. All temporary lighting shall remain in place and operational until all phases of the Project are complete including, but not limited to, all Final Visual Inspections and Final Clearance Air Monitoring procedures.
- Lockout all existing power to or through the Work Area as described below. Unless specifically noted otherwise, existing power and lighting circuits to the Work Area are not to be used. All power and lighting to the Work Area and decontamination facilities are to be provided from a temporary electrical panel as described below.
 - **a.** Lockout power to the Work Area by switching off all breakers serving power or lighting circuits in the work area. Label breakers with tape over

the breaker and with the notation "DANGER: Circuit Being Worked On." Lock the panel and have all keys under the control of the Contractor's Superintendent.

- b. Lockout power to circuits running through the Work Area wherever possible by switching off all breakers serving these circuits. Label breakers with tape over the breaker and with the notation "DANGER: Circuit Being Worked On." Sign and date the danger tag. Lock the panel and supply keys to the Contractor, Owner and Owner's Representative. If circuits cannot be shut down for any reason, label them at intervals 4 feet on center with tags reading, "DANGER: Live Electric Circuit. Electrocution Hazard".
- 3. Temporary Electrical Panel: Provide a temporary electrical panel sized and equipped to accommodate all electrical equipment and lighting required by the Work. Protect the panel with circuit breaker or fused disconnect. Locate the temporary panel as directed by MPS. Use of in house electrical outlets is prohibited without approval from MPS. Outlet-type GFCI devices will be required at all locations where use of wall outlets is approved.
- 4. During the connection of the Temporary Electrical Panel to the existing building electrical system at the existing panel location, any and all electrical cable necessary for the connection due to the distance from the electrical service panel shall be supplied by the Contractor.
- 5. Power Distribution System: Provide circuits of adequate size and proper characteristics for each use. In general, run wiring overhead and rise vertically where wiring will be least exposed to damage from abatement operations. Electrical connections are to be isolated and protected to prevent tampering by non-abatement personnel.
- **6.** Circuit Protection: Protect each circuit with a GFCI of proper size, located in the temporary panel.
- 7. Temporary Wiring: Wiring in the Work Area shall be Type-UF non-metallic heated cable located overhead and exposed for surveillance. Do not wire temporary lighting with plain, exposed (insulated) electrical conductors. Provide liquid-tight enclosures or boxes for wiring devices.

Provide an overload-protected disconnect switch for each temporary circuit located at the power distribution center.

Number of Branch Circuits: Provide sufficient branch circuits as required by the Work. All branch circuits are to originate at the temporary electrical panel. At a minimum, provide the following:

a. One circuit for each HEPA-filtered Negative Pressure Differential Machine. Exception for the design engineering controls described in Section 208.D.5.a.

- **b.** For power tools and task lighting, provide one temporary 4-gang outlet in the Work Area for each 2,500 square feet of Work Area, and one outlet at each decontamination unit, located in the equipment room (provide a separate 100-120 volt, 20-amp circuit for each 4-gang outlet 4 outlets per circuit).
- c. Provide one 110-120 volt, 20-amp branch circuits with 4-gang outlet for the Owner's exclusive use while conducting air sampling in each Work Area, at the clean side of each Decontamination Unit, and at each exhaust location for HEPA-filtered Negative Pressure Differential Machines.

207 REGULATED AREAS

A. Securing Work Area

- 1. Secure the Work Area from access by occupants, staff or users of the building. Accomplish this, where possible, by locking doors, windows or other means of access to the area, constructing temporary wood stud and plywood (minimum ½ inch thickness) barriers, and/or erecting temporary fencing (minimum 6-foot height). The Work Area is to include:
 - **a.** Containment areas (including all staging areas).
 - **b.** Equipment storage areas (interior and exterior of building).
 - **c.** ACM waste storage areas (exterior of building or approved interior locations).

B. Scheduling

1. Work may typically be permissible during normal working hours in those areas that can be completely secured by lockable doors from access by building occupants and staff, and that have HVAC equipment that can be shut down and locked off. Working hours will be specified within the Project Attachments F document or at the Pre-Bid Conference.

C. Demarcation of Regulated Area

1. Demarcate each Regulated Area with a sheet plastic drop sheet as described below. Post warning signs as required by 29 CFR 1926.1101 and Uniform Fire Code, Section 8707.4. It should be noted that multiple language warning signs maybe required. Where the controlled area is in a large area, such as in part of a boiler room, delineate the area with 3-inch wide polyethylene ribbon with the printed warning, "CAUTION: ASBESTOS REMOVAL". Install this ribbon between 3 and 4 feet above the floor.

300 PROJECT SITE WORK

301 REMOVAL OF ASBESTOS-CONTAINING MATERIALS

A. Containment construction shall consist of polyethylene film that conforms to requirements set forth by applicable regulatory and product testing agencies. Provide the largest size possible to minimize seams utilizing four (4) or six (6) mil thickness as appropriate. Containment construction is to include, but is not limited to Critical Barriers, Mini Enclosures, Limited Engineering Controls, Full Containments, Waste Load Outs, and Personnel Decontamination Units.

B. Glovebag Method of Asbestos Removal

- 1. MPS will allow the use of glovebag removal procedures only when limited amounts (less than twenty-five lineal feet (25') of ACM pipe insulation are to be removed per room. All glovebag method removal work shall be conducted by at least two (2) certified workers. Both workers shall remain in the Work Area until all removal work, final cleaning work and Final Visual Inspections are completed.
- 2. In using the glovebag method for removing pipe insulation, disposable clothing and respirators will be required. Workers will wear two disposable suits when performing glovebag activities utilizing a remote Decontamination Unit.
- 3. Install the glovebag according to the manufacturer's recommendations and smoke test prior to the removal of any ACM. Cut the covering on the insulation along the top seam to allow wetting of the insulation and cut cover all around section to be removed. Remove in small sections. Lower the insulation material carefully inside the glovebag, do not permit the insulation material to drop. Sliding of glovebags to incorporate the removal of additional insulating material will not be allowed. Contractor is to note that where applicable, insulation located in wall/ceiling penetrations is included in Scope of Work.
- 4. Removal of Glovebag and Disposal: Following removal of insulation, ensure that all visible material is inside the bag. Spray all tools in glovebag with amended water while it is still attached. Encapsulate surfaces. Evacuate bag with portable HEPA-vacuum and while the bag is collapsed, squeeze bag below tool pouch, and twist bag. Seal bag with tape or locking ties, separating the waste from the removal area. Vacuum the inside or the top of the glovebag and the unsealed portion of the glovebag below. Keep HEPA-vacuum connected until the glovebag is removed. Cut the glovebag along the top and sides, then remove it from the pipe. Wet pipe and wash all tools and removal area thoroughly. Dispose of glovebag, material, and contaminated equipment in accordance with all applicable federal, state, and local regulations.
- 5. The use of a remote Decontamination Unit is required. The location of the remote Decontamination Unit must be pre-approved by the MPS Project Manager/I.H. Consultant/AMS. Procedures for usage and location shall be as stated in MDH Regulations. The Decontamination Unit shall consist of three chambers. The first chamber is the equipment room, the middle chamber is the shower, and the last chamber is the clean room. Decontamination unit requirements are as described in Section 302.C.3.a.

