State of Wisconsin
Department of Administration
Division of State Facilities
Wisconsin Asbestos & Lead Based Paint
Management System
(WALMS)

SECTION A

SURVEY FIELD MANUAL

WISCONSIN ASBESTOS AND LEAD-BASED PAINT MANAGEMENT SYSTEM (WALMS)

The State of Wisconsin
Department of Administration
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1.0 INTRODUCTION

The enclosed guidelines will address questions regarding how the State of Wisconsin surveys are to be completed. The basic components of the standard survey include a full asbestos inspection (including visual roof assessment), and a lead-based paint inspection through the use of an XRF or paint chip analysis.

The agency can generally provide a floor plan of each building that includes room names or numbers. Room numbers will be necessary for WALMS data entry. The inspector should mark the room name or number on the floor plan if they are not shown on the provided plan. Room numbers will need to entered in the WALMS web-site with consistent significant digits I.E. rooms 001, 002, 003, 020, 021, etc. It may be necessary to renumber rooms to allow for better data transfer.

If the agency does not have floor plans available, the consultant will need to generate a simple floor plan sketch. CAD drawings of the facilities are not necessary. Floor plans will be scanned into the database for reference. Floor plans, whenever possible, should be listed as B (basement), 01 (for 1st floor), 02 (second floor), 03 (3rd floor) as this will allow for better data flow in the WALMS web-site.

2.0 FIELD PROCEDURES

Step 1 - Obtain project information, site contact, and work authorization from the Division of State Facilities (DSF) Project Manager. Contact the project manager or agency contact to provide general building information including the agency, institution name, building number, address, building square footage, general construction data, and dates of significant renovations.

Step 2 - Contact the site representative to arrange access, escorts (if necessary), and preferred inspection dates and hours. In addition, obtain and review any available building plans relative to the inspection. Only discuss why you are there with the site contact. Direct questions from employees/residents/occupants to the site contact.

Step 3 - Perform an initial walk-through of the entire building. Identify suspect asbestos-containing materials and list them on the Homogeneous Building Materials sheet (update as necessary throughout the inspection process). The intent of the initial walk-through is to help you become familiar with the building systems and layout and to ask the escort site-specific questions.

Step 4 - Use the enclosed forms for entering the data. Each form has been tailored for use with the WALMS Database. The items you should complete are described in the next section. It is critical to use the forms provided in this manual to allow for data transfer to the web-site.

Step 5 - All forms should be completed before leaving the site. Notify the site contact when you are leaving and return any keys.

2.1 Building Information Form (See Appendix A)

Fill in the state agency name, institution name, building name and address, building number, institution contact name and phone number, inspector's name and DHFS certification number, date of inspection, and construction date. Make sure to obtain construction date(s) and the building code number (ask the site contact or access WISBUILD). The "Building Type, Exterior Type, and Roof Type" all refer to the general building construction. All blanks must be completed!

2.2 Homogeneous Building Materials Form (See Appendix B)

The "Homogenous Building Materials Form" will serve as a list of all suspect materials identified in each building. The list should be started during the initial walkthrough and updated as needed during the inspection. See also Appendix F - WALMS-Homogenous Materials Codes.

2.3 Asbestos Inspection Field Data Sheet (See Appendix C)

Fill out the "Asbestos Inspection Field Data Sheets", by listing all suspect materials by room. Note quantities and material conditions. Make a drawing if you cannot obtain one from the site contact.

1. Fill in the locations of materials per location (room number).

2. Fill in material code using the list of codes provided. (See Appendix G)

3. Fill in the quantity (**S**quare foot, **L**inear foot, **E**ach).

4. Fill in the friability of the material. (**Y** = yes, **N** = no) For the purposes of the WALMS program all surfacing and thermal system insulation should be considered friable. Discretion can be used with other materials. If the material, when dry, can be crumbled, pulverized or reduced to powder by hand pressure, it must be listed as friable.

