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1	ADMINISTRATIVE ORGANIZATION AND ASBESTOS POLICIES AND PROCEDURES	

1.1 Definitions

Accessible - Material is subject to disturbance by school building occupants or custodial or maintenance personnel in the course of their normal activities.

Accredited - When referring to a person or laboratory means that such person or laboratory is accredited in accordance with Section 206 of Title II of [AHERA](#).

Acoustical material - Material often containing asbestos, perlite, vermiculite, etc., applied to ceilings or walls to dampen sound.

Action level - An [OSHA](#) standard for asbestos exposure. Action level means an airborne concentration of asbestos above which an employer must institute certain provisions (see 29 CFR 1926.58). The action level is 0.1 f/cc of air as an eight-hour, time-weighted average.

Adequately wetted - Sufficiently mixed or coated with water or an aqueous solution to prevent dust emissions.

AHERA - Asbestos Hazard Emergency Response Act of 1986.

Air erosion - The passage of air over friable [ACBM](#) which may result in the release of asbestos fibers.

Air plenum - Space above a ceiling used for the circulation of air through a building.

Air samples - Samples of airborne fibers taken by drawing air through a filter to trap the airborne fibers. The filters analyzed by phase contrast microscopy or electron microscopy.

Algorithm - A step-by-step procedure for problem solving.

Amosite - Brown asbestos, brittle fibers, high resistance to heat.

Amphibole - A major classification of asbestos mineral.

APR - Air purifying respirator.

Architectural drawings - Drawings that show the building structure and design.

Asbestos - A term used to define a group of naturally occurring minerals composed of hydrated silicates crystalline in structure,

occurring as parallel bundles of fibers, called “fibrils.”

Asbestos-containing building material (ACBM) - Surfacing [ACM](#) (see next definition), thermal system insulation ACM, or miscellaneous ACM that is found in or on interior structural members of other parts of a school building.

Asbestos-containing material (ACM) - When referring to school buildings means any material or product which contains more than one percent asbestos.

Asbestos debris - Pieces of [ACBM](#) that can be identified by color, texture, or composition; or means dust, if the dust is determined by an accredited inspector to be [ACM](#).

As-built drawings - Drawings which depict the locations of electrical or mechanical features as actually constructed.

ASHAA - Asbestos School Hazard Abatement Act of 1984.

Authorized worker (MMSD) - Contractor, [MMSD](#) maintenance / custodial staff or short-term worker with an approved purchase order, work order, or work permit issued by the District.

Blueprints - A detailed outline or plan showing how a building is to be constructed.

Bonding - An insurance contract to guarantee payment if a financial loss occurs as a result of an action of an employee or the contract owner.

Building drawings - Drawings that contain all required information. They are also referred to as “blueprints”.

Bulk samples - Samples of suspect asbestos-containing materials, analyzed by polarized light microscopy.

CFR - Code of Federation Regulations.

Claims-made policy - Claims made while the policy is in force.

Competent person - A competent person is one who is capable of identifying existing asbestos hazards in the workplace and who has the authority to take corrective action. Duties include establishing the negative-

pressure enclosure, controlling entry and exit of all employees, etc. The competent person must be trained in all aspects of asbestos abatement and the contents of the [OSHA](#) asbestos standard. Competent persons shall have attended a comprehensive asbestos training course (such as an [EPA](#) training center course or equivalent).

Condition factors - Describes the physical condition of [ACM](#).

Control options - Methods of reducing or eliminating the exposure potential of asbestos-containing materials (e.g., removal, enclosure, encapsulation, operations, and maintenance).

Corrugated paper - A type of thermal insulation characterized by brown “cardboard box” type corrugated paper wrapped around pipes or applied in sheets to boilers or tanks. Usually contains asbestos woven in with paper.

Corrective action - An activity undertaken to reduce or eliminate the exposure potential of [ACM](#): enclosure, encapsulation, removal, or operations and maintenance.

Crawl space - That area of a building below the ground floor, but above the ground, often only a few feet high.

Crocidolite - Blue asbestos, strongest of asbestos minerals, brittle fibers.

Crysotile - White asbestos, fine silky fibers, flexible with high tensile strength.

Damaged friable miscellaneous [ACM](#) - Friable miscellaneous ACM which has deteriorated or sustained physical injury such that the internal structure (cohesion) of the material is inadequate or, if applicable, which has delaminated such that its bond to the substrate (adhesion) is inadequate or which for any other reason lacks fiber cohesion or adhesion qualities. Such damage or deterioration may be illustrated by the separation of ACM into layers; separation of ACM from the substrate; flaking, blistering, or crumbling of the ACM surface; water damage; significant or repeated water stains, scrapes, gouges, mars, or other signs of physical injury on the ACM. Asbestos debris originating from the ACBM in question may also indicate language.

Damaged friable surfacing ACM -

Friable surfacing ACM which has deteriorated or sustained physical injury that the internal structure (cohesion) of the material is inadequate or which has delaminated such that its bond to the substrate (adhesion) is inadequate, or which, for any other reason, lacks fiber cohesion or adhesion qualities. Such damage or deterioration may be illustrated by the separation of ACM into layers; separation of ACM from the substrate; flaking, blistering, or crumbling of the ACM surface; water damage, significant or repeated water stains, scrapes, gouges, mars, or other signs of physical injury on the ACM. Asbestos debris originating from the ACM in question may also indicate damage.

Damaged or significantly damaged thermal system insulation ACM -

Thermal system insulation ACM on pipes, boilers, tanks, ducts, and other thermal system insulation equipment where the insulation has lost its structural integrity; or its covering, in whole or in part, is crushed water stained, gouge, punctured, missing, or not intact such that it is not able to contain fibers. Damage may be further illustrated by occasional punctures, gouges, or other signs of physical injury to ACM; occasional water damage on the protective coverings / jackets; or exposed ACM ends or joints. Asbestos debris originating from the [ACBM](#) in question may also indicate damage.

Decision tree - A decision-making tool which utilizes qualitative and quantitative data to assist in the selection of alternate courses of action.

Demolition - The wrecking or taking out of any load-supporting structural member of a facility together with any related or alternate courses of action.

Doffing - The process of taking off personal protective equipment.

Donning - The process of putting on personal protective equipment.

Emergency renovation - A renovation operation that was not planned, but results from a sudden unexpected event. This term includes operations necessitated by non-routine failures of equipment.

Encapsulation - Treatment of [ACBM](#) with a material that surrounds or embeds the asbestos fibers in an adhesive matrix to prevent the release of fibers as the encapsulant creates a membrane over the surface (bridging encapsulant) or penetrates the material and binds its components together (penetrating encapsulant).

Enclosure - An airtight, impermeable, permanent barrier around [ACBM](#) to control the release of fibers into the air.

EPA - Environmental Protection Agency. The agency directed to implement [AHERA](#).

Escort - An individual, usually from the facility maintenance staff, who accompanies the inspector during the inspection to provide access to all areas of the facility.

Exposure - A quantification of the population at risk and the magnitude and duration of their exposure.

Exposure factors - Refers to the conditions which may permit or enhance a fiber release; there are seven categories of exposure factors.

Facility - Any institutional, commercial, or industrial structure, installation, or building (excluding apartment buildings with four or less dwelling units).

F/cc - Fibers per cubic centimeter. A measurement to express the level of fibers in the air.

Facility component - Any pipe, duct, boiler, tank, reactor, turbine, or furnace at or in a facility; or any structural member of a facility.

Fiber release episode - Any uncontrolled or unintentional disturbance of [ACBM](#) resulting in visible emissions.

Fireproofing - Material sprayed onto building structural members to prevent or retard their loss of strength in case of fire. Often contains asbestos.

Fit-testing - The act of ensuring that a respirator has a proper seal to the wearer's face and that it works properly.

Floor plan - Indicates size and dimensions of facility space.

Floor plan layout - Shows the arrangement of different pieces of machinery, offices, and other facility space.

Flow diagram - Shows the flow of materials in physical plant systems.

Framing plan - Refers to the structural vertical supports (columns) of the building

Friable - Material, when damaged, may be crumbled, pulverized, or reduced to powder by hand pressure, and includes previously non-friable material after such previously non-friable material becomes damaged to the extent that, when dry, it may be crumbled, pulverized, or reduced to powder by hand pressure.

Friable asbestos material (FAM) - Any material that contains more than one percent asbestos by weight and that can be crumbled, pulverized, or reduced to powder, when dry, by hand pressure.

Functional space - A room, group of rooms, or homogenous area (including crawl spaces or the space between a dropped ceiling and the floor or roof deck above), such as classroom(s), a cafeteria, gymnasium, hallway(s), designated by a person accredited to prepare management plans, design abatement projects, or conduct response actions.

Glovebag - A device used to remove small sections of asbestos.

Hazard - A hazard is a circumstance, mechanism, or event which has the potential to create injury.

Hazard assessment - Analysis and evaluation of physical and exposure factors to determine the need for corrective action.

High-efficiency particulate air (HEPA) - Refers to filtering system capable of trapping and retaining at least 99.97 percent of all monodispersed particles 0.3µm in diameter or larger.

Homogeneous area (HMGA) - An area of asbestos-containing material where the material is consistent in texture, color, and age.

Inadvertent contamination - The disturbance of asbestos-containing products

not caused intentionally by the parties involved in the project

Inspection - The process of locating [ACM](#), determining the condition, and reporting the results.

Latency - Period before the presence of a disease is manifested by symptoms.

LEA - Local Education Agency, generally a school district.

Liability - Legally bound or obligated.

Litigation - The act or process of carrying on a lawsuit.

Local education agency (LEA) - Means 1) any local educational agency as defined in Section 198 of the Elementary and Secondary Education Act of 1965 (20 U.S.C. 3381); 2) the owner of any nonpublic, nonprofit elementary, or secondary school building; 3) the governing authority of any school operated under the defense dependents' education system provided for under the Defense Dependents' Education Act of 1978 (20 U.S.C. 921, et seq.).

MMSD - Madison Metropolitan School District. Local education agency for this Management Plan.

Magnesia - A type of thermal insulation, generally white fibrous material performed into shaped pieces or as bricks, often contains asbestos.

Mechanical area - An area of a building not normally accessed by the public containing air handlers, air conditioners, heat exchangers, tanks, pipes, or other mechanical equipment.

Mechanical prints - Drawings showing how the mechanical system is planned for a building.

Mechanical system - The heating, ventilation, air conditioning, and plumbing components of a facility.

Medical surveillance program - A program to ensure workers are physically and psychologically able to wear a respirator and perform asbestos activities.

Mesothelioma - A cancer of the lining of the lung (pleural) or abdominal (peritoneal) cavity.

Miscellaneous ACM - Miscellaneous material that is ACM.

Miscellaneous material - Interior building material on structural components, structural members, or fixtures, such as floor and ceiling tiles and does not include surfacing material or thermal system insulation.

Mudded joint fittings - Plaster compound packed onto pipe joints and around valves, pumps, elbows, and tees for thermal insulation. Often contains asbestos.

Negative air - A process by which air is continually removed from the work area to keep the air pressure in the work area less than the air pressure outside the work area.

NESHAPS - National Emission Standards for Hazardous Air Pollutants.

NIOSH - National Institute of Occupational Safety and Health. The agency who sets standards for respirators and other protective equipment.

Nonfriable - Material in a school building which, when dry, may not be crumbled, pulverized, or reduced to powder by hand pressure.

Operations and maintenance program - A program of work practices to maintain friable **ACBM** in good condition, ensure cleanup of asbestos fibers previously released, and prevent further release by minimizing and controlling friable **ACBM** disturbance or damage.

Occurrence policy - Claim is made during policy period or after the policy has expired.

OSHA - Occupational Safety and Health Administration. The agency responsible for protecting worker health and safety.

Outside air - The air outside buildings and structures.

Packing - Material applied to tanks, boilers, ducts, and air handlers for thermal insulation. Often contains asbestos.

PAPR - Powered Air Purifying Respirator.

PCM - Phase Contrast Microscopy. A method used to analyze air samples for the presence of asbestos fibers.

PEL - Permissible Exposure Limit. A level of airborne asbestos above which no employee shall be exposed. The PEL is 0.2/fcc of air as an eight-hour, time weighted average (see 29 CFR 1926.58).

Planned renovation - A renovation operation, or a number of such operations, in which the amount of friable asbestos material that will be removed or stripped within a given period of time can be predicted. Individual nonscheduled operations are included if a number of such operations can be predicted to occur during a given period of time based on operating experience.