C. Methods of Material Wrap and Cut

- **1.** Material wrap and cut removal can only be performed on intact non-damaged asbestos-containing thermal systems insulation.
- 2. At each designated point, a quantity of insulation shall be removed using glovebag methods as described in Section 301.B (this requirement will be waived if the insulation material at the cut points is a non-asbestos containing insulation). This removal area shall be large enough to allow for the encapsulation of the exposed insulation. At no time shall the Contractor remove more than 25 linear feet per room using glovebag methods.
- 3. Pre-clean all existing debris from the areas adjacent to the pipe locations using HEPA vacuum and/or wet wipe procedures.
- **4.** For each pipe scheduled for wrap and cut procedures, cut points shall be determined and insulation removed at that point. These locations should be identified by evaluation of the pipe according to its condition, length, location and the ability to extract from the area. Included in the Contractor's Scope of Work is the compete removal of insulation at and within all wall/ceiling penetrations.
- **5.** Upon completion of the glovebag removal procedures all exposed pipe insulation shall be sealed with an approved penetrating (palm grade) encapsulant.
- 6. Air monitoring samples shall be collected during/following (dependent upon amount of material impacted) glovebag procedures. The area shall only be released when fiber levels are found to be less than or equal to 0.01 f/cc. If fiber levels are detected in excess of 0.01 f/cc, corrective actions shall be initiated immediately.
- 7. Pre-wet all materials scheduled for component removal using water containing an approved amending agent. Wetting procedures shall be performed so that the outside covering of all components are saturated. This activity is to take place just prior to sealing and cutting of pipe.
- 8. Install a minimum of two (2) independent layers of six (6) mil polyethylene sheeting over all components scheduled for removal. All polyethylene sheeting shall be installed in a manner that provides an air tight seal around the materials to be sealed.
- Piping to remain in place shall be supported following material wrap and cut procedures. Residual liquid present within the piping will be contained during the cutting activities. Residual liquid will not be allowed to contact building finishes and remaining pipe insulation materials. Upon completion of the cutting activities the open ends of remaining pipe shall be sealed to prevent residual liquid from leaking out.
- 10. Pipes shall be cut and readied for removal and disposal according to the District's demolition schedule. Upon completion of the cutting activities, the Contractor shall, prior to the end of the workday, remove the pipe from the work area. No piping, debris or materials involved in this procedure will be allowed to

- remain within the building overnight. All materials shall be placed in the disposal dumpster prior to the Contractor's departure each day.
- **11.** The Contractor shall cut no piping unless MPS, the General Contractor, or the I.H. Consultant/AMS gives specific authorization.
- **12.** Piping adjacent to fittings is to be cut by Contractor personnel. Handling of piping with asbestos containing insulation is to be performed by Contractor personnel.
- 13. The Contractor is responsible for all costs associated with the containerization and disposal of asbestos containing materials. This will include the provision of a lockable dumpster when necessary.
- **D.** Methods of Removal for Asbestos Flooring Systems
 - Vinyl Asbestos Floor Tile, Asbestos Sheet Goods and Steel Shot Blasting of Asbestos Mastic
 - a. Installation and/or construction of Critical Barriers, Full Containment, Waste Load Out and Personnel Decontamination Units as defined in Section 302 of this document. The minimum of one (1) layer of four (4) mil thickness polyethylene sheeting for ceilings is not required when non-mechanical methods are used.
 - **b.** The Contractor will be required to establish, maintain, and record a negative pressure differential of -0.02 inches of water in the work area.
 - **c.** Removal of the specified ACM will be performed utilizing wet removal methods.
 - **d.** Steel Shoot Blasting will not be allowed without prior written approval from the MPS Project Manager.
 - 2. Vinyl Asbestos Floor Tile and Asbestos Mastic (Limited Engineering Controls)
 - **a.** Installation and/or construction of Critical Barriers, Waste Load Out and Personnel Decontamination Units as defined in Section 302 of this document.
 - **b.** Contractor personnel will be required to don personnel protective clothing and the appropriate respiratory protective equipment.
 - c. Install a six (6) mil polyethylene sheet splash guard at least three feet (3') in height. This splash guard will be applied to all vertical surfaces within the identified Work Area.
 - **d.** A negative pressure differential will be established and maintained within the Work Area throughout the removal process. The Negative Pressure

- Differential Machines will remain in operation until the Work Area has passed Final Clearance Air Monitoring criteria.
- e. MPS will not allow mechanical methods for the removal of the floor tile or mastic. MPS will only permit floor buffers to be utilized to aid in the removal of floor tile mastic under full containment engineering controls (as defined in Section 302 of this document). If full containment engineering controls are utilized, Contractor is responsible for all applicable regulatory notifications and permits.
- f. MPS and/or their representative will perform air monitoring within the Work Area during the removal process. If at any time air monitoring results indicate that 0.01 f/cc or 70 structures/square millimeter has been exceeded, the Contractor will be required to wet wipe/HEPA vacuum the entire Work Area.
- g. Removal of the specified ACM will be performed utilizing wet removal methods. The floor tile and mastic are to remain non-friable during the removal process. If these materials are rendered friable, the Contractor will be required to construct and maintain full containment engineering controls throughout the completion of the removal process. This will be done at no additional cost to MPS.

3. Asbestos Mastic

a. Contractor is required utilize a low order mastic remover. Neutralization of all work surfaces is required according to manufacturer's recommendations. Neutralization is to be performed prior to clearance air monitoring. Adjacent floor tile and mastic materials that are not included in the Scope of Work are required to be protected from mastic remover. Following air clearance, the Contractor is required to thoroughly rinse the concrete substrate with clean water three (3) separate times. Each separate rinse is to be performed using clean water, mop heads and buckets with rinse water being extracted following each rinse. Additional rinsing may be required if the Contractor fails to remove residual mastic remover.