Fill in the condition of the material. **P** = Poor, **G** = Good. For the purposes of this project, the definition of condition relates to the probability that a fiber release will occur. A material is in poor condition if it has one or more of the following characteristics:

- The surface is crumbling or blistering over at least 10% of the surface if the damage is evenly distributed (25% if the damage is localized).
- Over 10% of the material is hanging from the surface, deteriorated, or showing adhesive failure (25% if the damage is localized).
- Water stains, gouges, or mars over at least 10% of the surface if the damage is evenly distributed (25% if the damage is localized)

2.4 Site Drawing

All facilities MUST have a site drawing scanned into WALMS. Site drawings must have room numbers. If DSF or agency personnel provide no drawing, a simple hand drawing or sketch is adequate. Room numbers can and should be changed as necessary (001,002, 003) to allow for better data flow. I.E. buildings with room numbers such as AB1, AC2, AA1, etc will generate a confusing and difficult report if entered in the web-site. Corridors, hallways, and stairwells also need room numbers. Using white-out and hand drawing the numbers on the floor plan is acceptable.

The site drawing must include the following items:

- Title describing the location
- WALMS inspection date
- North Arrow
- DSF WALMS inspection project number
- All levels individually (ground floor, mezzanine, etc.-listed as B, 01, 02, 03, M, 04, etc)
- All rooms (with room number) and major landmarks (front door, receiving door, etc.) with appropriate labeling of major areas.
- Any differences between site conditions and the floor plans should be noted on the drawing
- Page # of #
- When feasible, distinguish additions on drawing by drawing a bold line on the floor plan.

Due to the nature of the WALMS database, room numbers are required. Room names are optional. When entering data, only the room number is required. Handwritten notes/drawings/room numbers are acceptable along with hand drawn additions or deletions.

2.5 Bulk Sample Log (See Appendix D)

Log in all samples collected, material codes, and locations (use concise location descriptions). The number of samples to be collected, sample numbering and some notes on standard procedures are found in the Asbestos Inspection Protocol section of this manual.

3.0 ASBESTOS INSPECTION PROTOCOL

3.1 Introduction

Inspection, sampling and assessment procedures are to be performed in general accordance with the guidelines published by the EPA in 40 CFR Part 763 Subpart E, dated October 30, 1987, and in general accordance with OSHA Standards CFR 1910.1001 / 1926.1101.

The EPA and OSHA consider a material to be asbestos-containing if at least one sample collected from the homogeneous material sample group shows asbestos present in an amount greater than 1%.

Access all building areas including the roof. Inspection of the roof is not part of the scope of this project. It is only necessary to identify the roof type (shingle, built-up, rubber membrane, etc) as this entered as the Building Information Section. Note all areas that cannot be accessed on the floor plan and the Asbestos Inspection Data Sheets.

Although the inspector shall review previous bulk sample data provided by the agency or DSF staff, this data shall only be utilized with prior approval from DSF staff.

DSF WALMS protocol does not require the identification, quantification or sampling of non-friable caulking, sealants, gaskets, asphalt roofing materials and miscellaneous adhesives. Rather, a general building comments log shall be entered in the WALMS web-site by the consultant according to the following:

"Unless otherwise indicated, all caulking, sealants, glazing compounds, gaskets, asphalt roofing materials and miscellaneous adhesives are assumed to contain asbestos and are considered to be Category I non-friable ACM as defined in NR 447."

If the inspector encounters the above material and determines it to be "friable", the inspector shall sample and quantify the material in accordance with the miscellaneous sampling protocol. An example would be window glazing compound (master code MPG) that is plaster-like and can be crumbled by hand pressure when dry. Otherwise, Category I non-friable caulking, sealants and miscellaneous adhesives, including but not limited to, vinyl wall base mastic, interior and exterior caulks, chalkboard mastic and paneling mastic, does NOT need to be identified, quantified or sampled in WALMS. See following pages regarding carpet mastic.

3.2 Initial Walkthrough

An initial walkthrough, accompanied by an escort familiar with the building, is recommended. This walkthrough will allow the inspector to become familiar with the building systems and the general building layout. The walkthrough will also

allow the inspector to ask site-specific questions of the escort. The Homogeneous Building Materials list should be started at this time.

Where room numbers and names do not exist, assign room number designations to all rooms. In addition, if any site conditions differ from the floor plan, note this on the floor plan at this time.