PLM - Polarized Light Microscopy. A method used to analyze bulk samples for the presence of asbestos.

Potential damage - Circumstances in which: 1) friable **ACBM** is in an area regularly used by building occupants, including maintenance personnel, in the course of their normal activities; 2) there are indications that there is a reasonable likelihood that the material or its covering will become damaged, deteriorated, or delaminated due to factors such as changes in building use, changes in occupancy, or recurrent damage.

Potential significant damage - means circumstances in which: 1) friable **ACBM** is in an area regularly used by building occupants, including maintenance personnel, in the course of their normal activities; 2) there are indications that there is a reasonable likelihood that the material or its covering will become significantly damaged, deteriorated, or delaminated due to factors such as changes in building use, changes in operations and maintenance practices, changes in occupancy, or recurrent damage; 3) the material is subject to major or continuing disturbance, due to factors including, but not limited to, accessibility or, under certain circumstances, vibration or air erosion.

Preventive measures - Actions taken to reduce disturbance of **ACBM** or otherwise eliminate the reasonable likelihood of the material's becoming damaged or significantly damaged.

Regulated areas - Areas where airborne concentrations exceed or may exceed the permissible exposure limits ([PEL](#)) of 0.2 f/cc.

Re-inspection - A periodic re-evaluation of the ACM's over a regular time period.

Removal - Taking out of stripping of substantially all [ACM](#) from a damaged area, functional space, or homogeneous area in a school building.

Renovation - Altering in any way one or more facility components. Operations in which load-supporting structural members which are demolished or taken out are excluded.

Repair - Returning damaged [ACM](#) to an undamaged condition or to an intact state so as to prevent fiber release.

Respirator - A device worn over the mouth and nose to prevent the inhalation of noxious substances.

Respiratory protection program - A program to provide the information, training, and equipment necessary for proper respiratory protection while working with [ACM](#).

Response action - A method, including removal, encapsulation, enclosure, repair, operations and maintenance that protects human health and the environment from friable [ACBM](#).

Routine maintenance area - An area, such as a boiler room or mechanical room, not normally frequented by students and in which maintenance employees or contract workers regularly conduct maintenance activities.

Salient - A limited area of a significantly different material condition within a homogenous area.

Sampling kit - Tools and supplies used for bulk sampling.

School - An elementary or secondary school as defined in Section 198 of the Elementary and Secondary Education Act of 1965 (20 U.S.C. 2854).

School building - Means 1) any structure suitable for use as a classroom, including a school facility such as a laboratory, library, school eating facility, or facility used for the

preparation of food; 2) any gymnasium of other facility which is specially designed for athletic or recreational activities for an academic course in physical education; 3) any other facility used for the instruction or housing of students or for the administration of educational or research programs; 4) any maintenance, storage, or utility facility, including any hallway, essential to the operation of any facility described in this definition of "school building: under paragraphs 1,2, or 3; 5) any portico or covered exterior hallway or walkway; 6) any exterior portion of a mechanical system used to condition interior space.

SEM - Scanning Electron Microscopy. A method to analyze air samples for the presence of asbestos.

Serpentine - A major classification of asbestos mineral.

Service personnel - People engaged in repair, maintenance, and/or custodial activities.

Short-term worker - Non-contracted utility workers, including, but not limited to, telephone repair workers, gas utility company workers, electrical utility company workers, water utility workers, civil defense employees and contractors, and cable television repair workers.

Significantly damaged friable miscellaneous [ACM](#) - Damaged friable miscellaneous ACM where the damage is extensive and severe.

Significantly damaged friable surfacing [ACM](#) - Damaged friable surfacing ACM in a functional space where the damage is extensive and severe.

State - A State, the District of Columbia, the Commonwealth of Puerto Rico, Guam, American Samoa, the Northern Marianas, the Trust Territory of the Pacific Islands, and the Virgin Islands.

Structural prints - The blueprints showing the structural system of a building.

Structural system - The system of beams, walls, piers, and such that supports a building.

Surfacing [ACM](#) - Surfacing material that is ACM.

Surfacing material - Material in a building that is either sprayed-on, troweled-on, or otherwise applied to a surface, such as acoustical plaster on ceilings and fireproofing materials on structural members; or other materials on surfaces for acoustical, fireproofing, or other purposes. Often contains asbestos.

Symbols - Drawn figures which represent real objects. Symbols are the “shorthand” of architectural and mechanical drawings.

TEM - Transmission Electron Microscopy. A method to analyze air samples or bulk samples for the presence of asbestos.

Thermal system insulation - Material in buildings applied to pipes, fittings, boilers, breeching, tanks, ducts, or other interior structural components to prevent heat loss or gain, or water condensation, or for other purposes.

Thermal system insulation [ACM](#) - Thermal system insulation that is ACM.

TSCA - Toxic Substances Control Act.

Tradesmen - People engaged in a construction trade, i.e., electricians, plumbers, carpenters, painters, etc.

TWA - Time Weighted Average. An average concentration of material over a set period of time.

Tyvek - Brand name for a disposable clothing worn during asbestos work.

Visible emissions - Any emissions containing particulate asbestos material that are visually detectable without the aid of instruments.

Vibration - The periodic motion to friable [ACBM](#) which may result in the release of asbestos fibers.

Wet cleaning - A cleaning technique where the material is kept wet and/or wet towels or mops are used to reduce the potential for the material to become airborne.

Wrapped paper - A type of thermal insulation characterized by layers of kraft paper wrapped around pipes. There is usually a layer of woven asbestos paper or “tar” paper embedded with asbestos.

29 [CFR 1926.58](#) - [OSHA](#) Asbestos Standard for the Construction Industry.

1.2 General Data

1.2.1 Local Education Agency (LEA)

LEA Name:	Madison Metropolitan School District
Address:	545 W. Dayton Avenue Madison, WI 53703-1995
Phone:	(608) 663-1879
Superintendent:	Dan Nerad
Work Phone:	(608) 663-1607
Home Phone:	(608) 836-0167

The Madison Metropolitan School District (MMSD) is a public school system organized under State Statutes (Chapter 120, Wisconsin Statutes, 1985/86) as a Unified School District.

The Board of Education has possession, care, control, and management of the property and affairs of the school district with responsibilities and duties as detailed in Wisconsin Statutes, Chapter 120.

The Board of Education is made up of 7 members elected at large to numbered seats for a three (3) year term. The Board of Education annually elects a school board president, vice president, district clerk, and district treasurer from among its members. The Board annually elects a school board secretary, who need not be a member of the board.

The Superintendent carries out the policies of the Board and administrates the school system. See Section 1.3 for designated person appointment, training, and responsibilities.

MMSD's Building Services has been designated as the LEA's centralized administrative office for the purposes of AHERA and will be responsible for maintaining a complete updated copy of the management plan and associated records for each building under the MMSD's control or direction per 40 CFR 763.93(g) and 40 CFR 763.94.

Building Services is located at:

Pflaum Road Facility
 4711 Pflaum Road
 Madison, WI 53718-6765
 (608) 204-7900

Normal business hours are between 8:00 A.M. and 4:15 P.M. weekdays. Building Services is closed on holidays recognized by the Madison Metropolitan School District.

Locations of buildings under the control of the Madison Metropolitan School District Board of Education are listed in Table 1-1; this table also provides a summary of the friable, non-friable, and assumed ACBM identified at each building during the inspection.

TABLE 1-1
MADISON METROPOLITAN SCHOOL DISTRICT
BUILDINGS COVERED BY AHERA

Building	Principal Administrator	ACBM		
		Friable	Assumed	Non-Friable
ADMINISTRATION BUILDING 545 West Dayton St 53703	Erik Kass	Yes	Yes	Yes
ALLIED DRIVE LEARNING CTR. 2237 Allied Drive 53711	Sally Schultz	N.D.	N.D.	N.D.
ALLIS ELEMENTARY 4201 Buckeye Rd. 53716	Julie Fritz	Yes	Yes	Yes
BLACK HAWK MIDDLE & GOMPERS ELEMENTARY 1402 Wyoming Way 53704	Sean Storch & Kristina Harris	Yes	Yes	Yes
CHAVEZ ELEMENTARY 3502 Maple Grove Dr., 53709	Linda Allen	No	No	No
CHEROKEE MIDDLE 4301 Cherokee Dr., 53711	Dave Watkins	Yes	Yes	Yes
CRESTWOOD ELEMENTARY 5930 Old Sauk Rd, 53705	Stephen Gruziewski	Yes	Yes	Yes
EAST HIGH 2222 E. Washington Ave., 53704	Mary Kelley	Yes	Yes	Yes
ELVEHJEM ELEMENTARY 5106 Academy Dr., 53716	Craig Campbell	Yes	Yes	Yes
EMERSON ELEMENTARY 2421 E. Johnson St., 53704	Karen Kepler	Yes	Yes	Yes
FALK ELEMENTARY 6323 Woodington Way, 53711	Lynn Winn	Yes	Yes	Yes
FRANKLIN ELEMENTARY 305 W. Lakeside St., 53715	Britta Hansen	Yes	Yes	Yes
GLENDALE ELEMENTARY	Rainy Briggs	Yes	Yes	Yes

TABLE 1-1
MADISON METROPOLITAN SCHOOL DISTRICT
BUILDINGS COVERED BY AHERA

Building	Principal Administrator	ACBM		
		Friable	Assumed	Non-Friable
1201 Tompkins Dr., 53716 HAMILTON MIDDLE & VAN HISE ELEMENTARY 4801 Waukesha St., 53705	Hank Schmelz & Peg Keeler	Yes	Yes	Yes
HAWTHORNE ELEMENTARY 3344 Concord Ave., 53714	Beth Lehman	Yes	Yes	Yes
HOYT BUILDING 3802 Regent St., 53705	Lucy Chaffin	Yes	Yes	Yes
HUEGEL ELEMENTARY 2601 Prairie Rd., 53711	Abby Potter	Yes	Yes	Yes
JEFFERSON MIDDLE 101 S. Gammon Rd., 53717	Anne Fisher	Yes	Yes	Yes
KENNEDY ELEMENTARY 221 Meadowlark Dr., 53714	Nancy Caldwell	Yes	Yes	Yes
LAFOLLETTE HIGH & LUSSIER STADIUM 702 Pflaum Rd. 53716	Chad Wiese	Yes	Yes	Yes
LAKE VIEW ELEMENTARY 1802 Tennyson Lane, 53704	Kristi Kloos	Yes	Yes	Yes
LAPHAM ELEMENTARY 1045 E. Dayton St., 53703	Michael Herting	Yes	Yes	Yes
LEOPOLD ELEMENTARY 2602 Post Rd., 53713	John Burkholder	Yes	Yes	Yes
LINCOLN ELEMENTARY 909 Sequoia Trail, 53713	Deborah Hoffman	Yes	Yes	Yes
LINDBERGH ELEMENTARY 4500 Kennedy Rd., 53704	Liz Fritz	Yes	Yes	Yes
LOWELL ELEMENTARY 401 Maple Ave., 53704	Lisa Kvistad	Yes	Yes	Yes
MEMORIAL HIGH & MANSFIELD STADIUM 201 S. Gammon Rd., 53717	Bruce Dahmen	Yes	Yes	Yes
MENDOTA ELEMENTARY 4002 School Rd., 53704	Carletra Stanaford	Yes	Yes	Yes
MIDVALE ELEMENTARY 502 Caromar Dr., 53711	Teresa Carranza	Yes	Yes	Yes
MUIR ELEMENTARY 6602 Inner Dr., 53705	Andera Kreft	Yes	Yes	Yes
PFLAUM ROAD FACILITY & FOOD PRODUCTION CENTER 4711 Pflaum Rd., 53718	Rick Hopke & Steve Youngbauer	N.D.	Yes	Yes
O'KEEFE MIDDLE & MARQUETTE ELEMENTAY 510 S. Thornton Ave., 53703	Kay Enright & Pam Wilson	Yes	Yes	Yes
OLSON ELEMENTARY 801 Redan Drive,	Pam Emmerich	No	No	No
RANDALL ELEMENTARY 1802 Regent St., 53705	John Wallace	Yes	Yes	Yes
SANDBURG ELEMENTARY 4114 Donald Dr., 53704	Brett Wilfrid	Yes	Yes	Yes
SENNETT MIDDLE 502 Pflaum Rd., 53716	Colleen Lodholtz	Yes	Yes	Yes
SHERMAN MIDDLE & SHABAZZ HIGH 1610 Ruskin St., 53704	Michael Hernandez &Aric Soderbloom	Yes	Yes	Yes
SHOREWOOD ELEMENTARY 1105 Shorewood Blvd., 53705	Anu Ebbe	Yes	Yes	Yes
SPRING HARBOR MIDDLE 1110 Spring Harbor Dr., 53705	Leia Esser	Yes	Yes	Yes
THOREAU ELEMENTRY	Kathy Castello	Yes	Yes	Yes

TABLE 1-1
MADISON METROPOLITAN SCHOOL DISTRICT
BUILDINGS COVERED BY AHERA

Building	Principal Administrator	ACBM		
		Friable	Assumed	Non-Friable
3807 Nakoma Rd., 53711				
TOKI MIDDLE & ORCHARD RIDGE ELEMENTARY 5602 Russett Rd., 53711	Nicole Schaefer & Barbara Dorn	Yes	Yes	Yes
WEST HIGH 30 Ash St., 53705	Ed Holmes	Yes	Yes	Yes
WHITEHORSE MIDDLE & SCHENK ELEMENTARY 230 Schenk St., 53714	Deb Ptak & Emmett Durtschi	Yes	Yes	Yes
WRIGHT MIDDLE 1717 Fish Hatchery Rd., 53713	Angie Crawford	No	No	No

1.2.2 MMSD Enrollment and Staffing

Madison Metropolitan School District enrollment and staffing by building is shown in Table 1-2.