E. Method of Removal for ACM-Contaminated Soil

1. The Contractor will be required to provide to MPS and/or their representative estimated quantities of all ACM included within the Scope of Work per Work Area. These ACM quantities are to include, but not be limited to, all ACM-contaminated soil, pipe insulation, associated fittings, duct insulation and any other ACM's specified within the Scope of Work for the crawl space(s). The calculated quantities are to be represented in cubic yards and there must be a separate quantity for each type of material that is to be removed. The calculations for soils are to be based on the required removal of a minimum of three (3) inches. These calculations will be verified by the MPS-retained I.H. Consultant. The purpose of these calculations is to aid MPS and the Contractor in tracking (through waste manifests) the progress and substantial completion of

the removal process in each identified crawl space Work Area. These quantity estimates will be submitted to MPS and/or their representative at the same time as the Project Design.

- 2. All ACM-contaminated soils will be removed from MPS facilities through the proper utilization of HEPA-filtered Vacu-loading equipment exclusively. No other methods for the removal of these materials will be acceptable without prior MPS approval of an alternative procedure designed as a response to a technical inability to utilize said equipment. All soil removal is to be performed utilizing full enclosure procedures as defined in Section 302 of this document.
- 3. Removal of ACM-contaminated soils will be performed utilizing wet methods. The Contractor must provide notification to and obtain written permission from the appropriate regulatory agency or agencies if the HEPA-filtered Vacu-loading equipment is utilized on unwetted (dry) soils. HEPA-filtered Vacu-loading of unwetted (dry) soils may be interpreted as a "dry removal" which requires the granting of a Procedural Variance from the appropriate regulatory agency or agencies.
- 4. When the removal of TSI is also within the Scope of Work, the Contractor will be required to place a four (4) mil polyethylene drop cloth underneath the pipe runs. The polyethylene drop cloth should be of a sufficient size to ensure that any resultant TSI debris will fall onto the drop cloth.
- 5. Start removal at the point of work farthest from the Decontamination Unit and proceed toward the Decontamination Unit. The entire surface of the identified ACM-contaminated soil within the Work Area will be vacuumed through the use of the HEPA-filtered Vacu-loading equipment. Hand raking or localizing of the surfaces and visible debris will be strictly prohibited due to the potential for the covering or integrating of the ACM debris below grade. Once the HEPA-filtered Vacu-loading equipment procedures are completed, do not permit traffic into the abated area.
- 6. ACM-Contaminated soils shall be removed to a minimum depth of three (3) inches or to a greater depth sufficient to facilitate clearance by PLM sample collection analysis (U.S. EPA Interim Method EPA 600/M4-82-020) performed by the MPS-retained Industrial Hygienist. At all times, a minimum depth of three (3) inches will be removed from areas of ACM-contaminated soil. Piles of soil and a minimum of three (3) inches of soil below the piles will be removed and are included within the Contractors scope of work.
- 7. It is to be understood that there will potentially be localized areas of ACM-contaminated soil in which three (3) inches of soil removal will not be sufficient to document uncontaminated soil conditions. It shall be the Contractor's responsibility to remove soil to a sufficient depth to meet MPS PLM clearance criteria in each Work Area of the Project prior to the collection of the aggressive final TEM clearances. MPS PLM clearance criteria requires that additional cleaning and/or removal be performed if the first round of PLM soils analysis indicates "trace" amounts or greater of asbestos content.

- **8.** Clearance Criteria for Areas of ACM-contaminated soil
 - a. Contractor will request a visual inspection of the Work Area(s) by the MPS representative and/or the onsite AMS/I.H. Consulting Firm when the specified Scope of Work has been completed utilizing the required abatement procedures within a Work Area. The visual inspection is to determine if the abated pipes, fittings, vessels and ductwork are adequately cleaned of gross ACM debris to facilitate encapsulation and/or if the soil layer is adequately cleaned of gross ACM debris for the collection of random bulk (PLM) samples. Contractor is expected to meet any and all reasonable requirements specified by the AMS/I.H. Consulting Firm for the re-cleaning of surfaces and areas. All surfaces of the Work Area specified for abatement will be substantially cleaned of all visible ACM debris.
 - b. Following the successful completion of the visual inspection by the AMS/I.H. Consulting Firm, randomly selected soil samples will be collected for PLM analysis (U.S. EPA Interim Method EPA 600/M4-82-020). It is the responsibility of the AMS/I.H. Consulting Firm to adequately divide the Work Area(s) into nine (9) or more approximately equal-sized grids for the collection of one (1) bulk sample from each grid within the Work Area(s) at a randomly selected location within each grid area. MPS reserves the right to authorize the AMS/I.H. Consulting Firm to divide each Work Area into more than nine (9) grid sample areas if nine (9) are deemed inadequate. At no time will a Work Area be divided into less than nine (9) grid sample areas nor will less than a total of nine (9) bulk samples be collected per Work Area.
 - c. Bulk sample analytical results indicating zero percent (0%) asbestos content within the soil layer will be required for clearance of crawl space soil area(s) following the collection of one (1) set of nine or more clearance bulk samples.
 - d. Bulk sample analytical results indicating asbestos content of greater than one percent (1%) within the soil layer will require that the Contractor remove an additional minimum of one (1) inch of soil from the approximate area of the grid area(s) that failed. A visual inspection will follow and subsequent bulk sample(s) will be collected and analyzed.
 - e. Bulk sample analytical results indicating one percent (1%) or less (trace amounts) of asbestos content within the soil layer will require that the Contractor subject the soil layer within the approximate area of the grid area(s) that failed to, at a minimum, a surface re-cleaning via the HEPA-filtered Vacu-loading equipment. Some soil removal with said equipment may be additionally required. A visual inspection will follow and subsequent bulk sample(s) will be collected and analyzed.
 - **f.** Two (2) consecutive bulk samples collected from one (1) sample grid area yielding analytical results of trace amounts of asbestos content

- within the soil layer will be considered sufficient for the PLM clearance of crawl space soil areas.
- **g.** Following the PLM clearance of all grid sample areas within a crawl space soil Work Area, the Contractor will be authorized to proceed with the required encapsulation procedures to facilitate the collection of TEM final clearance air samples.

302 PROJECT DECONTAMINATION PROCEDURES

A. General

- 1. The work specified in this section includes the decontamination of air in the Work Area that has been or may have been contaminated by the elevated airborne asbestos fiber levels generated during the asbestos abatement activities, or that may previously have had elevated fiber levels due to friable ACM in the space.
- 2. The work includes the cleaning, decontamination and removal of potential temporary barriers installed prior to the asbestos abatement work.