Note any differences (the exception to the rule) in the general construction of the building during this time. An example of this would be if all of the rooms in the building have wood floors with the exception of one particular room, which has a concrete floor. This will be noted in the "comments" section of the Asbestos Inspection Field Data Sheet for that room.

3.3 Inspection

List all suspect materials on the "Asbestos Inspection Field Data Sheets" on a room by room basis. If the room or area contains no suspect materials, then note NSM. If the room is inaccessible, then note INA. It should be understood that the inspector is expected to make several attempts to gain access to all inaccessible areas and that the DSF Project Manager should be notified immediately of any problems.

A list of standardized bulk sampling codes is attached (Appendix F). Use these codes on all forms and within the database.

The following are some special areas you might encounter.

1. High Area ceilings - These areas must be accessed. Often new ceilings are installed below old, hiding the old acoustical plaster. Arrange to have an extension ladder brought out if: a) access cannot be made from the mezzanine or attic catwalk, b) no ladder is on-site, c) the buildings are separated and/or the site is vacant.

2. Carpeting/multi-layers of sheet flooring and floor tiles - . Note size and color of all layers. Check the mastic under the carpet and sample appropriately. In areas of multicolored AND/OR patterned floor tile (i.e. checkerboard, where it is obvious that tile is of same make/style and installed at same time), ASSUME THIS TO BE ONE HOMOGENEOUS AREA and take one sample per dominant color (minimum of 3 samples). A reasonable effort must be made to identify floor tile/mastic located under carpet. Attempt to delineate black carpet mastic (possibly old residual tile mastic) from clear, brown or green carpet mastic.

3. Drywall System- Sample the drywall system as a miscellaneous material with samples dispersed throughout the building. Take three (3) composite samples and instruct the lab to analyze the joint compound and drywall individually. In addition, the lab must analyze the drywall/joint compound

as a composite material if asbestos is detected in any individual layer. Report the composite result in WALMS (ACM vs NON-ACM).

4. Exterior- Conduct a walk around of the exterior and roof areas, if accessible, to list and sample or assume suspect exterior materials. This includes identifying and sampling exterior stucco, plaster, and transite panels used for soffits, above/below windows, cooling towers and parapet walls. The room number and floor should be entered in WALMS as "exterior". Roof – Roofing materials are **not** to be sampled or assumed. The roof type will, however, be included in the building information.

5. Attics, Ceiling Hatches - Open all hatches, access attic.

6. Freezers, Coolers, Stock rooms - Check thoroughly for transite panels as these are a prime target of renovations. For other types of freezer walls, check for damaged areas near the door and sample any suspect materials within.

7. Note on all necessary forms any suspect ACM found during the survey that is in poor condition and poses an immediate health risk.

8. Quantify exposed and accessible suspect materials (see comment above regarding floor tile under carpet). Materials above suspended ceilings are considered accessible and are to be included in the inventory. Any material that cannot be fully accessed will be noted in the comments section of the Asbestos Inspection Field Data Sheet as not having an accurate quantity due to the inaccessibility of the material (piping that goes from a mechanical room into an enclosed chase). The inspector will report only the quantity observed within the mechanical room and note that there is the possibility of additional materials in the inaccessible areas.

3.4 Bulk Sampling

Utilize the Bulk Sample Log (Appendix D) for documentation of bulk samples collected. If the site contact or other personnel says a material has been sampled and (is/is not) asbestos, but there is no hard data to support their claims, obtain the samples anyway. Remember, use of previous data must be pre-approved by the DSF Project Manager. Attempt to collect samples in non-occupied areas, using proper respiratory protection and friable material repair protocol. Look for multiple layers of tile, make sure you sample to the substrate.

3.5 Bulk Sample Numbering Scheme

Each bulk sample will be assigned a unique sample number with a minimum of three significant digits (I.E. number samples 001, 002, 003, etc to allow for data transfer to the web-site). Homogenous materials must be grouped together with sample numbers in consecutive order.

3.6 Assumed Materials

Due to the destructive nature of bulk sample collection, not all suspect materials will be sampled. Any suspect material that is not sampled will be assumed to be an asbestos-containing material (ACM). Provide a comment in the "Building Comments Log" regarding unusual materials that were assumed or provide an explanation for materials that were assumed that normally are sampled. Review the exempt material list in Appendix F- Homogenous Material Codes. The exempt materials do not need to be identified, quantified or sampled. Do not "assume" exempt materials.