Building	# Students	# Support Staff	# Custodial & Maintenance Staff	Building Total
Administration Building	0	258	3	261
Allied Drive Learning Center			1	1
Allis Elementary	588	73	3	664
Black Hawk Middle & Gompers Elementary	612	132	4	748
Chavez Elementary	672	92	4	768
Cherokee Middle	544	88	4	636
Crestwood	406	65	3	474
East High	1706	190	17	1913
Elvehjem Elementary	401	79	3	483
Emerson Elementary	327	80	3	410
Falk Elementary	299	62	3	364
Franklin Elementary	370	53	3	426
Glendale Elementary	403	82	3	488
Hamilton Middle & Van Hise Elementary	1066	147	3	1216
Hawthorne Elementary	321	51	3	375
Hoyt Building		45	2	47
Huegel Elementary	468	67	3	538
Jefferson Middle	415	90	3	508
Kennedy Elementary	537	54	2	593
LaFollette High	1710	198	13	1921
Lake View Elementary	260	51	2	313
Lapham Elementary	219	66	3	288
Leopold Elementary	718	96	4	818
Lincoln Elementary	335	63	3	401
Lindbergh Elementary	230	47	2	279
Lowell Elementary	260	76	3	339
Memorial High	2056	223	15	2294
Mendota Elementary	285	66	2	353
Midvale Elementary	338	72	3	413
Muir Elementary	438	62	3	503
O'Keeffe Middle & Marquette Elementary	631	105	5	741
Olson Elementary	650	90	3	743

Building	# Students	# Support Staff	# Custodial & Maintenance Staff	Building Total
Pflaum Facility		75	52	127
Randall Elementary	338	46	3	387
Sandburg Elementary	309	45	2	356
Sennett Middle	628	98	4	730
Sherman Middle & Shabazz High	559	70	5	634
Shorewood Elementary	398	59	3	460
Spring Harbor	265	41	2	308
Stephens Elementary	526	85	2	613
Thoreau Elementary	384	89	3	476
Toki Middle & Orchard Ridge Elementary	866	139	4	1009
West High	2036	231	17	2284
Whitehorse Middle & Schenk Elementary	813	127	5	945
Wright Middle	256	45	3	304

1.2.3 District-Wide Summary of AHERA Inspections

Table 1-3 provides a summary of the AHERA building inspections and should be used in conjunction with the management plans which provide further detailed information.

T A B L E 1 - 3
D I S T R I C T W I D E S U M M A R Y O F A H E R A I N S P E C T I O N S

#	S C H O O L N A M E	GROSS AREA	S U R F A C I N G			T H E R M A L			M I S C		
			SPRAY ON FRIABLE SQ. FT.	PLASTER	OTHER	PIPING LF	FTGS #	TANKS SQ. FT.	FLOOR TILE SQ. FT.	CEILIN G TILE SQ. FT.	OTHER
Elementary School											
001	ALLIS	82,000	N.D.	N.D.	YES	179	47	50	36,005	N.D.	YES
052	CHAVEZ	88,000	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
004	CRESTWOOD	67,675	N.D.	N.D.	N.D.	545	460	30	32,562	N.D.	YES
006	ELVEHJEM	72,234	N.D.	N.D.	N.D.	45	1,153	499	40,898	N.D.	YES
007	EMERSON	70,600	N.D.	YES	N.D.	27	7	112	37,009	N.D.	N.D.
011	FALK	66,525	N.D.	N.D.	N.D.	N.D.	652	154	31,403	N.D.	YES
008	FRANKLIN	51,760	N.D.	N.D.	N.D.	1,064	228	112	14,913	N.D.	YES
009	GLENDALE	78,875	N.D.	N.D.	YES	3,976	1,369	230	55,920	N.D.	YES
012	HAWTHORNE	54,091	N.D.	N.D.	N.D.	60	934	192	31,695	N.D.	YES
013	HOYT / RECREATION	33,900	4,315	N.D.	N.D.	1,182	968	480	23,622	N.D.	YES
038	HUEGEL	64,000	N.D.	N.D.	N.D.	1	16	N.D.	16,241	N.D.	N.D.
036	KENNEDY	67,220	N.D.	N.D.	N.D.	33	750	144	46,335	N.D.	N.D.
014	LAKE VIEW	40,500	N.D.	N.D.	N.D.	40	607	110	31,437	11,183	YES
016	LAPHAM	73,744	49,748	N.D.	N.D.	2,964	133	1,000	40,078	N.D.	N.D.
072	LEOPOLD	93,308	N.D.	N.D.	N.D.	N.D.	332	N.D.	23,875	N.D.	N.D.
037	LINCOLN	58,822	N.D.	N.D.	N.D.	N.D.	506	32	37,372	N.D.	YES
071	LINDBERGH	34,475	N.D.	N.D.	YES	3	251	N.D.	11,298	N.D.	YES
019	LOWELL	68,896	N.D.	N.D.	N.D.	1,799	264	200	16,655	N.D.	N.D.
021	MENDOTA	49,400	N.D.	YES	N.D.	1,050	304	570	35,619	8,109	YES
022	MIDVALE	64,950	N.D.	N.D.	N.D.	3,632	88	931	39,198	3,877	YES

017	MUIR	69,000	N.D.	N.D.	YES	3	203	N.D.	10,496	N.D.	YES
062	OLSON	92,000	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
026	RANDALL	61,540	N.D.	N.D.	YES	3,406	116	153	24,280	46	YES
053	SANDBURG	42,864	N.D.	N.D.	N.D.	N.D.	392	315	25,745	N.D.	YES
029	SHOREWOOD HILLS	60,950	N.D.	N.D.	N.D.	70	17	N.D.	30,543	N.D.	YES
032	STEPHENS	72,000	N.D.	N.D.	N.D.	2	N.D.	N.D.	18,806	N.D.	YES
023	THOREAU	112,263	N.D.	N.D.	N.D.	N.D.	204	N.D.	15,567	N.D.	N.D.
	SUBTOTAL	1,791,592	54,063	----	----	20,081	10,001	5,314	727,572	23,215	----
<u>ELEMENTARY / MIDDLE SCHOOL</u>											
210	BLACK HAWK / GOMPERS	104,960	N.D.	N.D.	N.D.	239	163	217	83,361	N.D.	YES
220	O'KEEFFE / MARQUETTE	137,110	N.D.	YES	N.D.	51	N.D.	N.D.	54,226	N.D.	N.D.
225	TOKI / ORCHARD RIDGE	112,263	482	YES	N.D.	N.D.	64	N.D.	80,818	N.D.	N.D.
227	WHITEHORSE / SCHENK	118,353	N.D.	YES	YES	101	40	27	82,939	N.D.	YES
234	HAMILTON / VAN HISE	124,977	N.D.	YES	N.D.	N.D.	N.D.	14	74,324	1,610	YES
	SUBTOTAL	585,783	482	----	----	391	267	267	375,668	1,610	----
<u>MIDDLE SCHOOL</u>											
203	CHEROKEE	89,390	N.D.	YES	YES	6,642	446	700	45,092	355	N.D.
245	JEFFERSON	81,029	N.D.	N.D.	N.D.	N.D.	1,110	150	24,863	N.D.	YES
242	SENNETT	98,300	N.D.	N.D.	N.D.	38	526	787	34,762	N.D.	YES
228	SHERMAN	131,490	1,580	N.D.	N.D.	3,784	711	2,052	73,098	12,477	YES
231	SPRING HARBOR	32,234	2,809	N.D.	N.D.	20	889	689	23,996	N.D.	YES
239	WRIGHT	55,150	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
	SUBTOTAL	487,593	4,389	----	----	10,484	3,682	4,378	201,811	12,832	----
<u>HIGH SCHOOL</u>											
141	EAST	458,816	15,854	YES	YES	5,702	5,509	19,570	133,866	N.D.	YES
142	LA FOLLETTE	334,872	N.D.	N.D.	N.D.	88	3,954	894	136,882	N.D.	YES
145	MEMORIAL	365,868	1,710	YES	N.D.	18	158	N.D.	152,763	8,698	YES
143	WEST	362,112	67,458	N.D.	N.D.	4,526	2,047	780	96,855	11,538	N.D.
	SUBTOTAL	1,521,668	85,022	----	----	10,334	11,668	21,244	520,366	20,236	----
<u>MISCELLANEOUS</u>											
301	ADMINISTRATION ALLIED DRIVE	84,200	45,869	N.D.	YES	6,228	1,392	2,184	45,525	1,175	YES
307	LEARNING CTR.	21,000	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
305	MAINTENANCE	68,160	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	4,079	N.D.	N.D.
146	MANSFIELD STADIUM	3,600	N.D.	N.D.	N.D.	N.D.	95	N.D.	N.D.	N.D.	YES
147	LUSSIER STADIUM	4,011	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
	SUBTOTAL	180,971	45,869	----	----	6,228	1,487	2,184	49,604	1,175	----
	TOTAL	4,567,607	189,825	----	----	47,518	27,105	33,387	1,875,021	59,068	----

1.3 LEA Designated Person Documentation



40 CFR 763.84(g) requires that the LEA designate a person, with the required asbestos training, to ensure that the requirements of 40 CFR 763.84 are properly implemented.

1.3.1 MMSD Designated Person

MMSD's Board of Education appoints the following individual as MMSD's designated person:

Tom Kannal, Facility Manager - Building Services
Madison Metropolitan School District
4711 Pflaum Road
Madison, WI 53718-6765
Work Phone (608) 204-7916

1.3.2 Designated Person Asbestos Training

MMSD's designated person, Tom Kannal, is a State of Wisconsin certified Asbestos Designer, Management Planner, Inspector and Supervisor.

1.3.3 Responsibilities of the Designated Person

Among other duties, the LEA's designated person is responsible for ensuring that the LEA follows the correct procedures for inspection, management plan development and submission, implementation of response actions, and recordkeeping. In addition, the LEA's designated person will provide a single contact for the public to obtain information about asbestos-related activities in the District. The Rule requires the LEA's designated person to ensure that the following actions are performed properly:

- Inspections, re-inspections, and periodic surveillance are conducted.
- Management plans are developed, submitted to the State, and updated.
- Employees and building occupants, or their legal guardians, are informed at least once each school year about inspections, response actions, and post-response activities.
- Ensures response actions are developed and implemented, including operations and maintenance activities.
- Custodial and maintenance employees are provided appropriate training as specified in the AHERA regulations.
- Short-term workers (e.g., telephone repair workers, utility workers, or exterminators) who may come in contact with asbestos in a school are given information regarding the locations of ACBM.
- Asbestos warning signs are posted as needed.



- The potential for conflict of interest that may arise between accredited personnel to be hired by the school is considered by the LEA.
- Management plans are available for inspection, and proper notification of management plan availability has been provided.

1.4 Management Plan Availability



40 CFR 763.84(f) and 763.93(g) require that, upon submission of the management plan for review to the Agency designated by the State Governor, the LEA shall:

- Keep a copy of the plans in its centralized administrative office and make the plans available, during normal business hours, without cost or restriction, for inspection by representatives of the EPA, the State, and the public, including teachers, school personnel and their representatives, and parents [40 CFR 763.93(g)(1)].
- Notify in writing, parent, teacher, and employee organizations of the availability of the management plans [40 CFR 763.93(g)(1)].