B. Preliminary Cleaning

- **1.** Perform preliminary cleaning in accordance to all applicable federal, state, and local regulations.
- 2. I.H. Consulting Firm/AMS or MPS Project Manager shall perform visual inspections before and after the installation of critical barriers and the construction of the containment area(s).

C. Containment Construction

1. Critical Barriers

- a. MPS prohibits the use of spray adhesives for the attachment of all temporary critical barriers to any and all interior surfaces and/or components of any MPS facility. This includes, but is not limited to, walls (painted, textured, papered, unfinished, etc.), ceilings (painted, textured, spray-applied, unfinished, etc.), doors (painted, varnished, unfinished, etc.), door openings (frames, jambs, casings, hardware, etc.), window openings (frames, jambs, casings, hardware, etc.), ceiling components or systems (suspended ceiling tiles, glue-applied ceiling tiles, tectum ceiling panels, suspended ceiling tile/panel grid systems, etc.), and fixtures (lights, switchplates, electrical outlet cover plates, heating/ventilation/air conditioning system diffuser grilles, HVAC ductwork openings, unit ventilator assemblies, etc.).
- **b.** Completely separate the Work Area from other portions of the building, and the outside, by closing all openings/cracks with polyethylene sheeting barriers at least six (6) mil in thickness.

- c. Individually seal all ventilation openings (supply and exhaust), lighting fixtures, clocks, doorways, windows, convectors, speakers and other openings into the Work Areas with polyethylene sheeting. Maintain seal until all work, including project decontamination, is completed. Take care in sealing of lighting fixtures to avoid melting or burning of polyethylene sheeting.
- **d.** Provide polyethylene sheeting barriers at least six (6) mil in thickness as required to seal opening completely from the work area into adjacent areas. Seal the perimeter of all polyethylene sheeting barriers with duct tape.
- e. Contractor must be able to establish and maintain a minimum negative pressure differential of -0.02 inches/water following the installation of critical barriers and <u>before</u> the installation of floor, wall, or ceiling polyethylene sheeting. It is required that this activity be witnessed/documented by the on site AMS.

2. Application of Polyethylene Sheeting (Full Containment)

- a. MPS prohibits the use of spray adhesives for the attachment of all temporary containment or enclosure polyethylene sheeting to any and all interior surfaces and/or components of any MPS facility. This includes, but is not limited to, walls (painted, textured, papered, unfinished, etc.), ceilings (painted, textured, spray-applied, unfinished, etc.), doors (painted, varnished, unfinished, etc.), door openings (frames, jambs, casings, hardware, etc.), window openings (frames, jambs, casings, hardware, etc.), ceiling components or systems (suspended ceiling tiles, glue-applied ceiling tiles, tectum ceiling panels, suspended ceiling tile/panel grid systems, etc.), and fixtures (lights, switchplates, electrical outlet cover plates, heating/ventilation/air conditioning {HVAC} system diffuser grilles, HVAC ductwork openings, unit ventilator assemblies, etc.).
- b. MPS will only allow the use of spray adhesives for the attachment or fastening of polyethylene sheeting to other polyethylene sheeting and/or other containment components owned by the Contractor and brought onto the MPS site for the construction of the temporary containment or enclosure structure(s).
- **c.** Provide a single polyethylene film in the largest sheet size possible to minimize seams, a minimum of four (4) or six (6) mils thick as indicated.
- d. Cover all floors not scheduled for removal and wall surfaces in the Work Area with polyethylene sheeting taped securely in place. Use a minimum of one (1) layer of four (4) mil thickness polyethylene sheeting on walls, minimum of one (1) layer of four (4) mil thickness polyethylene sheeting for ceilings and a minimum of two (2) layers of six (6) mil thickness polyethylene sheeting on floors. Cover floors first so that polyethylene sheeting extends at least twelve (12) inches up on walls, then cover walls

with polyethylene sheeting to extend past the floor seams a minimum of twenty-four (24) inches. This process will be repeated with both (walls and floors) second layers. At no time will polyethylene sheeting seams meet at either the floor-to-wall junctions or wall-to-wall junctions.

- **e.** The ceiling polyethylene sheeting, if applicable, shall be placed last and shall extend down the wall a minimum of 12 inches.
- **f.** Form a sharp right-angle bend at junction of floors, walls, and ceilings so that there is no radius that could be stepped on causing any attachments to be pulled loose.
- **g.** Continuously monitor the containment barriers visually or using the smoke method to ensure the integrity. Repair damaged barriers and remedy defects immediately upon discovery.
- h. Contractor will provide and install viewing windows of sufficient size and in sufficient available locations to provide for observation of abatement activities by MPS project personnel and representatives.
- i. If the Project Scope of Work involves the dividing of a Work Area into any components that do not equal the entire space through the use of erecting polyethylene sheeting barriers, one (1) layer of this barrier must be a critical barrier. A minimum of two (2) layers of polyethylene sheeting will be required for the construction of polyethylene sheeting barrier walls a critical barrier and the minimum one (1) wall layers of the containment.
- j. In exterior applications or when there is a potential for the containment or a portion(s) of the containment to be exposed to the elements, this containment or portion(s) of this containment will be required to be protected or housed within a structure constructed of exterior grade materials (i.e. CDX grade plywood), minimum 1/2" thickness, with framing members spaced at a maximum of 24" on center.

3. Decontamination Units

a. Provide personnel Decontamination Units consisting of an arrangement of connected rooms or spaces consisting of a changing room, shower room and equipment room which are separated by air locks. Personnel are to pass through this Decontamination Unit for entry into and exiting from the Work Area for any purpose. All polyethylene sheeting utilized for the construction of the Decontamination Unit will be a minimum of two (2) layers of six (6) mil. Air locks are required to be "Z" flap type using a minimum of six (6) mil polyethylene sheeting. The use of pre-fabricated pop up decontamination unit chambers will not be allowed without MPS approval. The Decontamination Units will be constructed of materials that will enable the units to be padlocked, and in effect deny access to the containment area. In exterior applications or unsecured interior areas of a facility, the decontamination units and/or the structures constructed to house them will be built of exterior grade materials (i.e. CDX grade