The following are examples of suspect materials that should generally be assumed ACM and sampled only if damage exists:

1. Cold storage insulation (material possibly behind wood, etc.)
2. Fire doors
3. Duct connectors/vibrations joints
4. Terrazzo floors
5. Lab (transite) tabletops
6. Sink linings (be sure to list as friable or nonfriable)
7. Suspect electrical wire or components

3.7 Bulk Sample Protocol

Sampling protocol for suspect materials is as follows:

Surfacing	Acoustic, Texture,	3-5-7 Rule
	Plaster	3-5-7 Rule
Drywall/Joint Compound		3/Composite
Thermal System Insulation		
Thermal systems	Pipe insulation	3/system
	Tank insulation	

THERMAL SYSTEM INSULATION EXEMPTIONS: The inspector is allowed to "test until positive" for magnesia and/or aircell pipe insulation. I.E. the inspector may collect samples at their discretion for each homogenous code of aircell or magnesia (0-5", 5-10", 10-15".) pipe insulation. In addition, it is not necessary to generate a separate homogenous code for fittings on aircell or magnesia pipe insulation.

Miscellaneous	All floor tiles w/ mastic	3/color & size
	Sheet flooring,	3/type
	Ceiling Tiles	3/type

MISCELLANEOUS MATERIAL EXEMPTIONS: Samples for miscellaneous material shall be collected at the discretion of the inspector and in adequate quantity to determine if a homogenous material is or is not asbestos containing under the following circumstances:

<200 SF of homogenous floor tile/mastic or sheet flooring per building
<160 SF of homogenous ceiling tile per building

Roofing- not addressed- only necessary to indicate type (shingle, rubber, built-up, etc) in the Building Information Section.

The 3-5-7 rule is: 3 samples up to 1000 sf, 5 samples from 1000 sf to 5000 sf, and 7 samples for over 5000 sf of each surfacing material. Proportionately distribute all samples throughout the building. Take composite samples at full depth of drywall system. Care should be taken during bulk sampling. These are not demolition surveys. If sampling a material will cause significant damage then assume that the material is ACM and note as such by inserting a building comment in the building comment log.

Bulk samples will be analyzed by Polarized Light Microscopy (PLM) with dispersion staining as described by the interim method of the determination of asbestos in bulk insulation, Federal Register, Volume 47, No. 103, dated May 27, 1982.

ALL BULK SAMPLES MUST BE ANALYZED. "TEST UNTIL POSITIVE" SHALL **NOT** BE UTILIZED IN ANALYSIS OF SAMPLES ON DSF PROJECTS. **THE ONLY EXCEPTION TO THIS IS FOR AIRCELL OR MAGNESIA PIPE INSULATION (SEE ABOVE).** SAMPLE RESULTS MUST BE REPORTED PER LAYER ON BULK SAMPLE DATA REPORTS. FLOOR TILE SAMPLES WILL BE REPORTED AS ACM ON REPORTS IF FLOOR TILE OR MASTIC CONTAINS GREATER THAN 1%. DRYWALL/JOINT COMPOUND WILL BE REPORTED AS ACM IF THE COMPOSITE ANALYSIS IS GREATER THAN 1%.

Laboratories analyzing samples on DSF projects must be National Voluntary Laboratory Accreditation Program (NVLAP) Laboratories.

3.8 Point Counting Procedure

For all friable materials that show asbestos content present, but less than 1%, the inspector shall have the sample set point counted. Direct the laboratory to stop at the first sample point counted above 1% (i.e. point count these samples until positive). If an individual sample in a set of friable samples has asbestos detected, but less than 1%, and the remaining samples in that set are negative (none detected), point count only the sample or samples with asbestos detected.

Further analysis of nonfriable materials that show asbestos present, but less than 1%, will be determined on a case by case basis by DSF staff.

4.0 Lead-Based Paint Sampling

Inspection, and sampling procedures are to be performed in general accordance with Chapter 7 of the HUD Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing (1997 revision). All procedures published by the EPA in 40 CFR Part 745 and Title X of the 1992 Housing and Community Development Act should also be adhered to.