Additionally 40 CFR 763.93(g) requires the LEA to:

- Maintain updated copies of the management plans in its centralized administrative control or direction and make the plans available, during normal business hours, without cost or restrictions, for inspection by representatives of the EPA, the State, and the public [40 CFR 763.93(g)(2)].
- Notify in writing, parent, teacher, and employee organizations at least once each school year of the availability of the management plans [40 CFR 763.93(g)(4)].

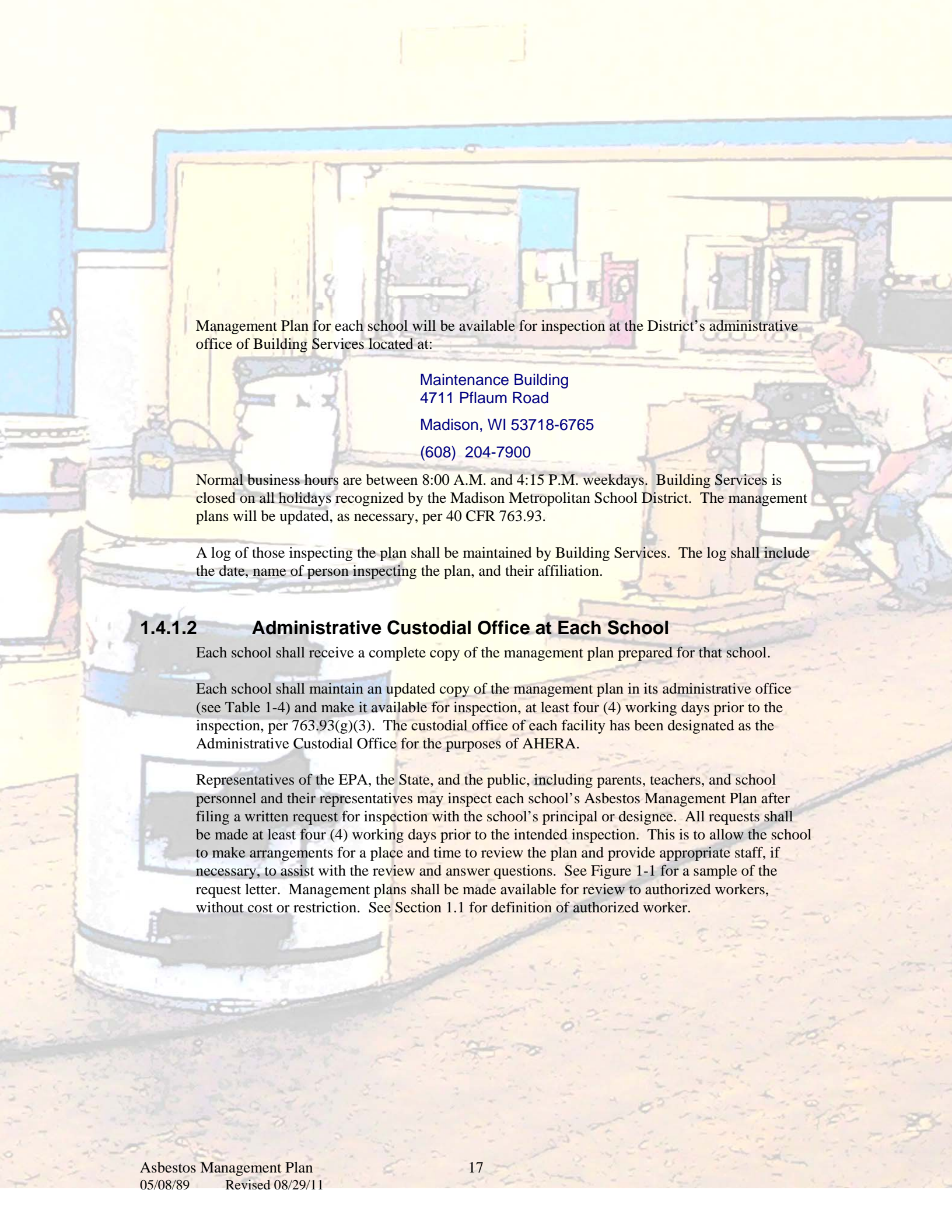
40 CFR 763.93(g)(3) requires each school to:

- Maintain in its Administrative Office a complete, updated copy of the management plan for its school.
- Make management plans available for inspection, without cost or restriction to workers before work begins in any area of a school building.
- Make management plans available for inspection to representatives of the EPA, the State, and the public, including parents, teachers and other school personnel and their representatives within five working days after receiving a request for inspection.

1.4.1 Madison Metropolitan School District Management Plan Availability

1.4.1.1 District Administrative Office

Upon submission of the management plans by MMSD to the State, a complete Asbestos



Management Plan for each school will be available for inspection at the District's administrative office of Building Services located at:

Maintenance Building
4711 Pflaum Road
Madison, WI 53718-6765
(608) 204-7900

Normal business hours are between 8:00 A.M. and 4:15 P.M. weekdays. Building Services is closed on all holidays recognized by the Madison Metropolitan School District. The management plans will be updated, as necessary, per 40 CFR 763.93.

A log of those inspecting the plan shall be maintained by Building Services. The log shall include the date, name of person inspecting the plan, and their affiliation.

1.4.1.2 Administrative Custodial Office at Each School

Each school shall receive a complete copy of the management plan prepared for that school.

Each school shall maintain an updated copy of the management plan in its administrative office (see Table 1-4) and make it available for inspection, at least four (4) working days prior to the inspection, per 763.93(g)(3). The custodial office of each facility has been designated as the Administrative Custodial Office for the purposes of AHERA.

Representatives of the EPA, the State, and the public, including parents, teachers, and school personnel and their representatives may inspect each school's Asbestos Management Plan after filing a written request for inspection with the school's principal or designee. All requests shall be made at least four (4) working days prior to the intended inspection. This is to allow the school to make arrangements for a place and time to review the plan and provide appropriate staff, if necessary, to assist with the review and answer questions. See Figure 1-1 for a sample of the request letter. Management plans shall be made available for review to authorized workers, without cost or restriction. See Section 1.1 for definition of authorized worker.

FIGURE 1-1
SAMPLE OF REQUEST LETTER TO REVIEW
ASBESTOS MANAGEMENT PLAN

To: Building Principal (Insert School Name)

I hereby request an opportunity to review the asbestos management plan for this school.

I understand that the District will contact me to arrange a place and time for review of the District's Asbestos Management plan at the above noted school within 5 working days from the date of this request. I also understand that the plan is available for immediate review at the office of Building Services during normal business hours.

Note: EPA regulations allow the school district five working days from the date of request to make the management plan available for review. It should also be noted that the management plan is available for immediate review, during normal business hours, at Building Services, 4711 Pflaum Road, Madison WI 53718, Phone (608) 204-7900.

Signature

(Please Print) Name: _____

Address: _____

Phone: _____

Email Address: _____

cc: Building Services

Table 1-4

Management Plan Availability by Location

Building	School Custodial Administrative Office ¹	LEA Administrative Office ²
Administration – Doyle	Room 15	Pflaum Road Facility - Building Services
Allis	Room 116A	Pflaum Road Facility - Building Services
Allied Drive	Room 100	Pflaum Road Facility - Building Services
Black Hawk	Room 134C	Pflaum Road Facility - Building Services
Chavez	Room 107	Pflaum Road Facility - Building Services
Cherokee	Room 210	Pflaum Road Facility - Building Services
Crestwood	Room 101	Pflaum Road Facility - Building Services
East	Room 19B	Pflaum Road Facility - Building Services
Elvehjem	Room 132A	Pflaum Road Facility - Building Services
Emerson	Room 12	Pflaum Road Facility - Building Services
Falk	Room 124	Pflaum Road Facility - Building Services
Franklin	Room 17	Pflaum Road Facility - Building Services
Glendale	Room 16	Pflaum Road Facility - Building Services
Hamilton	Room 4	Pflaum Road Facility - Building Services
Hawthorne	Room 117	Pflaum Road Facility - Building Services
Hoyt Building	Room 100	Pflaum Road Facility - Building Services
Huegel	Room 11	Pflaum Road Facility - Building Services
Jefferson	Room 115	Pflaum Road Facility - Building Services
Kennedy	Room 104A	Pflaum Road Facility - Building Services
LaFollette	Room 1098B	Pflaum Road Facility - Building Services
Lake View	Room 13	Pflaum Road Facility - Building Services
Lapham	Room 119	Pflaum Road Facility - Building Services
Leopold	Room 10	Pflaum Road Facility - Building Services
Lincoln	Room 119	Pflaum Road Facility - Building Services
Lindbergh	Room 114G	Pflaum Road Facility - Building Services
Lowell	Room 13	Pflaum Road Facility - Building Services
Memorial	Room 208C	Pflaum Road Facility - Building Services
Mendota	Room 100	Pflaum Road Facility - Building Services
Midvale	Room 11A	Pflaum Road Facility - Building Services
Muir	Room 122G	Pflaum Road Facility - Building Services
O'Keeffe	Room 122	Pflaum Road Facility - Building Services
Olson	Room 115AA	Pflaum Road Facility - Building Services
Pflaum Facility	Room 100D	Pflaum Road Facility - Building Services
Randall	Room 12	Pflaum Road Facility - Building Services
Sandburg	Room 124	Pflaum Road Facility - Building Services
Sennett	Room 117	Pflaum Road Facility - Building Services

Building	School Custodial Administrative Office ¹	LEA Administrative Office ²
Sherman	Room 133B	Pflaum Road Facility - Building Services
Shorewood	Room 26	Pflaum Road Facility - Building Services
Spring Harbor	Room 102	Pflaum Road Facility - Building Services
Stephens	Room 133	Pflaum Road Facility - Building Services
Thoreau	Room 118	Pflaum Road Facility - Building Services
Toki	Room 148	Pflaum Road Facility - Building Services
West	Room 1400A	Pflaum Road Facility - Building Services
Whitehorse	Room 120D	Pflaum Road Facility - Building Services
Wright	Room 1401	Pflaum Road Facility - Building Services

¹ Available without restriction to Madison Metropolitan School District authorized workers, within five working days following written request for inspection to the public.

² Available without restriction to Madison Metropolitan School District authorized workers and the public during normal business hours.

1.4.2 Notifications of Management Plan Availability

Upon submission of the management plans to the State, and at the least once each school year, the District will notify parent-teacher and employee organizations, in writing, of the availability of the management plans per 40 CFR 763.93(g)(4). See Appendix 1-3 for a dated sample copy of the notification(s) and a complete mailing list.

1.5 Management Plan Certification



40 CFR 763.93(e)(7) of the AHERA regulations requires that the person or persons who inspected for ACM and who will design or carry out response actions, except operations and Maintenance, with respect to the ACM a statement that the person(s) is accredited under the State of Wisconsin contractor accredited program as per section 206(b) of Title II of the Act..

1.5.1 It is the intent of the LEA that persons conducting inspections, re-inspections and response actions be accredited by the State of Wisconsin.

1.5.2 Asbestos Management Planner's Statement of Compliance

The Madison Metropolitan School District contracted with RMT, Inc., in 1989, to provide State of Wisconsin Asbestos Management Planners to conduct the following tasks:

- Review Inspection Reports for MMSD buildings
- Develop recommendations and opinions of cost for appropriate response actions
- Prepare Asbestos Management Plans for MMSD buildings

Table 1-5 provides a summary of Asbestos Management Planners provided for by RMT, Inc. to prepare Asbestos Management Plans.