- plywood), minimum 1/2" thickness, with framing members spaced at a maximum of 24" on center.
- b. Provide a shower head producing a spray of water that can be adjusted for spray size and intensity. Supply the shower with hot and cold potable water. Arrange so that the control of the water temperature, flow rate and shut-off is from inside the shower unit adjustable at the shower tap as required by MDH Regulations.
- c. Provide an additional one-piece waterproof shower leak basin with an approximate depth of 6 inches, fabricated from seamless material. The required shower leak basin is to be separate from the portable shower unit. The portable shower unit is to be set up inside the separate shower leak basin. This is to act as a catch basin to protect MPS flooring materials and facility finishes in the event that the shower unit leaks. At no time will standing water in the catch basin be permissible. All water from the shower unit, including catch basin water, will be properly filtered.
- **d.** The Contractor must demonstrate, prior to the removal of any ACM that the hot/cold water and shower filtering pump are properly functioning.
- **e.** The use of reusable garments (e.g. nylon swimsuits) underneath disposable protective clothing will not be permitted to be removed from the Work Area except as appropriately bagged ACM waste.
- **f.** All filtered shower water will be discharged into sanitary sewer lines. Discharge into non-sanitary floor drains and/or storm drains will be strictly prohibited.
- 4. All containment areas shall be constructed to include a three-stage Waste Load Out Unit. This unit shall be separate from the Decontamination Unit and shall be used as a temporary storage area for bagged waste and as a port for the transfer of bagged waste to the waste transport vehicle. All polyethylene sheeting utilized for the construction of the Waste Load Out Unit will be a minimum of two (2) layers of six (6) mil. Air locks are required to be "Z" flap type using a minimum of six (6) mil polyethylene sheeting. The use of pre-fabricated pop up load out unit chambers will not be allowed without MPS approval. The Waste Load Out Units will be constructed of materials that will enable the units to be padlocked, and in effect deny access to the containment area. In exterior applications or unsecured interior areas of a facility, the Waste Load Out Units and/or the structures constructed to house them will be built of exterior grade materials (i.e. CDX grade plywood), minimum 1/2" thickness, with framing members spaced at a maximum of 24" on center. Ingress and egress of Contractor personnel through the Waste Load Out Unit is strictly prohibited.

5. Duct Tape.

a. Provide duct tape in 2-inch or 3-inch widths as indicated, with an adhesive that is formulated to aggressively stick to sheet polyethylene.

6. Spray Adhesive

a. Provide spray adhesive in aerosol cans that is specifically formulated to stick tenaciously to sheet polyethylene. The use of spray adhesives onto any MPS facility surfaces is strictly prohibited.

7. Expanding Foams

- a. The use of expanding foams in the construction of containments will only be allowed following approval for use from MPS. Approval from the on site I.H. Firm or AMS WILL NOT be considered as approval from MPS.
- **b.** The use of expanding foams WILL NOT be allowed inside containment prior to successful completion of the final inspection by the MPS representative, the I.H. Firm or AMS.

8. Wetting Material

- a. For wetting of ACM prior to disturbance and/or during removal procedures, use amended water. Provide water to which a surfactant has been added. Use a mixture of surfactant and water that results in wetting of the ACM and retardation of fiber release during disturbance of the ACM equal to or greater than that provided by the use of a surfactant consisting of one (I) ounce of 50% polyoxyethylene ether mixed with five (5) gallons of water.
- **b.** For wetting prior to disturbance of ACM, use a removal encapsulant. Provide a penetrating type of encapsulant designated specifically for removal of ACM. Use a material that results in wetting of the ACM and retardation of fiber release during disturbance of the ACM.
- **c.** Thoroughly wet the ACM to be removed prior to stripping and/or tooling, to reduce fiber dispersal into the air.
- **d.** Saturate the ACM sufficiently to wet without causing excess dripping. Allow time for amended water to penetrate the ACM thoroughly.
- **e.** Spray the ACM repeatedly with amended water during the work process to maintain a continuously wet condition.
- f. If applicable, perforate outer covering of any insulation that has been painted and/or jacketed in order to allow penetration of amended water, or where necessary, carefully strip away the outer covering while simultaneously spraying amended water on the installation, to minimize dispersal of asbestos fibers into the air.
- **g.** Mist the Work Area air continuously with amended water through the use of airless spray equipment during all removal activities to reduce airborne fiber levels throughout the duration of the Project.

- h. The use of facility domestic water supplies for the specific purpose of wetting ACM or asbestos-contaminated materials located within abatement work areas will be permitted with the following requirements and restrictions:
 - 1. All provisions within Section 206 C., "Water Service" of this specification, all other related MPS requirements, and all applicable federal, state and local regulatory requirements are met.
 - 2. All provisions within Section 302 C.8., "Wetting Materials" of this specification, all other related MPS requirements, and all applicable federal, state, and local regulatory requirements are met.
 - 3. All damage(s) resulting from the excessive or uncontrolled application of amended water, unattended supply lines left running, or supply line breakage will be the sole responsibility of the Contractor to repair. This includes, but is not limited to, all costs associated with the decontamination and cleaning of all areas affected by flooding or leakage of contaminated water into uncontaminated or non-containment areas. The Contractor's responsibility will include all additional costs for surveillance and analytical services required to meet the specified clearance criteria for re-occupancy of the affected area(s).
 - 4. The removal or stripping of ACM or asbestos-contaminated materials will not be permitted with the domestic water supply systems. The domestic water supply systems and associated equipment may only be used for the wetting of the materials.
- i. Remove saturated ACM in small sections from all areas. Do not allow the ACM to dry out. As it is removed, simultaneously pack ACM, while still wet, into disposal bags. Evacuate air from disposal bags with HEPA-filtered vacuum equipment before sealing. Twist neck of bags, bend over (goose neck) and seal with a minimum of three wraps of duct tape. Clean the outside of the bags and move them to the wash station of the Waste Load Out Unit.

9. Negative Pressure Differential Monitoring

a. Continuously monitor and record the pressure differential between the Work Area and the building outside of the Work Area with a monitoring device incorporating a continuous strip chart recorder. A minimum negative pressure differential of -0.02 inches of water is to be maintained. The monitoring device is to be calibrated each shift prior to any ACM removal. The calibration is to be observed by the MPS I.H. Firm/AMS. The Contractor is to immediately notify MPS Project Manager and/or I.H. Firm/AMS if the measured negative pressure differential cannot be maintained at -0.02 inches of water.

- **b.** A copy of the strip chart is to be included in the Contractor's Post Project Submittals along with explanations, per occurrence, if the measured negative pressure differential is below -0.02 inches of water. Strip chart recordings are to identify the work area, date, required minimum engineering controls and phase of abatement.
- **c.** Any and all make-up air filters installed within containment barriers will be a minimum of a Negative Pressure Differential Machine secondary filter.
- d. All venting of HEPA filtered exhaust is to be to the outside of the building. Interior venting of HEPA exhaust will require prior approval from MPS. Interior exhaust locations approved by MPS require continuous air monitoring.