The HUD/EPA standard for lead-based paint, as defined in Title X of the 1992 Housing and Community Development Act, is 1.0 mg/cm^2 or 0.5% by weight. However the State of Wisconsin defines lead-based paint as **0.7 mg/cm^2 or 0.06% by weight (600ppm)**.

For purposes of this program, we will use the more restrictive state level as definition of lead containing.

A limited lead-based paint inspection will be conducted on exposed building materials. The inspection will include the analysis of the following building components:

INTERIOR

1. Ceiling
2. Walls
3. Windows or components
4. Doors or components
5. Floors (where floors are painted or varnished)

EXTERIOR

1. Walls
2. Windows or components
3. Doors or components

In most cases, floors will not need to be tested. The program allows additional components to be added, if necessary.

If any of the above components are non-existent, not painted/varnished, inaccessible, limited in number, etc. place a comment in the Building Comments Log to explain.

For each of these components, three separate areas will be inspected per building or building addition (Total of 24 lead samples possible per building or per building addition). To complete the lead-based paint inspection an XRF device or lead paint chip sampling using EPA Method SW-846 7420 for analysis is acceptable. Varnished and stained substrates should be sampled within the specified number of samples.

Use the appropriate enclosed forms for entering the data. The items you should complete are as follows:

1. Lead-Based Paint Spreadsheet (See Appendix E)

The Lead-Based Paint Spreadsheet allows the inspector to enter either XRF test results or paint chip test results. Complete this field form when collecting data. Paint chip samples will require an approximately 2" x 2" area scraped to the substrate.

a. Fill in agency name, institution name, building name, building number, date of inspection, name of inspector, XRF Model and Serial number (if applicable).
b. Complete sample number (either XRF or chip sample), room number or area, building component, substrate, paint or varnish color.
c. Complete the paint condition column, as either "good" or "poor". Paint should be considered in "good" condition unless it is crackling, flaking, or peeling over areas:
   - Greater than 10% for small component surface areas, interior or exterior
   - More than 10 square feet on exterior component surfaces with large areas
   - More than 2 square feet on interior surfaces for areas with large surface components
d. Record Corrected Lead Concentration (CLC) of XRF test result in mg/cm2 or lab result (%) if sample is a paint chip. The inspector and company will be responsible for properly documenting XRF calibration checks, although the calibration check data will **not** be entered in the WALMS program.
e. Determine if the testing location is or is not considered Lead-Based Paint (LBP) or Non-Lead-Based Paint (Non-LBP) according to current DSF protocol levels.
f. Enter any unusual circumstances into the building comments log.

5.0 APPENDICES

APPENDIX A-Building Information Form

WALMS

BUILDING INFORMATION FORM

Agency: _____ DSF: Project #: _____

Institution: _____

Buiding Name: _____ Initial Building #: _____

Addition (s) #: _____

Address: _____

City: _____ County: _____ State: _____ Zip Code: _____

Present use of the Building: _____

Past use of the Building: _____

Contact Name: _____ Phone No: _____

Inspectors Name: _____ DHFS Inspector #: _____

Company Name: _____ Phone: _____ E-mail: _____

Address: _____

City: _____ State: _____ Zip Code: _____

Inspection Dates: From: _____ To: _____

Approximate construction date: _____ Number of Floors: _____

Gross Sq. Ft.: _____ Net Sq. Ft.: _____

Exterior Finish: _____

Roof Type: _____

Comments: _____

_____

_____

_____

_____

APPENDIX B-Homogenous Building Materials Form

WALMS

HOMOMGENEOUS BUILDINGS MATERIALS FORM

Agency:	
Institution:	
Building #:	
Building Name:	

Construction Date:	
Date Of Inspection:	
Inspector:	
Inspector #:	

MATERIAL CODE	MATERIAL DESCRIPTION

APPENDIX C-Asbestos Inspection Field Data Sheet

WALMS

ASBESTOS INSPECTION FIELD DATA SHEET

Agency:		Construction Date:	
Institution:		Date of Inspection:	
Building #:		Inspector:	
Building Name:		Inspector #:	