Building	Management Planner	Building	Management Planner
Administration Building	Diana J. Hruban	Lincoln Elementary	Michael F. Lewis
Allied Drive	Thomas G. Kannal	Lindbergh Elementary	Diana J. Hruban
Allis Elementary	Thomas G. Kannal	Lowell Elementary	Garry D. Rossing
Chavez Elementary	Thomas G. Kannal	Mansfield Stadium	Garry D. Rossing
Cherokee Middle	Michael F. Lewis	Memorial High	Garry D. Rossing
Crestwood Elementary	Garry D. Rossing	Mendota Elementary	Garry D. Rossing
East High	Diana J. Hruban	Midvale Elementary	Michael F. Lewis
Elvehjem Elementary	Thomas G. Kannal	O'Keeffe/Marquette	Michael F. Lewis
Emerson Elementary	Thomas G. Kannal	Olson Elementary	Thomas G. Kannal
Falk Elementary	Diana J. Hruban	Pflaum Facility	Thomas G. Kannal
Franklin Elementary	Michael F. Lewis	Randall Elementary	Michael F. Lewis
Glendale Elementary	Thomas G. Kannal	Sandburg Elementary	Diana J. Hruban
Black Hawk/Gompers	Thomas G. Kannal	Sennett Middle	Thomas G. Kannal
Hamilton/Van Hise	Michael F. Lewis	Sherman/Shabazz	Diana J. Hruban
Hawthorne Elementary	Diana J. Hruban	Shorewood Elementary	Diana J. Hruban
Hoyt Building	Diana J. Hruban	Spring Harbor Elementary	Diana J. Hruban
Huegel Elementary	Diana J. Hruban	Stephens Elementary	Garry D. Rossing
Jefferson Middle	Diana J. Hruban	Thoreau Elementary	Michael F. Lewis
Kennedy Elementary	Thomas G. Kannal	Toki/Orchard Ridge	Garry D. Rossing
LaFollette High	Thomas G. Kannal	West High	Michael F. Lewis
Lake View Elementary	Diana J. Hruban	Whitehorse/Schenk	Thomas G. Kannal
Lapham Elementary	Diana J. Hruban	Wright Middle	Thomas G. Kannal
Leopold Elementary	Michael F. Lewis		

The undersigned do hereby certify that they prepared the Asbestos Management Plan(s) as outlined in Table 1-5; and that the plans have been prepared in compliance with the United States Environmental Protection Agency's regulations CFR, Part 763, Subpart E, Asbestos Containing Materials in School; and that they are certified by the State of Wisconsin as an Asbestos Management Planner. (Signatures on File)

Diana J. Hruban

Diana J. Hruban
Wisc. Cert. #MP-028

Thomas G. Kannal

Thomas G. Kannal
Wisc. Cert. #MP-170

Michael F. Lewis

Michael F. Lewis
Wisc. Cert. #MP-321

Garry D. Rossing

Garry D. Rossing, CIH
Wisc. Cert. #MP-282

1.5.3 LEA Designated Person Assurances

I, Douglas Pearson, the appointed designated person for Madison Metropolitan School District, do hereby certify that, to the best of my knowledge and belief, the LEA responsibilities, as stipulated by EPA 40 CFR, Part 763, Subpart E, Section 763.84 will be fulfilled by the implementation of this Asbestos Management Plan. (signature on file).

1.6 Asbestos Operations and Maintenance Program



40 CFR 763.91 of the AHERA regulations requires MMSD to implement an operations, maintenance, and repair (O&M) program whenever any friable ACM is present or assumed to be present. Any material identified as non-friable ACM must be treated as friable ACM when the material is about to become friable as a result of activities performed in a school building.

1.6.1 Purpose

The purpose of an Asbestos O&M program is as follows:

- Clean up asbestos fibers previously released.
- Prevent future release by minimizing ACM disturbance or damage.
- Monitor the condition of ACM.
- An O&M program is required to continue until all ACM is removed or the building is demolished.

1.6.2 Scope

The Madison Metropolitan School District's operation and maintenance program, in general, shall achieve the following:

- Provide information to building occupants, Madison Metropolitan School District custodial staff, contract workers, and short-term workers regarding the location of ACM.

- Notify building occupants about periodic surveillance, re-inspections, and response activities.
- Monitor ACM for changes in condition.
- Train MMSD custodial and maintenance staff in proper work procedures, when working with ACM or in the proximity of ACM.
- Provide MMSD employees involved in asbestos operations and maintenance activities with appropriate respirators and personal protective equipment.
- Develop and implement work procedures to minimize the potential for fiber release for each ACM found in a building.

1.6.3 Madison Metropolitan School District O&M Policy

At this time, asbestos abatement and O&M activities are coordinated through Building Services as either in-house abatement activities or contracted to a qualified asbestos abatement contractor.

In-house asbestos abatement activities conducted via Building Services Shop personnel include the following:

- O&M work consisting of small-scale, short-duration activities that are the result of unplanned repairs that include friable and non-friable asbestos material.
- Removal of non-friable asbestos material.

Out of house, contracted, asbestos abatement activities coordinated through Building Services include the following:

- O&M work consisting of small-scale short-duration activities are the result of unplanned repairs that include friable and non-friable asbestos material.
- Removal of friable and non-friable asbestos material.

All the above work will be performed by State of Wisconsin certified asbestos workers who shall be supervised by a State of Wisconsin certified asbestos supervisor. All asbestos work shall be conducted in accordance with all applicable federal, state, and local regulations, including, but not limited to, 40 CFR, Part 673, Subpart G, 29 CFR 1926.58, and applicable U.S. Department of Transportation Regulations.

1.6.4 Building Occupant Notifications



40 CFR 763.93(e)(1) requires that the LEA inform workers and building occupants or their legal guardians, about inspections, re-inspections, response actions, and post-response action activities, including periodic surveillance and re-inspection activities that are planned or in progress.

1.6.4.1 Madison Metropolitan School District Policy

In addition to the annual notification of management plan availability (see Section 1.4 of this management plan), the District will provide advance notification for asbestos activities to be conducted in the schools. Advance notifications will be sent out for re-inspections, periodic surveillances, and response action activities. Notifications will be sent out as far in advance of the

activity as practical, with the exception of emergency work in which post-notification will be made within ten days of emergency work.

See Figure 1-2 for a copy of the notification form (BS-21) for asbestos activities. Notification will be sent by the designated person to the school's administrative office for distribution and posting.

Notifications will remain posted for a minimum of 20 days from scheduled start date or the project duration, whichever is greater.

Additional notification to building staff and occupants, or legal guardians, will be left to the discretion of the school's principal. Such notifications may take the form of the following:

- Review of asbestos activities at staff meetings and PTO meetings
- Review of asbestos activities in school newsletter. Written notices to staff or legal guardians,

1.6.5 MMSD Monitoring Program

The Madison Metropolitan School District will monitor asbestos-containing building materials identified in the management plan, for changes in condition. Monitoring activities will consist of the following:

- Semiannual periodic surveillance of asbestos-containing building materials per 40 CFR 763.92(b).
- Three-year re-inspections using State of Wisconsin certified asbestos inspectors per 40 CFR 763.85(b).

1.6.5.1 Semiannual Periodic Surveillance



The 1987 AHERA Rule [40 CFR 763.92(b)] requires that the Madison Metropolitan School District conduct periodic surveillance at least once every six (6) months after the management plan is in effect in each building that contains ACBM or assumed ACBM. Persons performing periodic surveillance will conduct the following:

- Visually inspect all areas that are identified in the management plan as containing ACBM or assumed ACBM and record any changes in condition of the materials.
- Submit a copy of the periodic surveillance record to the LEA designated person for inclusion in the management plan.

1.6.5.1.1 MMSD Policy and Procedure

Periodic surveillance will be conducted by MMSD staff who have had a minimum of sixteen (16) hours of asbestos training. Training will, at a minimum, be in compliance with 40 CFR 763.92(a), (1) and (2).

NOTIFICATION OF ASBESTOS ACTIVITIES

Madison Metropolitan School District

Building Services, 4711 Pflaum Road, Madison, WI 53704

Building Location:	Date of Notification:
--------------------	-----------------------

The following asbestos activity is planned for the above noted building:

- Periodic Surveillance
- Reinspection
- Operations & Maintenance Activity
- Other _____
- Scheduled Response Action
- Repair, Removal, Encapsulation or Enclosure

Brief Description of Work:

Scheduled Start Date: Estimated Project Duration:

Location(s) of Activity:

For additional information regarding this notification please contact Building Services at 221-6262.

PLEASE POST THIS NOTICE

Authorized Signature

Title

Date

White Copy - Administrative Office
Yellow Copy - Employee Lounge
Pink Copy - Custodial Office
Goldenrod - Originator

BS-17 5/89

Figure 1-2 Notification of Asbestos Activities

Periodic surveillance will be conducted at least once every six (6) months. The first periodic surveillance will be conducted during Winter Break of each year and on or before June 30th of each year.

Results of periodic surveillance will be recorded on the Periodic Surveillance Report Form for Asbestos-containing Building Materials, MMSD Form BS-18. See Figure 1-3 for a sample copy of Form BS-18. Completed forms are to be returned to the designated person identified in Section 1.3 of this management plan, for inclusion in the management plan. See section on recordkeeping for results of semi-annual periodic surveillance.

**PERIODIC SURVEILLANCE FORM FOR
ASBESTOS-CONTAINING BUILDING MATERIALS**

**Madison
Metropolitan School District**

FORM #

Building Services, 4711 Pflaum Road, Madison, WI. 53704-6721

Federal and State law requires periodic surveillance of ACBM or assumed ACBM in school buildings at least once every six (6) months.

BUILDING LOCATION	BUILDING NO.
STREET ADDRESS	

This is to certify that I am familiar with the asbestos management plan prepared for the above noted building, and to the best of my knowledge and belief, I have visually inspected for changes in condition all areas that were identified in the asbestos management plan as having asbestos-containing building materials (ACBM) or assumed ACBM and that all areas are unchanged with the following exceptions: (if none, state "none")

Room No.	Room Use	Report material description, condition and any remarks

-Use additional sheets if necessary-

COMPLETED BY (Please print or type)	DATE
SIGNATURE	PLEASE RETAIN THE PINK COPY FOR YOUR RECORDS

White Copy - Building Services
 Yellow Copy - Building Services
 Pink Copy - Originator

Sheet _____ of _____

B.S.-14 5/89

Figure 2-3 Sample Copy of Periodic Surveillance Form

1.6.5.2 Three-Year Re-inspections



The 1987 AHERA Rule [40 CFR 673.85(B)] requires that the District use an accredited asbestos inspector(s) to re-inspect and reassess known friable and non-friable asbestos-containing building materials or assumed asbestos-containing building materials in each building at least once every three (3) years.

The accredited asbestos inspector shall perform the following:

- Visually re-inspect and reassess the condition of all friable known or assumed asbestos-containing building materials per 40 CFR 763.88.
- Visually inspect materials that were previously considered non-friable asbestos-containing building materials to determine whether the material has become friable since the last inspection or re-inspection.
- Identify any homogeneous areas with material that has become friable since the last inspection or re-inspection and assess per 40 CFR 763.88.
- Reassess the condition of friable known or assumed asbestos-containing building materials previously identified.
- Submit a copy of the re-inspection record to the LEA designated person for inclusion in the management plan within 30 days of the re-inspections.

1.6.5.2.1 Madison Metropolitan School District Policy and Schedule

Re-inspections will be conducted by either an outside consultant or in-house staff as determined by the MMSD's designated person. In either case, re-inspections will be performed by State of Wisconsin certified asbestos inspectors. Re-inspections shall be conducted in compliance with 40 CFR 763.85(b).

Re-inspections will be conducted at least once every three (3) years. The first re-inspections are scheduled as per Table 1-6. Thereafter, re-inspections will be conducted on or before August 31st of the third year.

Results of re-inspections shall be submitted to the designated person identified in Section 1.3 of this management plan for inclusion in the management plan. See Section on Recordkeeping for information on re-inspections.

TABLE 1-6
MMSD BUILDING REINSPECTION SCHEDULE

Area	Complete By	Area	Complete By
LaFollette Cluster Allis Elvehjem Kennedy Whitehorse/Schenk Sennett LaFollette Pflaum Road Facility /Food Production Center	August 31, 1990	West Cluster Franklin Leopold Lincoln Midvale Randall Shorewood Thoreau Cherokee Hamilton/Van Hise West Hoyt Administration	August 31, 1990
East Cluster Emerson Lakeview Lindbergh Lowell Mendota Sandburg Black Hawk/Gompers O'Keeffe/Marquette East Hawthorne Lapham Sherman/Shabazz	August 31, 1990	Memorial Cluster Crestwood Falk Huegel Muir Stephens Jefferson Toki/Orchard Ridge Memorial/ Mansfield Stadium Spring Harbor	August 31, 1990

1.6.6 Training of Custodial and Maintenance Workers

1.6.6.1 Two-hour Awareness Training



Prior to implementation of the Operations and Maintenance provisions of the management plan, MMSD is required to ensure that members of its maintenance and custodial staff who work in a building that contains asbestos-containing building materials receive at least two (2) hours of asbestos awareness training [40 CFR 763.92(a)(1)]. Training shall include, as a minimum, the following:

- Information on asbestos and its various uses and forms.
- Information on the health effects associated with asbestos exposure.
- Locations of asbestos-containing building materials identified throughout each school building in which they work.
- Recognition of damage, deterioration, and de-lamination of asbestos-containing building materials.
- The name and telephone number of the LEA's designated person.
- The availability and location of the management plan.