10. Final Cleaning

- **a.** Perform the final cleaning operations of all surfaces of the Work Area, including items of polyethylene sheeting, tools, scaffolding and/or staging, using wet-cleaning methods and/or HEPA-filtered vacuum equipment.
- **b.** Do not perform dry dusting or dry sweeping. Use each surface of a dark cleaning cloth one time only and then dispose of as contaminated waste.
- **c.** Continue the cleaning until there is no visible debris from removed materials or residue on polyethylene sheeting or other surfaces.

11. Final Visual Inspection

- a. The Contractor is to perform a complete inspection of the entire Work Area before notifying the AMS or MPS Project Manager. The inspection is to include all surfaces, ceilings, walls, floors, Decontamination Units, Waste Load Out Units, all polyethylene sheeting, seals over ventilation openings, doorways, windows, and other openings. Inspect for debris from any sources, residue on surfaces, dust or other matter. During inspection, sweep the entire Work Area, 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 cleaning and continue decontamination procedures.
- **b.** When the Work Area is visually clean, and if, after sweeping all surfaces with the leaf blower, no debris, residue, dust or other material is found, notify MPS that the Work Area is ready for visual inspection and provide the following:
 - i. Temporary Lighting: Provide lighting on all surfaces in the areas to be subjected to visual inspection. Provide hand-held lights capable of reaching all locations in Work Area.

- **ii.** Lifts: Provide ladders, scaffolding and lifts as required to provide access to all surfaces in the area to be subject to visual inspection. Access is to allow touching of all surfaces.
- c. I.H. Firm/AMS and/or MPS Project Manager shall perform the Final Visual Inspection prior to encapsulation. AMS or I.H. Firm is authorized to perform the Final Visual Inspection if the MPS Project Manager is not available.
- **d.** Contractor shall provide a minimum of two (2) sets of protective clothing and respiratory protection equipment (equal to the equipment being utilized by the workers) and said equipment shall be reserved for availability to authorized visitors.

12. Encapsulation

- **a.** Following passing of the visual inspection, perform post-removal encapsulation of substrata. Maintain the negative pressure differential system in operation during the encapsulation work.
- **b.** An approved encapsulant shall be applied, using low pressure or airless spraying equipment, to all areas of the project where ACM has been removed.
- Encapsulants utilized shall be of a type that dries to a clear finish only. No C. coloring agents shall be added to encapsulants unless specified or preapproved by MPS. MPS reserves the right to require the addition of an appropriate coloring agent to the encapsulant when necessary. All encapsulants shall be compatible with the replacement materials to be used (e.g. any spray back materials, mastic adhesives, etc.). If any encapsulant is incompatible with the substrata, the Contractor shall be fully responsible for providing an alternate encapsulant that is compatible, at no additional cost to MPS. All encapsulants utilized by the Contractor will be suitable for the area of application with respect to heat resistance, compatibility to surfaces, reapplied replacement materials. Encapsulant will be a product tested and designated for the specific use. In areas where replacement flooring materials (VCT, vinyl sheet flooring) are to be installed, the encapsulant is to be compatible with the flooring/adhesive materials. Any form of paint products (latex or oil-based) will not be acceptable for use as a required encapsulant.
- d. Contractor must adequately encapsulate any and all thermal system insulation specified to remain in place following abatement procedures (e.g. exposed pipe insulation ends). Contractor will utilize an approved non-ACM encapsulant (e.g. "palm grade" bridging encapsulant) for this purpose. The use of duct tape or any other unapproved encapsulating material will be strictly prohibited.
- **e.** Following encapsulation, the negative pressure differential equipment will remain operational to maintain the required negative air pressure within

the containment area (minimum -0.02 inches of water as measured by manometer) and to allow the negative pressure differential system to clean the air of the containment of any residual airborne asbestos fibers.

- f. The AMS shall perform the aggressive Final Clearance Air Monitoring of the Work Area as per the requirements of the applicable federal, state and local regulations and Section 207 of this Specification. It should be noted that the Final Clearance Air Monitoring will be performed with only critical barriers in place.
- g. Contractor will be responsible for periodic inspections of Negative Pressure Differential Machines to ensure their continuous required operation and the established negative pressure differential (minimum 0.02 inches/water for full containment procedures) for <u>all</u> containment areas including Mini Enclosures until such time as the Final Clearance Air Monitoring analytical results are received and posted.
- h. It is the responsibility of the Contractor to notify the applicable Minnesota regulatory agencies regarding the scheduled visual inspection prior to the collection of the required final clearance air samples. It is the option of these inspectors to perform a visual inspection following the collection of the final clearance air samples that have met or exceeded the required clearance criteria.

13. Removal of Work Area Isolation

- a. MPS may reject abatement work that fails to meet clearance requirements as outlined in this document. Contractor shall promptly correct any deficiencies resulting in rejection of the work. If clearance air sampling demonstrates that asbestos concentrations are above the levels established for clearance of MPS asbestos abatement projects, Contractor shall promptly reclean the affected area and initiate other procedures necessary to reduce airborne asbestos concentrations to acceptable levels. All corrective measures associated with failed final clearance tests, including recleaning, other remedial actions, additional required air sampling and/or additional final clearance air sampling procedures and analysis by an industrial hygienist and laboratory selected by the MPS, shall be conducted at Contractor's expense, unless Contractor can establish to the Owner's satisfaction that unrelated activities are responsible for the failed tests.
- b. Remove all critical barrier sheeting and perform the final cleaning operations of all surfaces in the Work Area in the same manner as the first cleaning (this cleaning is now being applied to existing room surfaces). Take care to avoid marks or other damage to the surfaces.
- c. After all requirements of this section have been met, remove the Work Area isolation in the sequence outlined in this paragraph. Shut down and remove the negative pressure differential system. Seal HEPA-filtered fan units, HEPA-vacuums and similar equipment with 6-mil polyethylene

sheeting and duct tape to form a tight seal at intake end before being moved from the work area. Remove personnel and material Decontamination Units. Remove the critical barriers separating the Work Area from the rest of the building. Remove any small quantities of residual material found with wet-wiping, HEPA-vacuums and local area protection. If significant quantities as determined by MPS Representative are found, then the entire area affected shall be decontaminated. Remove all equipment, materials and debris from the Work site. Dispose of all remaining asbestos-containing waste material (including all dismantled polyethylene sheeting components) as specified in Section 302 of this Specification.

d. Contractor shall be responsible for the removal of all polyethylene sheeting barriers and the associated duct tape/spray adhesive residue. This shall include, but not be limited to, all polyethylene sheeting containment components, critical barriers, mini containment components, wall/ceiling/floor penetrations, barrier tape attachment locations, warning signage locations, etc.