ROOM NUMBER	HOMOGENEOUS MATERIAL CODE	MATERIAL QUANTITY	FRIABLE Y/N	MATERIAL CONDITION	COMMENTS
		S L E			
		S L E			
		S L E			
		S L E			
		S L E			
		S L E			
		S L E			
		S L E			
		S L E			
		S L E			
		S L E			
		S L E			
		S L E			
		S L E			
		S L E			
		S L E			
		S L E			
		S L E			
		S L E			

S = Square Feet
L = Linear Feet
E = Each

G = Good
P = Poor

Colors For Floor Tiles

W = White	R = Red	O = Orange	B = Blue
K = Black	T = Tan	C = Cream	I = Indigo
L = Yellow	Y = Gray	S = Silver	E = Beige
N = Brown	P = Pink	G = Green	D = Gold
		M = Maroon	V = Olive

APPENDIX D-Bulk Sample Log

WALMS

BULK SAMPLE LOG

Agency:		Construction Date:	
Institution:		Date of Inspection:	
Building #:		Inspector:	
Building Name:		Inspector #:	

SAMPLE NUMBER	HOMOGENEOUS MATERIAL CODE	ROOM/AREA	LOCATION WITHIN ROOM/AREA

APPENDIX E-Lead Based Paint Spreadsheet

WALMS

LEAD-BASED PAINT SPREADSHEET

Agency: ______________________
Institution: ______________________
Building Name: ______________________
Building #: ______________________

XRF Model: ______________
Page: ______ of ______
Inspected By: ______________________
Date Inspected: ______________________

XRF Serial #: ______________

SAMPLE #	ROOM #	BUILDING COMPONENT	PAINT/ VARNISH COLOR	PAINT CONDITION	SUBSTRATE	XRF RESULT mg/cm2	CHIP RESULT %	LBP OR NON-LBP	COMMENTS

APPENDIX F-Asbestos Homogenous Material Codes

WALMS

HOMOGENEOUS MATERIAL CODES

08/02/07

HOMOGENEOUS MATERIAL CODE	DESCRIPTION	UNITS	NOTES
GENERAL			
1. NSM	NO SUSPECT MATERIALS		
2. INR	INACCESSIBLE ROOM / AREA		
3. INC	INACCESSIBLE CEILING		
4. INP	INACCESSIBLE PIPECHASE		
5. INO	OTHER, DESCRIBE		
THERMAL			
1. TAx	AIRCELL PIPE INSULATION	LF	WHERE x = 5 = 0-5" 10 = 5-10" 15 = 10-15" 20 = 15-20" ETC... BASED ON OUTER DIAMETER OF PIPE
2. TCx	CARDBOARD PIPE INSULATION	LF	
3. TCxF	FITTINGS ON CARDBOARD PIPE INSULATION	EA	
4. TMx	MAGNESIA PIPE INSULATION	LF	
5. TWx	WOOLWRAP PIPE INSULATION	LF	
6. TWxF	FITTINGS ON WOOLWRAP PIPE INSULATION	EA	
7. TFx	FIBERGLASS WITH SUSPECT SUBLAYER	LF	
8. TFxF	FITTINGS ON FIBERGLASS PIPE INSULATION	EA	
9. TTW	TAPE WRAP ON PIPE	LF	
10. TBI	BOILER INSULATION / INTERIOR	SF	
11. TBE	BOILER INSULATION / EXTERIOR	SF	
12. TWT	WATER TANK INSULATION	SF	
13. TWM	WATER METER INSULATION	SF	
14. TGV	GANG VALVE INSULATION	SF	
15. TGK	GASKETS	EA	
16. TXB	EXHAUST BREACHING INSULATION	SF	
17. TDI	DUCTING INSULATION / INTERIOR	SF	
18. TDE	DUCTING INSULATION / EXTERIOR	SF	
20. TDW	DUCT WRAP (THIN PAPER)	SF	
21. TFC	FLEXIBLE DUCT CONNECTOR	EA	AHU vibration joint - can be assumed
22. TIL	INCINERATOR LINER (NOT FIRE BRICK)	SF	
23. TIX	INCINERATOR EXHAUST INSULATION	SF	
24. TFP	FLUE PACKING	SF	
25. TFB	FIRE BRICK	SF	