Additionally, new custodial and maintenance employees shall receive required training within 60 days after commencement of employment.

1.6.6.2 Additional Fourteen-Hour Asbestos Training



MMSD is required to ensure that members of its maintenance and custodial staff who conduct activities that may result in the disturbance of asbestos-containing building materials receive, in addition to the two-hour awareness training, 14 hours of asbestos training [40 CFR 763.92(a)(2)]. Additional asbestos training shall include the following topics as a minimum:

- Descriptions of proper methods of handling asbestos-containing building materials.
- Information on the use of respiratory protection equipment and other personal protective measures.
- Hands-on training in good work practices.

1.6.6.3 Madison Metropolitan School District Policy

It will be the policy of the Madison Metropolitan School District to provide custodial and maintenance employees with a minimum of two (2) hours asbestos awareness training conforming to 40 CFR 763.92(a)(1). An additional 14 hours of asbestos training will be provided for maintenance and custodial staff who conduct activities that may result in the disturbance of asbestos-containing building materials.

New maintenance and custodial workers will be trained within 60 days after commencement of employment.

1.6.6.4 Summary of Madison Metropolitan School District Employee Training and Schedule

Two-hour awareness training for custodial and maintenance staff will be conducted prior to implementation of the operation and maintenance provision of this management plan.

As of April 24, 1989, all Madison Metropolitan School District maintenance shop employees; carpenters; painters; Building Custodian III's, Building Custodian I's, and Maintenance Workers have received 16 hours of asbestos training. Appendix 1-6 summarizes asbestos training provided to Madison Metropolitan School District employees.

A copy of the Employee Asbestos Training Record will be forwarded to Employee Services for the employee's personnel file. Building Services will retain the original copy.

Update training will be provided, as deemed necessary by the designated person, to maintenance and custodial staff to maintain proper awareness and understanding of regulations, health and safety issues, and work practices.

1.6.7 Employee Protection Program



40 CFR 763.91(b) extends worker protection, provided by 40 CFR 763.121, to employees of an LEA performing operations and management activities who are not covered by 29 CFR 1926.58 or a state standard for asbestos worker protection. EPA has determined that the State of Wisconsin Regulations are comparable to or more stringent than the EPA rule. By state law, Wisconsin public employees are afforded worker protection and the public health and safety regulations are administered by the Department of Industry, Labor, and Human Relations (DILHR).

In general, the regulations require the following:

- Establishment of a regulated area whenever airborne concentrations exceed, or are reasonably expected to exceed the permissible exposure limit (PEL) of 0.2 f/cc. The regulated area is to be demarcated and access limited to authorized persons. A regulated area shall be supervised by a competent person.
- Exposure monitoring shall be performed to accurately determine the airborne concentrations of asbestos to which employees are exposed.

- Use of engineering controls and work practices to achieve compliance with the permissible exposure limit.
- Respirators are to be provided by the employer and ensure that they are used during the following activities:
 - During the interval necessary to install or implement feasible engineering and work practice controls.
 - In work operations such as maintenance and repair activities, or other activities for which engineering and work practice controls are not feasible.
 - In work situations where feasible engineering and work practice controls are not sufficient to reduce exposure to or below the permissible exposure limit.
 - In emergencies.
- When respiratory protection is used, the employer shall have a written respirator program that includes information and guidance for proper selection, use, care, and emergency uses of respirators.
- The employer shall provide personal protective equipment and ensure its use.
- Except for small-scale, short-duration operations, the employer shall establish a decontamination area adjacent to the regulated area. Decontamination area shall consist of an equipment room, shower area, and clean room in series.
- Medical surveillance shall be provided to employees engaged in work involving airborne asbestos exposure at or above the action level of 0.1 f/cc for 30 days or more per year, or to employees who are required to wear negative-pressure respirators.
- Records of employee exposures, including air monitoring (to be kept for 30 years) and medical surveillance (to be kept for duration of employment plus 30 years), shall be maintained.

1.6.7.1 Madison Metropolitan School District Policy

The Madison Metropolitan School District will make available respirators and personal protective equipment, and will provide necessary medical surveillance as deemed necessary by the LEA designated person. At the present time, Madison Metropolitan School District employees shall be restricted from working with friable asbestos-containing building materials. All such work will be performed by contract workers.

Worker protection required for specific work procedures for specific material types will be outlined in the description of the work procedure.

1.6.8 Warning Labels



40 CFR 763.95 of the regulations requires LEA's to post warning labels in routine maintenance areas that have been identified as containing friable asbestos-containing building materials.

Warning labels shall be readily visible with large size print in bright colors, and shall read:

***“Caution
Asbestos. Hazardous.
Do not disturb without proper training and equipment”.***

Warning labels are to remain posted until the asbestos-containing building materials have been removed, as determined by the LEA designated person or designee.

1.6.8.1 Madison Metropolitan School District Policy

Warning labels have been posted in routine maintenance areas where ACM was identified. These areas include, but are not limited to, boiler rooms, mechanical rooms, and utility pipe tunnels that contain asbestos-containing building materials. The warning labels are bright yellow with black lettering. An example of the warning label is shown on Figure 1-4.

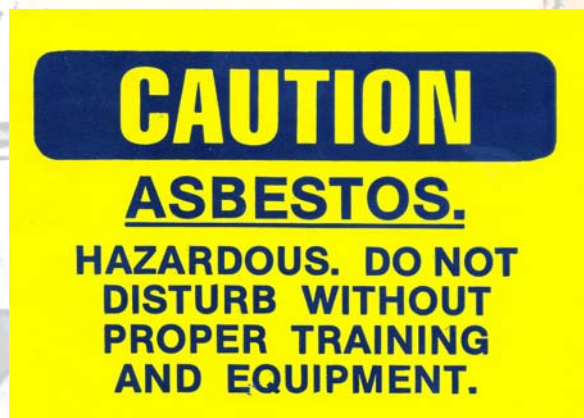


Figure 1-4 Warning Label

It is the policy of the Madison Metropolitan School District that warning labels shall remain posted until the LEA designated person has authorized their removal and all asbestos-containing material has been removed. The LEA designated person shall be informed if warning labels are missing or damaged.

Information regarding the locations of posted warning labels is provided in Section 2 of the management plan.

1.6.9 Work Authorization

1.6.9.1 General

In order to minimize inadvertent disturbance of asbestos-containing building materials by Madison Metropolitan School District personnel, contract workers or short-term workers, a system of review prior to the work activity will be implemented.

The system will require vendors, contractors and short-term workers for maintenance and renovation activities to be reviewed by the custodial staff prior to start of work activity. Custodial staff shall have the vendor, contractor and/or short-term workers sign-in the log book in each custodial administrative area. The sign in log shall alert those signing in that an asbestos management plan is available for the facility and that they have reviewed the work with custodial staff and understand that they are not to disturb asbestos containing materials without written authorization from Building Services.

1.6.9.2 Madison Metropolitan School District Personnel

Presently, a requisition/work order system is in use for maintenance, repair, and improvement work performed by Madison Metropolitan School District Services staff. Staff shall review requests for work prior to issuance of a work order. Special precautions, instructions, and work procedures provided as necessary.

Work performed at the building level by custodial and maintenance repair staff shall be reviewed and approved by the LEA designated person, or designee, prior to performing the work. A work order will be issued by building Services. Exceptions will be made for routine activities that do not involve the disturbance of asbestos-containing building material or suspect asbestos-containing building material, as deemed appropriate by the LEA designated person.

1.6.9.3 Contract Workers

Contract workers are issued a work authorization prior to work by either Purchasing Services or Building Services. All contracted vendors will be required to use the sign-in in the log book available in the custodial administrative office and review proposed work with custodial staff prior to implementation. The contractor is responsible for reviewing Asbestos Management Plan.

1.6.9.4 Short-Term Workers

Short-term workers are non-contract, utility workers, including, but not limited to, telephone repair workers, electrical utility company workers, gas utility company workers, water utility workers, civil defense employees and contractors, and cable television repair workers.

Short-term workers, except for emergency services, were notified regarding the availability of the asbestos management plan. Additionally, short-term workers are required to sign in the log book available in the custodial administrative office at each facility and review the intended work with custodial staff prior to implementation. Short-term workers are responsible for reviewing Asbestos Management Plan prior to start of their work and are not to disturb asbestos-containing building materials as part of their work.

1.6.10 Work Procedures

1.6.10.1 General

Work procedures dealing with various types of asbestos-containing building materials present throughout the Madison Metropolitan School District have been developed to minimize the potential for fiber release. Asbestos-containing materials are classified into three (3) categories as follows:

- Surfacing Materials
- Thermal System Insulation
- Miscellaneous Materials

These categories can be further subdivided into friable and non-friable asbestos-containing building materials. Friable materials can be crumbled, pulverized, or reduced to powder by hand pressure, when dry.

Surfacing materials are generally sprayed-on, troweled-on, or otherwise applied to surfaces, such as acoustical plaster on ceilings and walls or fire proofing materials on structural building components. Hard plasters and drywall spackling are examples of non-friable surfacing materials.

Thermal system insulation includes insulating material that are applied to pipes, fittings, boilers, breeching systems, tanks, and ducts to prevent heat loss, gain, or water condensation. Thermal system insulation that has retained its structural integrity and has an undamaged protective wrap that prevents fiber release can be considered to be non-friable.

Miscellaneous materials include other asbestos-containing building materials not included under surfacing materials or thermal system insulations such as electrical wire, cloth-type insulations, floor tile, ceiling tile, cement-asbestos board and pipe, partitions, and built-in laboratory counter tops.

1.6.10.2 Specific Work Procedures

Specific work procedures for removal of non-friable vinyl asbestos floor tile (VAT) and glove bag removal of thermal insulation are outlined in the following procedures. Only employees with State of Wisconsin Supervisor Certification are the remove VAT and thermal insulations using these procedures.

1.6.10.2.1 General Removal Procedures for Vinyl Asbestos Floor Tile

Vinyl asbestos floor tile removed by Building Services is removed by one of two methods:

- Infrared Machine procedure
- Wet Method / Infrared Machine procedure

1.6.10.2.1.1 Infrared Machine Procedure:

INFRARED MACHINE

Procedures for the removal of Vinyl Asbestos Floor Tile (VAT) using the Infrared Machine

1. Review work order/map of area where removal is to occur.
2. MMSD carpenters must have WI Asbestos Supervisor ID card with them at all times when doing VAT removal work.

3. Have copy of Department of Health and Social Services notification on site if removal is greater than three square feet.

Set-up Regulated Area

1. Erect barriers and post placards
 - a. Where possible hang or suspend black poly across hallway leading to area and doorway to room where removal will take place (not needed for small patch and repair projects).
 - b. Place large Danger Asbestos signs/barricade tape at all possible entry points to removal area.
 - c. Turn off all heating, ventilation and air conditioning equipment (HVAC) in the area where the VAT is to be removed.
 - d. Cover intake and exhaust grills of HVAC equipment with 6-mil poly.
2. HEPA vacuum the entire area that is to be abated, with floor attachment to HEPA vac.
3. Plug infrared machine into large mobile electrical/panel board (240 volt). Electric power (110 volt) supplied to the smoke tower must be attached to a ground fault circuit interrupter (GFCI). The GFCI must be attached to a live circuit outside the work area. The supplied 100 foot, 110 volt extension cord can then be attached to the GFCI, and attached to the smoke tower on the infrared machine. You are now ready to conduct non-friable VAT removal with the infrared machine. Operation of the machine should be based on the operation manual and instruction received during the 40 hour Asbestos Supervisor Training Course.

NOTE: A negative exposure assessment (NEA) has been completed for each work task performed using this work procedure when abating similar material. Therefore, a complete negative pressure enclosure (NPE) is not needed. In addition, respirators, protective clothing, or decontamination facilities are also not required when performing this work procedure as specified.

Removing the Floor Tile

1. Heat floor tiles sufficiently enough to break the bond between floor and the tiles. Note, loose tile may be removed without heating, provided that the tiles are lightly misted with water prior to removal and the tile remains intact as defined by OSHA.*
2. The removed tiles are to be placed in fiber drums that have been lined with 2 asbestos disposal bags. Tiles should be lightly misted with an airless sprayer before the disposal bags are closed (no standing water). Enough space should be left in the bags to allow for closing and sealing with duct tape.
3. Fiber drums that are full should be covered with lid, closed with metal ring and taped closed with duct tape.
4. NESHAP generator/danger asbestos labels must be affixed to the drums before they are transported from the building.