14. Punch List.

a. The Contractor will submit to the MPS Project Manager a notarized copy of the itemized punch list compiled by the I.H. Consulting Firm stating that each item has been completed or otherwise resolved for acceptance and has been endorsed and dated by the I.H. Consulting Firm representative. This submittal to MPS is required within seven (7) business days of receiving the punch list itemizing the work to be completed or corrected from the I.H. Consulting Firm.

303 HANDLING AND DISPOSAL OF ASBESTOS-CONTAINING WASTE MATERIAL (ACWM)

This section describes the storage and disposal of ACWM's including containerization of ACWMs.

A. Handling and Storage Requirements.

- 1. At NO time are ACWMs to be stored inside of the facility without prior consent from the MPS Project Manager. When the storage of ACWMs inside a facility is allowed, the Contractor is responsible to maintain security (lock doors, lockable containers) for the ACWMs.
- 2. At NO time are unsecured ACWMs, materials labeled as ACWM or ACWM receptacles to be left unattended by Contractor personnel.
- 3. At NO time are ACWMs to leave a MPS project site in an uncovered and unlined truck/trailer. The requirement for the lining of the enclosed truck/trailer does not include the installation of a ceiling lining.

- **4.** The Contractor is to receive prior consent from the MPS Project Manager for ACWM storage areas and the methods of isolation.
- 5. Any exterior storage areas for ACWMs (including storage trailers, transport trailers, roll-off dumpsters, and vehicles) are to be fenced by the Contractor with temporary free standing chain link fencing (minimum 6 foot height). Storage trailers, transport trailers, roll-off dumpsters and fencing are to be secured by chains and padlocks when unattended. At NO time will trailers or roll-off dumpsters containing ACWMs be left uncovered, unattended or unsecured (locked).
- 6. Any equipment or area(s) utilized for the transportation or storage of ACWM shall be lined with a minimum of one (1) layer of 6 mil polyethylene sheeting. These include, but are not limited to:
 - **a.** Interior Storage Areas (pre-approved by MPS for use)
 - **b.** Exterior Storage Areas (pre-approved by MPS for use)
 - **c.** Storage Trailers, Roll-off Dumpsters, or Vehicles
 - d. ACWM Receptacles
 - e. Carts
- 7. No ACWM will be removed from any regulated area(s) during normal school hours. The only permissible time for ACWM loadout will between the hours of 6:00 P.M. and 4:00 A.M. on school days or MPS-approved alternate times if specific activities involving any building occupants or visitors (e.g., students, faculty, parents, general public) are scheduled in or adjacent to the waste loadout pathway.
- 8. Contractor will isolate, through the placement of barrier tape and/or barricades, the entire pathway through the building that is to be utilized for the transfer of containerized ACWM from the regulated area(s) to the storage area or transport vehicle. This isolation procedure will ensure that no unprotected building occupants or visitors can access any location near or adjacent to the waste loadout pathway. It is the Contractor's responsibility to ensure that all physical entry into the area and visual observation of the procedures is properly controlled if not eliminated.
- 9. Removal of all non-asbestos waste materials generated by the project is limited to the same restrictions for loadout as ACWMs. This restriction will eliminate the potential for loadout of non-asbestos waste materials to be mistaken for actual ACWM loadout by facility personnel/visitors (students, faculty, custodial staff, parents) and/or the general public (parents, neighborhood residents).
- **B.** Handling and Disposal Submittals
 - **1.** Submit the following to MPS for review:
 - **a.** A copy of the state or local license for the waste hauler.

b. The name and address of the landfill where the asbestos-containing waste materials are to be buried. Include the contact person's name and telephone number.

C. Disposal Bags

1. Provide 6 mil thick leak-tight polyethylene bags labeled with text as follows:

FIRST LABEL (provide in accordance with 29 CFR 1910.1200(f) of OSHA's Hazard Communication Standard):

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

SECOND LABEL (provide in accordance with U. S. Department of Transportation regulation on hazardous waste marking. 49 CFR Parts 171 and 172. Hazardous Substances: Final Rule. Published November 21, 1986, and revised February 17, 1987):

HQ Hazardous Substance Solid, NOS NA 2212 Class 9 (Asbestos)

THIRD LABEL (provide in accordance NESHAP regulation EPA 340/1-90-015, "A Guide to the Asbestos NESHAP, Revised November 1990). **Label information is to include:**

Generator identified as follows:

Minneapolis Public Schools 1250 West Broadway Street Minneapolis, Minnesota 55411

Facility of origin identified as follows:

Name of MPS Facility Street Address of MPS Facility Minneapolis, Minnesota Zip Code

Contracting firm responsible for transportation and disposal:

Name of Asbestos Abatement Contracting Firm
Street Address of Firm
City, State and Zip Code
Area Code and Telephone Number

D. MPS requires the use of transparent polyethylene, labeled, 6-mil disposal bags. The use of colored disposal bags (e.g., black, yellow, or other non-transparent polyethylene) will be strictly prohibited for the containerization, transportation and disposal of asbestoscontaining waste materials originating from any MPS site or facility. Disposal bags are to be individually goosenecked and doubled to prevent leakage.

E. Fiberboard Drums

- **1.** Provide heavy-duty leak-tight fiberboard drums with tight-sealing, locking metal tops.
- **2.** Line all drums with two (2) 6 mil disposal bags as specified in Section 303A. and 303C.

F. Paperboard Boxes

- 1. Provide heavy-duty corrugated paperboard boxes coated with plastic or wax to retard deterioration from moisture. Provide in sizes that will easily fit in disposal bags.
- **2.** Line all boxes with two (2) 6 mil disposal bags as specified in Section 303A. and 303C.

G. Steel Drums

- **1.** Provide steel drums for containerization and disposal of rigid and/or jagged materials (i.e. plaster lath, wire-embedded thermal lagging).
- 2. Provide to MPS proof of the source of origin and type of materials previously contained in the drums.
- **3.** Line all steel drums with two (2) 6 mil disposal bags as specified in Section 303A. and 303C.