SURFACING

1. SSF	SPRAYED ON FIREPROOFING	SF	3 SAMPLES FOR 0 - 1000 SF
2. SSA	SPRAYED ON ACOUSTICAL	SF	5 SAMPLES FOR 1000 - 5000 SF
3. STF	TROWLED ON FIREPROOFING	SF	7 SAMPLES FOR + 5000 SF
4. STA	TROWLED ON ACCOUSTICAL	SF	
5. SP1	PLASTER (BOTH BASE AND SKIM COAT)	SF	

MISCELLANEOUS

1. MF6xy	6"x 6" FLOOR TILE WITH MASTIC	SF	WHERE x IS THE PRIMARY COLOR AND y IS THE SECONDARY R= RED O=ORANGE L=YELLOW G=GREEN B=BLUE W=WHITE K=BLACK S=SILVER D=GOLD Y=GRAY P=PINK T=TAN N=BROWN E=BEIGE C=CREAM M=MAROON V=OLIVE
2. MF9xy	9"x 9" FLOOR TILE WITH MASTIC	SF	
3. MF12xy	12"x12" FLOOR TILE WITH MASTIC	SF	
4. MF36xy	36"x 36" FLOOR TILE WITH MASTIC	SF	
5. MFLxy	LINOLEUM WITH MASTIC	SF	
9. MCM	CARPET MASTIC	SF	
MFM	EXPOSED FLOORING MASTIC	SF	
11. MCTz	CEILING TILE AND MASTIC	SF	z = 1-00 REPRESENTING A DESCRIPTION OF SIZE, COLOR, TEXTURE, STRUCTURE, PATTERN
12. MSCTz	SUSPENDED CEILING TILE	SF	
13. MDW	DRYWALL AND JOINT COMPOUND	SF	
14. MEI	ELECTRICAL WIRE INSULATION	LF	Assume suspect wire
15. MFC	FIRE CURTAIN	SF	
16. MFW	FIRE WALL	SF	
17. MFD	FIRE DOOR	EA	Assume
18. MTP	TRANSITE PANELING / SIDING	SF	
19. MTL	TRANSITE LABTOP	SF	Assume
20. MTS	TRANSITE SINK	SF	Assume
21. MPI	PAPER INSULATION	SF	
22. MPT	TAR PAPER INSULATION	SF	
23. MSM	SERPENTINE MARBLE/TERRAZZO	SF	Assume
24. MLI	LIGHT INSULATION	EA	
25. MPG	WINDOW PANE GLAZING COMPOUND	LF	Sample if friable
26. MBI	BLOWN IN INSULATION	SF	
27. MRM	ROOF MEMBRANE	SF	
28. MRF	ROOF FLASHING	SF	
29. MRSx	ROOF SHINGLE	SF	X=1-00 REPRESENTING A DESCRIPTION
	USE THE FOLLOWING CODES IF NONE OF THE ABOVE APPLY:		
30. INO EA	OTHER EACH	EA	
31. INO LF	OTHER LINEAR FEET	LF	
32. INO SF	OTHER SQUARE FEET	SF	

EXEMPT MATERIALS

CONCRETE
RUBBER
VINYL
GLASS
WOOD
FIBERGLASS (BUT NOT TAR PAPER LAYERS OR CANVAS COVERED WITH SUSPECT SUBLAYER)
CORK
PORCELAN
CHALKBOARDS (IF PURE SLATE OR METAL)
CONCRETE BLOCK & MORTARS
BRICK AND BRICK MORTARS
NON-EXPOSED MASTICS ARE NOT ADDRESSED UNLESS SAMPLED WITH A SUSPECT MATERIAL
MASONRY BOARDS AND WOOD PRESS BOARDS
PARTICLE BOARD
PLASTIC
METALS (BUT NOT ALL SURFACE COATINGS)
CUT STONE (EXCLUDING SERPENTINE [OAK GREEN] MARBLE , TERRAZZO -ASSUME)
CERAMIC TILES, GROUTS AND MORTAR
PAINT (BUT NOT TEXTURED SURFACE COATINGS)

GENERAL INFORMATION

HOMOGENEOUS MATERIALS ARE MATERIALS WHICH WERE ORIGINALLY CONSTRUCTED DURING THE SAME CONSTRUCTION PHASE.