Clean-Up After VAT Removal

1. After VAT has been removed, the substrate must be prepared prior to the installation of the new floor tile.
2. To remove any dirt and grit that has accumulated beneath the old tile, the flooring must be scraped. Using an airless sprayer, lightly mist the flooring and scrape with a razor blade scrapper. Please note, dry scraping/dry sweeping is not allowed. The dirt and scrapings must then be cleaned up using a HEPA vac.
3. Remove all asbestos placards, barricade tape and plastic barriers before leaving the site. The fact that this was a non-friable abatement, plastic sheeting that is to be disposed of may be disposed of as non-asbestos waste.
4. If possible, the completed areas should have restricted access until new flooring is laid. In areas where restricted access is not possible, alternative measures need to be taken, i.e., using secured carpet runners or plastic to provide access through or across an abated area.

Additional Precautions While Using the Infrared Machine

1. Infrared machine is not to be used when the floor is wet or moist (electrocution hazard).
2. Remove key from control panel when the machine is left unattended.
3. De-energize panel and unplug machine before leaving machine unattended.
4. The weight of the machine must be supported by its wheels while in use and in transport.
5. The heating elements are very expensive and are ruined when they become wet. Therefore, the smoke tower should not be overfilled with water and must be kept level at all times.
6. The infrared machine should not be rolled or pushed across flooring surfaces that are not to be removed, damage to flooring may result.
7. A minimum of one multi-purpose dry chemical (Class A, B, C) fire extinguisher must be available at all times. Water should never be used to extinguish a fire associated with the Infrared Machine (electrocution hazard).
8. Burn kit to treat related burns must be on-site at all times. Any and all burns must be reported to Building Services with follow-up visit to physician.
9. Wiring and disconnect of infrared electrical panel be done by an electrician, care shall be taken when working around open electrical panel (electrocution hazard).
10. Some incidental breakage of floor tiles is to be expected. Under the standard, material is not intact only if it has crumbled, been pulverized, or has otherwise deteriorated so that the asbestos fibers are no longer likely to be bound with their matrix. Therefore, the incidental breakage of tiles does not by itself mean that the material is not intact.

Version 3

March, 1997

WET METHOD / INFRARED MACHINE

Procedures for the removal of Vinyl Asbestos Floor Tile (VAT) using Wet Methods and the Infrared Machine

1. Review work order/map of area where removal is to occur.
2. MMSD carpenters must have WI Asbestos Supervisor ID card with them at all times when doing VAT removal work.
3. Have copy of Department of Health and Social Services notification on site if removal is greater than three square feet.

Preparing the VAT

1. With the aid of building custodians, de-energize and lock-out and tag all wall and floor mounted electrical outlets.
2. Post entrances to rooms or areas with asbestos placards.
3. Wet vat flooring with a bucket and mop. Note: floor penetrations may need to be sealed to avoid damage to ceilings located below the removal areas.
4. Let water stand on VAT for a minimum of three days or until tile sufficiently begins to cup or pop up.
5. Allow flooring to thoroughly dry (approximately three days). Large puddles of water may need to be mopped up to allow for complete drying.

Set-up Regulated Area

1. Erect barriers and post placards:
 - a. Where possible hang or suspend black poly across hallway leading to area and doorway to room where removal will take place (not needed for small patch and repair projects).
 - b. Place large Danger Asbestos signs/barricade tape at all possible entry points to removal area.
 - c. Turn off all heating, ventilation and air conditioning equipment (HVAC) in the area where the VAT is to be removed.
 - d. Cover intake and exhaust grills of HVAC equipment with 6-mil poly.
2. HEPA vacuum the entire area that is to be abated, with floor attachment to HEPA vac.

3. Plug infrared machine into large mobile electrical/panel board (240 volt). Electric power (110 volt) supplied to the smoke tower must be attached to a ground fault circuit interrupter (GFCI). The GFCI must be attached to a live circuit outside the work area. The supplied 100 foot, 110 volt extension cord can then be attached to the GFCI, and attached to the smoke tower on the infrared machine. You are now ready to conduct non-friable VAT removal with the infrared machine. Operation of the machine should be based on the operation manual and instruction received during the 40 hour Asbestos Supervisor Training Course.

NOTE: A negative exposure assessment (NEA) has been completed for each work task performed using this work procedure when abating similar material. Therefore, a complete negative pressure enclosure (NPE) is not needed. In addition, respirators, protective clothing, or decontamination facilities are also not required when performing this work procedure as specified.

Removing the Floor Tile

1. Heat floor tiles sufficiently enough to break the bond between floor and the tiles. Note, loose tile may be removed without heating, provided that the tiles are lightly misted with water prior to removal and the tile remains in tact as defined by OSHA.*
2. The removed tiles are to be placed in fiber drums that have been lined with 2 asbestos disposal bags. Tiles should be lightly misted with an airless sprayer before the disposal bags are closed (no standing water). Enough space should be left in the bags to allow for closing and sealing with duct tape.
3. Fiber drums that are full should be covered with lid, closed with metal ring and taped closed with duct tape.
4. NESHAP generator/danger asbestos labels must be affixed to the drums before they are transported from the building.

Clean-Up After VAT Removal

1. After VAT has been removed, the substrate must be prepared prior to the installation of the new floor tile.
2. To remove any dirt and grit that has accumulated beneath the old tile, the flooring must be scraped. Using an airless sprayer, lightly mist the flooring and scrape with a razor blade scrapper. Please note, dry scraping/dry sweeping is not allowed. The dirt and scrapings must then be cleaned up using a HEPA vac.
3. Remove all asbestos placards, barricade tape and plastic barriers before leaving the site. The fact that this was a non-friable abatement, plastic sheeting that is to be disposed of may be disposed of as non-asbestos waste.
4. If possible, the completed areas should have restricted access until new flooring is laid. In areas where restricted access is not possible, alternative measures need to be taken, i.e., using secured carpet runners or plastic to provide access through or across an abated area.

Additional Precautions While Using the Infrared Machine

1. Infrared machine is not to be used when the floor is wet or moist (electrocution hazard).
2. Remove key from control panel when the machine is left unattended.
3. De-energize panel and unplug machine before leaving machine unattended.
4. The weight of the machine must be supported by its wheels while in use and in transport.
5. The heating elements are very expensive and are ruined when they become wet. Therefore, the smoke tower should not be overfilled with water and must be kept level at all times.
6. The infrared machine should not be rolled or pushed across flooring surfaces that are not to be removed, damage to flooring may result.
7. A minimum of one multi-purpose dry chemical (Class A, B, C) fire extinguisher must be available at all times. Water should never be used to extinguish a fire associated with the Infrared Machine (electrocution hazard).
8. Burn kit to treat related burns must be on-site at all times. Any and all burns must be reported to Building Services with follow-up visit to physician.
9. Wiring and disconnect of infrared electrical panel be done by an electrician, care shall be taken when working around open electrical panel (electrocution hazard).

Some incidental breakage of floor tiles is to be expected. Under the standard, material is not intact only if it has crumbled, been pulverized, or has otherwise deteriorated so that the asbestos fibers are no longer likely to be bound with their matrix. Therefore, the incidental breakage of tiles does not by itself mean that the material is not intact.

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1.6.10.2.1.3 Glovebag Removal Procedures for Thermal System Insulation

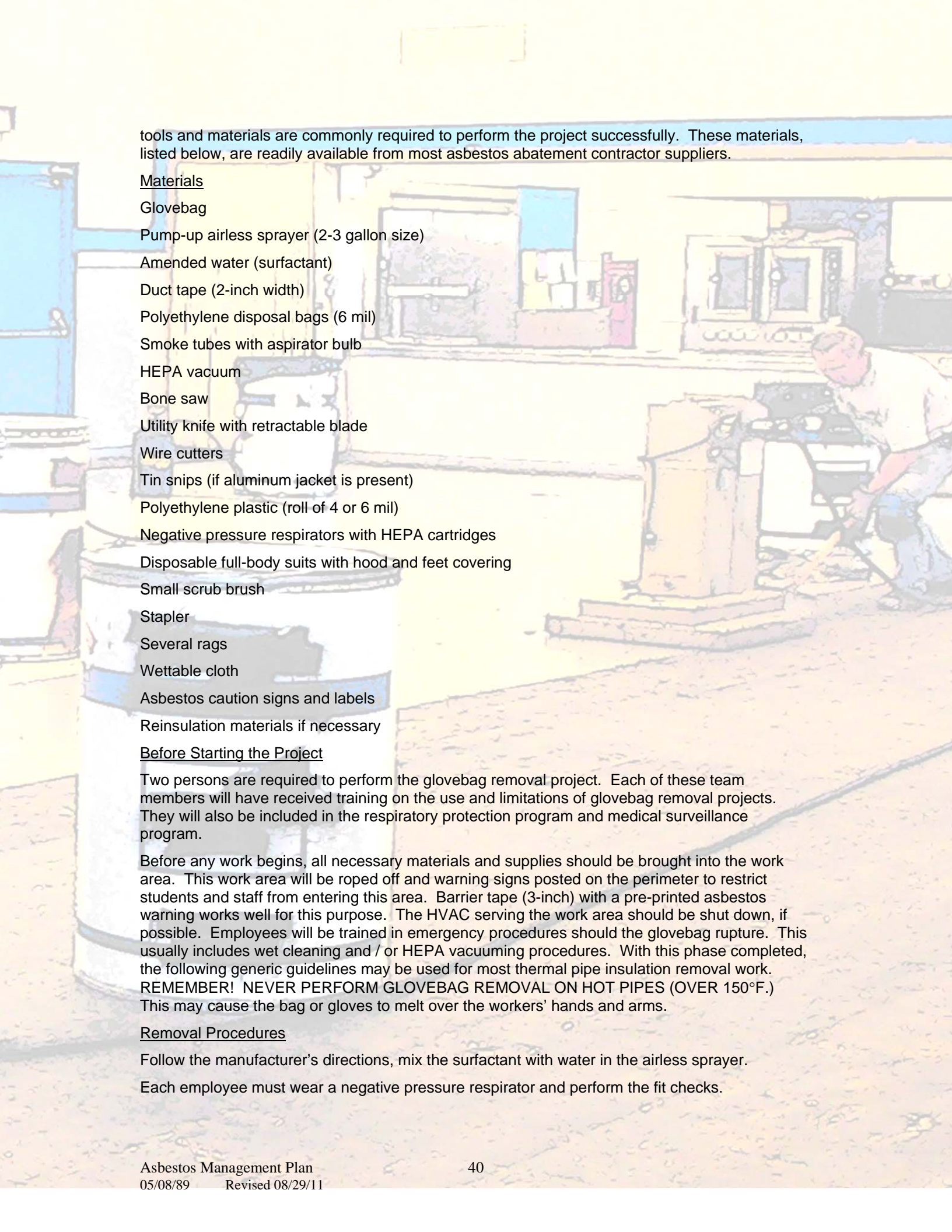
Thermal System Insulation may be removed by Building Services Personnel strictly as O&M.

The intent must be for repairs only (small-scale, short-duration) and not large scale abatement where removal of ACM is the intent.

The specific work procedure for glovebag removal follows.

Overview of the Glovebag Procedure

The glovebag consists of a 6 mil bag fitted with long sleeve gloves, a tool pouch, and two ports used for water application and the HEPA vacuum. Although glovebags can be fabricated by the user for each project, most contractors prefer to purchase ready-made bags. The size, quality, style, and cost vary depending on the manufacturer. In addition to the glovebag, several other



tools and materials are commonly required to perform the project successfully. These materials, listed below, are readily available from most asbestos abatement contractor suppliers.

Materials

Glovebag
Pump-up airless sprayer (2-3 gallon size)
Amended water (surfactant)
Duct tape (2-inch width)
Polyethylene disposal bags (6 mil)
Smoke tubes with aspirator bulb
HEPA vacuum
Bone saw
Utility knife with retractable blade
Wire cutters
Tin snips (if aluminum jacket is present)
Polyethylene plastic (roll of 4 or 6 mil)
Negative pressure respirators with HEPA cartridges
Disposable full-body suits with hood and feet covering
Small scrub brush
Stapler
Several rags
Wettable cloth
Asbestos caution signs and labels
Reinsulation materials if necessary

Before Starting the Project

Two persons are required to perform the glovebag removal project. Each of these team members will have received training on the use and limitations of glovebag removal projects. They will also be included in the respiratory protection program and medical surveillance program.