H. Disposal Manifests

- 1. Contractor shall provide to the MPS Project Manager (MPS Plant Maintenance), the ORIGINAL MANIFEST (Generator Copy), for all asbestos-containing waste materials generated by the Project and hauled to the pre-approved landfill. These documents are to be submitted to MPS within thirty (30) days after the asbestos-containing waste material has been properly disposed of at the pre-approved landfill site. The five percent (5%) retainage will be withheld from payment to the Contractor until such time as the receipt of the above-specified Waste Manifest documents.
- 2. All manifests shall specify the "Generator" in the appropriate section of the document as:

Minneapolis Public Schools 1250 West Broadway Street Minneapolis, Minnesota 55411

- 3. All MPS asbestos-containing waste material shall be identified separately. In no case shall asbestos-containing waste material, other than MPS-generated quantities, be listed on the manifest.
- **4.** The original "'Generator" copy will be forwarded to:

Minneapolis Public Schools
Facilities Department – Design & Construction
1250 West Broadway Street
Minneapolis, Minnesota 55411

5. Contractor is responsible for distribution of all Manifest copies to appropriate required parties, facilities and regulatory agencies.

EXHIBIT D Fee Schedule

MINNEAPOLIS PUBLIC SCHOOLS REQUEST FOR PROPOSAL (RFP 26-03)

2026-2028 FEE SCHEDULE FOR INDUSTRIAL HYGIENE CONSULTING, INSPECTIONS AND PROJECT AIR MONITORING/ SURVEILL ANCE SERVICES

Α.	Industrial Hygiene Consultant Project Manager for abatement project site visits, client meetings, cost estimation, contract administration, abatement contractor submittal review and project management:
	\$Per Hour Year 1 (2026)
	\$Per Hour Year 2 (2027)
	\$Per Hour Year 3 (2028)
В.	MDH-Certified AHERA Asbestos Inspector or Lead Inspector for inspections, scope of work surveys, and survey report preparation:
	\$Per Hour Year 1 (2026)
	\$Per Hour Year 2 (2027)
	\$Per Hour Year 3 (2028)
C.	MDH-Certified AHERA Project Designer for development of the scope of work and design meetings:
	\$Per Hour Year 1 (2026)
	\$Per Hour Year 2 (2027)
	\$Per Hour Year 3 (2028)
D.	MDH-Certified Lead Inspector utilizing XRF testing equipment:
	\$Per Hour Year 1 (2026)
	\$Per Hour Year 2 (2027)
	\$Per Hour Year 3 (2028)
E.	On-Site Air Monitoring Specialist to perform pre-abatement/abatement/pre-clearance visual inspections, daily and final clearance air sampling and project surveillance and air monitoring report preparation: Includes Twelve (12) PCM samples (including Blanks) for each ten (10) hour period. One (1) PCM air sample is to be added for each hour worked over ten (10) in a shift.
	\$Per Hour Year 1 (2026)
	\$Per Hour Year 2 (2027)
	\$Per Hour Year 3 (2028)
F.	Weekend On-Site Air Monitoring Specialist to perform pre-abatement/abatement/pre-clearance visua inspections, daily and final clearance air sampling and project surveillance: Includes Twelve (12) PCM samples (including Blanks) for each ten (10) hour period. One (1) PCM air sample is to be added for each hour worked over ten (10) in a day.
	Ф В II V 4 (0000)
	\$ Per Hour Year 1 (2026)
	\$Per Hour Year 1 (2026) \$Per Hour Year 2 (2027)

G. Holiday* On-Site Air Monitoring Specialist to perform pre-abatement/abatement/pre-clearance visual inspections, daily and final clearance air sampling and project surveillance: Includes Twelve (12) PCM samples (including Blanks) for each ten (10) hour period. One (1) PCM air sample is to be added for each hour worked over ten (10) in a day.

	*Holiday is defined as Memorial Day, Independence	Day, Labor Day, Thanksgiving Day, Christmas Day and New Years Day.		
	\$Per Hour Year 1 (2026)			
	\$Per Hour Year 2 (2027)			
	\$Per Hour Year 3 (2028)			
Н.	Rate for providing computer aided drafting:			
	\$Per Hour Year 1 (2026)			
	\$Per Hour Year 2 (2027)			
	\$Per Hour Year 3 (2028)			
I.	Additional PCM air samples in excess of twelve (12) per ten (10) hour period (including blanks).			
	\$Per Sample			
J.	Costs for PLM analyses of suspect ACM bulk samples:			
	\$Per Sample Layer (24 Hour Turn around).			
	\$Per Sample Layer (72 Hou	ır Turn around).		
K.	Cost for Lead Paint Chip bulk sample analysis:			
	\$Per Analysis (24 Hour Turn around).			
	\$Per Analysis (72 Hour Turn around).			
L.	MPS reserves the right to reject any and or all Fee Schedules submitted. Fee Schedules may be rejecte for any reason, including, but not limited to Fee Schedules containing any irregularities.			
NAME		TITLE		
SIGNA	TURE	COMPANY NAME		
DATE		ADDRESS:		

NOTE: MPS will not accept invoicing which includes any charges for on-site employee training, MDH Fees, mileage, word processing, copying, equipment rental, etc. MPS will not accept billings for travel time to and from the site. MPS will allow travel time to the Lab at the end of a shift. Courier services can be billed for the transportation of Lab samples. Only invoicing which is consistent with the descriptions of services solicited herein and itemized accordingly will be accepted. Invoicing inconsistent with this requirement will be returned to the firm of origin for corrections. Corrected invoices will then be resubmitted by the firm of origin to MPS for payment processing.



Vendor Information and Payment Form

Vendor Name:		
Phone Number: Work	Cell	
Address:	City:	State: Zip:
Email Address to receive Purchase	Orders	
If you wish to receive a paper che	ck, please enter information below:	
Remittance Address:		
City:	State:Zip:	
Recommended Payment Informa	tion Direct Deposit:	
Bank Name:		
Bank Routing Number:	Account Nu	mber:
Note: a voided check or bank vei	rification letter is required for ACH pa	ayments
Remittance Email Address to send	payment notice:	
Please provide a brief description	n of the types of goods and/or services y	you offer:
Is your business qualified to do bus	siness under a Minnesota State Contract,	a Federal Contract or Cooperative
Agreement? Yes □ No □		1
Supplier Diversity Information:		
Charle the how helow which portains to	o your enterprise certifications (you may sel	last more than one)
check the box below which pertains to	your enterprise certifications (you may ser	eet more than one).
Hispanic/Latino		erican with Disability
□ Black American/Afr □ Asian Americans	ican □8A (□GLE	
□ Native Americans	□ Non-	
Women Owned	□Disa	dvantage Business Enterprise
Ueterans	Othe	er
Not Applicable		
Print Name:	Name:Title:	
Signature:	Date:	