HOMOGENEOUS MATERIALS ARE MATERIALS THAT HAVE A SIMILAR APPEARANCE SUCH AS COLOR, TEXTURE, PATTERN, etc... AND WHICH HAVE BEEN INSTALLED AT THE SAME TIME.

APPENDIX G-WALMS Review Checklist

WALMS REVIEW CHECKLIST (08/02/07)

Note: Review comments by DSF are based on a cursory electronic review of the WALMS inspection data and are designed to confirm all requested information has been input into the WALMS web-site. The review does not involve field verification or confirmation of the accuracy of the inspection or analysis data. This is the responsibility of the consultant conducting the inspection. This checklist is designed to be beneficial to the consultant prior to printing a final report. It is not the intent or policy of DSF to review every report prior to printing

Date:
Reviewer:
Agency:
Facility:
Building:
DSF Survey Project #:

Standard Reports

Building Inspection

___All fields are complete and data appears accurate. NOTE: REMEMBER TO CHECK DATA ENTRY COMPLETE BUTTON JUST PRIOR TO PRINTING FINAL REPORTS.

Comments:

Building Summary Report

___Individual homogenous codes have been established for each homogenous area.

___Do bulk sample results exist for homogenous codes that do not appear in the summary? This indicates the homo code exist in the building, but was never entered in a room.

___All homogenous codes have accurate unit descriptions (LF, EA, SF, etc) for that homogenous code. If incorrect, check "master" homogenous code and change if necessary.

___Has drywall been listed as "Drywall and Joint Compound" with the composite analysis reported (composite analysis shall be conducted if one layer has asbestos detected).

___Are all suspect materials listed?

___Are "assumed materials" listed that should have been sampled? Does a comment exist in the building comment section if this is the case?

___Are homogenous codes listed that are exempt by WALMS protocol?

___ Have building comments been entered in the Building Comments Log for unusual circumstances? For example, if the on-site contact request that the newly installed sheet flooring in the elevators be assumed rather than tested (due to damage), include a comment to in the Building Comments Log explaining the reason for assuming the material.

----- Do comments in the building log include information about previous abatement activities requested from and supplied by the agency?

___ Does the floor summary appear accurate?

Comments:

Floor Plans

___Are all floors scanned?

___Does the drawing have :

- ___Title describing the location
- ___Date of the drawing (WALMS inspection date)
- ___DSF project #
- ___North arrow
- ___Floor
- ___Rooms numbers/descriptions
- ___Readable

Comments:

Material Inventory by Room

___Do duplicate entries exist?

___Are room numbers/descriptions complete?

___Does it appear ALL suspect materials are present in the inventory?

___Do quantities appear accurate?

___Are units listed correctly for homogenous codes?

___Do room numbers follow a logical order in the inventory (i.e. 001, 002, 003) with consistent significant digits?

___Are a significant number of rooms listed as inaccessible?

Comments:

Bulk Sample Data-Asbestos

___Are the proper number of samples collected and analyzed per homogenous material?

___Are all layers of bulk samples with multiple layers documented correctly? Does each layer have a description such as "grey layer" or "black mastic" (not 1st, 2nd)? Can we distinguish which layer the asbestos is present (floor tile or mastic, for example)?

___ Are samples numbers grouped per homogenous code and therefore appear in a logical sequence in the inventory. For example, samples 001, 002, 003 represent one homogenous code.

Comments:

Lead Based Paint Testing Inventory

Are all three tests entered for each of the following components?

Interior:

___ Ceilings (test results may not be present if ceilings are not accessible- does a building comment appear if this is the case?)
___Walls

___Windows (test results may not be present if windows are not painted-does a building comment appear if this the case?)
___Doors
___Floors (may not be present if not painted-does a building comment appear if this is the case?)

Exterior:

___Walls (test results may not be present if exterior is not painted-does a building comment appear if this is the case?)
___Windows (test results may not be present if windows are not painted-does a building comment appear if this is the case?)
___Doors
____Are results listed correctly? I.E. If the result is above .7 mg/cm2 or .06 % by weight, is the material listed as LBP?

Comments:

END