Before any work begins, all necessary materials and supplies should be brought into the work area. This work area will be roped off and warning signs posted on the perimeter to restrict students and staff from entering this area. Barrier tape (3-inch) with a pre-printed asbestos warning works well for this purpose. The HVAC serving the work area should be shut down, if possible. Employees will be trained in emergency procedures should the glovebag rupture. This usually includes wet cleaning and / or HEPA vacuuming procedures. With this phase completed, the following generic guidelines may be used for most thermal pipe insulation removal work. **REMEMBER! NEVER PERFORM GLOVEBAG REMOVAL ON HOT PIPES (OVER 150°F.)** This may cause the bag or gloves to melt over the workers' hands and arms.

Removal Procedures

Follow the manufacturer's directions, mix the surfactant with water in the airless sprayer.

Each employee must wear a negative pressure respirator and perform the fit checks.

Each employee must wear a disposable full-body suit. Remember, the hood goes over the respirator straps.

Check the pipe where the work will be performed. If it is damaged (broken lagging, hanging, etc.), wrap the entire length of pipe in polyethylene plastic and "candy stripe" it with duct tape. A common error when doing glovebag work is forgetting that loose pipe lagging several feet or even several yards away from the glovebag work may be jarred loose by the activity. This is one of the common causes of high airborne fiber concentrations during glovebag work. The other problem is failure to clean up debris on the floor and other surfaces which may have accumulated and contains asbestos. If the pipe is undamaged it is still necessary to place one layer of duct tape around the pipe at each location where the glovebag will be attached. This serves two purposes. First, it gives a good surface on which to seal the ends of the glovebag. Second, it minimizes the chance of releasing fibers when the tape at the ends of the glovebag is peeled off at the completion of the job.

Slit the top of the glovebag open (if necessary) and cut down the sides to accommodate the size of the pipe (about two inches longer than the pipe diameter).

Place the necessary tools into the pouch located inside the glovebag. This may include a bone saw, utility knife, rags, scrub brush, wire cutters, tin snips, and wettable cloth.

Place one strip of duct tape along the edge of the open top slit of the glovebag for reinforcement.

Place the glovebag around the section of pipe to be worked on and staple the top together through the reinforcing duct tape. Staple at intervals of approximately one inch. Next, fold the stapled top flap back and tape it down with a strip of duct tape. This should provide an adequate seal along the top. Next, duct tape the ends of the glovebag to the pipe itself, previously covered with plastic or duct tape (see step 4).

Using the smoke tube and aspirator bulb, place the tube into the water port (small opening on the side of the glovebag). By squeezing the bulb, fill the bag with visible smoke. Remove the smoke tube and close the water port. While keeping the water port closed, gently squeeze the glovebag and look for smoke leaking out, especially at the top and ends of the glovebag. If leaks are found, they should be taped closed using duct tape and the bag should be re-tested with smoke.

Insert the wand from the water sprayer through the water port. Using duct tape, tape the water port tightly around the wand to prevent air leakage.

Insert the nozzle from the HEPA Vac through the second port. Using duct tape, tape the HEPA Vac tightly around the nozzle to prevent any leakage.

One person places their hands into the long-sleeved gloves while the second person directs the water spray at the work.

If the section of pipe is covered with an aluminum jacket, this is removed first using the wire cutters to cut any bands and then the tin snips to remove the aluminum. It is important to fold the sharp edges in order to prevent cutting the bag when it is placed in the bottom. Use caution to prevent cuts – these edges are sharp!

With the insulation exposed, use the bone saw to cut the insulation at each end of the section to be removed inside the glovebag. **Note:** A bone saw is a serrated, heavy-gauge wire with ring-type handles at each end. Throughout this process, water is sprayed on the cutting area to keep dust to a minimum.

Once the ends are cut, the section of insulation should be slit from end to end using the utility knife. The cut should be made along the bottom of the pipe and water continuously supplied. Again, care should be taken, when using the knife, not to puncture the bag. Some insulation may have wire to be clipped as well.

Spray all tools with water inside the bag and place back into pouch.

The insulation can now be lifted off the pipe and gently placed in the bottom of the bag.

Using the scrub brush, rags and water, scrub and wipe down the exposed pipe inside the glovebag.

Wet the donut-shaped pieces of wettable cloth over the exposed ends of insulation remaining on the pipe. Wettable cloth is a plaster impregnated fiberglass webbing available at many hardware and / or plumbing supply stores.

Using the water wand, wash the interior sides of the glovebag from the top down.

Using one hand, pull the tools into one of the gloves (to the outside of the bag) and twist tightly. Place duct tape over the twisted portion and then cut the tools away from the glovebag, cutting through the twisted / taped section. In this manner, the contaminated tools may be placed directly into the next glovebag without cleaning. Alternatively, the tool pouch with the tools can be placed in a bucket of water, opened underwater, and the tools cleaned and dried without releasing asbestos into the air. Note: Rags and the scrub brush cannot be cleaned in this manner and should be discarded with the asbestos waste. If more than one adjacent section of pipe is to be removed, the glovebag may be loosened at each end and slid along the pipe to the next section. In this case, the tools would remain in the bag for continued use.

Turn on HEPA Vac to collapse the bag while twisting the bag (between the HEPA Vac and asbestos debris water ports). Tightly, tape over the twisted section using duct tape, separating the top of the pipe and ports from the asbestos debris at the bottom. Turn off the HEPA Vac. Remove the water wand and HEPA Vac nozzle from the bag. Slip a 6 mil disposal bag over the glovebag (still attached to the pipe). Remove the bag from the pipe and fold it down into the disposal bag. Remove the disposable suits and place these into the bag with the waste.

Insert HEPA Vac nozzle, twist the top of the bag closed, and again collapse the bag. Label the bag with warning and NESHAP labels. Remove HEPA Vac nozzle and seal the twist with duct tape.

Using a clean damp rag, wipe the exterior of the respirator and leave the work area. Remove the respirator and all asbestos placards and barrier tape.

Asbestos containing material must be disposed of at an approved landfill in accordance with EPA regulations.

1.6.10.3 Cleaning Activities

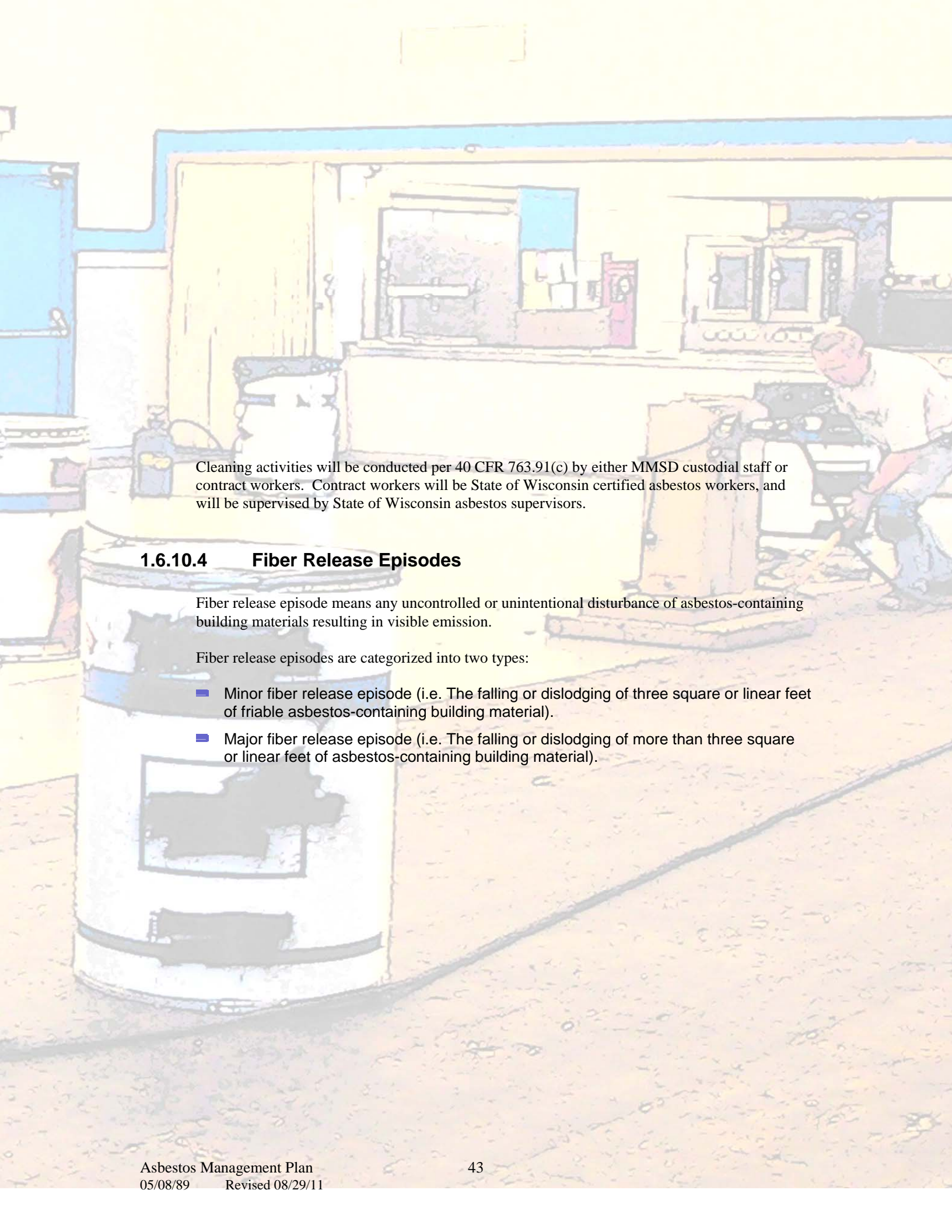


Cleaning activities are to be conducted prior to initiation of any response actions in areas where friable asbestos-containing building materials are present [40 CFR 763.91(c)].

Cleaning procedures are:

- HEPA-vacuum or wet-clean floors and other horizontal surfaces. HEPA-vacuum or steam clean carpets
- Dispose of debris, filters, mop heads, and cloths in sealed, leak-tight containers.

1.6.10.3.1 MMSD Policy



Cleaning activities will be conducted per 40 CFR 763.91(c) by either MMSD custodial staff or contract workers. Contract workers will be State of Wisconsin certified asbestos workers, and will be supervised by State of Wisconsin asbestos supervisors.

1.6.10.4 Fiber Release Episodes

Fiber release episode means any uncontrolled or unintentional disturbance of asbestos-containing building materials resulting in visible emission.

Fiber release episodes are categorized into two types:

- Minor fiber release episode (i.e. The falling or dislodging of three square or linear feet of friable asbestos-containing building material).
- Major fiber release episode (i.e. The falling or dislodging of more than three square or linear feet of asbestos-containing building material).

1.6.10.4.1 Minor Fiber Release Episodes



40 CFR 763.91(f)(1) requires the LEA to take the following action in the event of a minor fiber release episode:

- Thoroughly saturate the debris using wet methods.
- Clean the area per 40 CFR 763.91(c).
- Place asbestos debris in sealed, leak-tight containers.
- Repair damage or immediately implement appropriate response action.

1.6.10.4.2 Major Fiber Release Episodes



40 CFR 763.91(f)(2) requires the LEA to take the following action in the event of a major fiber release episode:

- Restrict entry into the area and post warning signs.
- Shut off or temporarily modify the air-handling system to prevent distribution of fibers to other areas.
- Use State of Wisconsin certified asbestos designer to design the response and State of Wisconsin certified workers and supervisors to conduct response.

1.6.10.4.3 MMSD Policy

Fiber release episodes will be responded to and carried out per 763.91(f)(1) and (2) as applicable. Fiber release episodes will be documented using Form BS-13.

2 BUILDING SPECIFIC INFORMATION

2.1 Building Information

2.1.1 Building Data

The following building information is provided to assist those using this management plan:

- Information on building, including the location number, building use, brief description of building construction and mechanical systems, construction history and contacts.
- Room identification numbering information.
- Graphic representation of results of inspections, reinspections and proposed response actions, as applicable.



2.1.2 Building Information

See Figure 2-1 for the building information sheet. This sheet includes information on building use, brief description of construction, mechanical systems, construction history, and contacts for building owner, occupant and building manager.