



Department
of
Public Works

Bureau of
Bridges and
Public
Buildings

ASBESTOS MANAGEMENT PLAN REPORT

DEPARTMENT 565
BUREAU OF SANITATION

BUILDING 1734
GARAGE - NORTH AREA I
7222 WEST FOND DU LAC AVENUE
MILWAUKEE, WISCONSIN 53218

August, 1990

August 3, 1990

GENERAL INTRODUCTION

On Friday, October 30, 1987, the United States Environmental Protection Agency (EPA) issued a final rule under section 203 of Title II of the Toxic Substances Control Act (TSCA), 15 U.S.C. 2643 that requires the nation's School Districts to identify asbestos containing materials (ACM) in their school buildings and that they use specially trained and certified persons to conduct the inspections. The law that enabled the EPA to issue these rules is called the "Asbestos Hazard Emergency Response Act" (AHERA). These rules and regulations are contained in 40 CFR Part 763, "Asbestos Containing Materials in Schools Rule", dated October 30, 1987.

In anticipation of issuance of a further rule by the EPA requiring the inspection and management of ACM in all governmental and public buildings, the City of Milwaukee has undertaken this task and has done so according to the rules and regulations of AHERA.

The terms "AHERA" and "40 CFR Part 763" will be used interchangeably throughout this report to describe the regulations under which the City of Milwaukee proposes to operate.

This report represents the results of the prescribed inspection for the building as specified herein-after.

The following page is a summary of the existence of ACBM for the specified building.

August 3, 1990

GARAGE - NORTH AREA I
7222 WEST FOND DU LAC AVENUE
MILWAUKEE, WISCONSIN 53218

ACBM DECLARATION

This Building contains Asbestos Containing
Building Materials (ACBM) in the following forms:

- ☐ Friable Proven Surfacing ACBM
- ☐ Friable Proven Thermal Systems ACBM
- ☐ Non-Friable Proven ACBM
- ☐ Friable Assumed ACBM
- ☐ Friable Assumed Thermal Systems ACBM
- ☐ Non-Friable Assumed ACBM
- ☒ No Suspected ACBM

(After Bulk Sample Analysis. of 2/14/92)

ACCEPTANCE STATEMENT

Please refer to
SECTION 1 - GENERAL ASBESTOS MANAGEMENT
(Departmental Statement Of Policy)
for Management Plan ACCEPTANCE STATEMENT.

**TABLE OF CONTENTS
FOR
ASBESTOS MANAGEMENT PLAN REPORT**

GENERAL INTRODUCTION	1
ACBM DECLARATION & MANAGEMENT PLAN ACCEPTANCE STATEMENT . . .	2
TABLE OF CONTENTS	3

SECTION 1 - GENERAL ASBESTOS MANAGEMENT

DEPARTMENTAL STATEMENT OF POLICY	1
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SECTION 2 - SPECIFIC BUILDING ASBESTOS MANAGEMENT

SECTION 2 INTRODUCTION	1
SPECIAL INSTRUCTIONS	2
CERTIFICATION & SURVEILLANCE STATEMENTS	3
GENERAL BUILDING INFORMATION	8
Building Construction Report	
BUILDING HOMOGENEOUS ZONES	10
Homogeneous Zones Definitions Report	
INSPECTION RESULTS/RESPONSE OPTIONS	13
Area ID Location Floor Plans	18
All-Area Inventory Report	20
ACBM/Response Option Summary Report	Not Applicable
Scoped Response Option Form	Not Applicable
BULK SAMPLING INFORMATION	21
Bulk Sampling Methodology	
Bulk Sample Summary Reports	

BULK SAMPLE LABORATORY ANALYSIS	APPENDIX A
HOMOGENEOUS ZONE PHOTOGRAPHS	APPENDIX B
NOTIFICATION STATEMENTS	APPENDIX C
ABATEMENT/RESPONSE ACTION RECORDS	Not Applicable

<u>O&M ACTIONS REQUIRED BEYOND SURVEILLANCE</u>	Not Applicable
O&M Repair Work Order Report	
Initial & Periodic Cleaning Report	
Area ID Location Floor Plans	

ASBESTOS MANAGEMENT PLAN REPORT

S E C T I O N 1

**GENERAL ASBESTOS MANAGEMENT
(Departmental Statement Of Policy)**

STATEMENT OF POLICY

- A. It is the purpose of the City of Milwaukee, as stated in this manual, to provide a healthy and safe place of employment for all employees.
- B. To abide by all Federal, State and local regulations as they apply to the City of Milwaukee.
- C. To apply good work practices as dictated by location and/or circumstances.
- D. To exercise good judgment in application and training.

IMPLEMENTATION POLICY

This Management Plan will be implemented on or before July 29, 1991 and response actions as recommended and authorized will be completed in a timely fashion, within the limits of resources allocated to the tasks. The Designated Person will maintain and update the Management Plan to keep it current with ongoing O & M activities, response actions, periodic surveillance and reinspections.

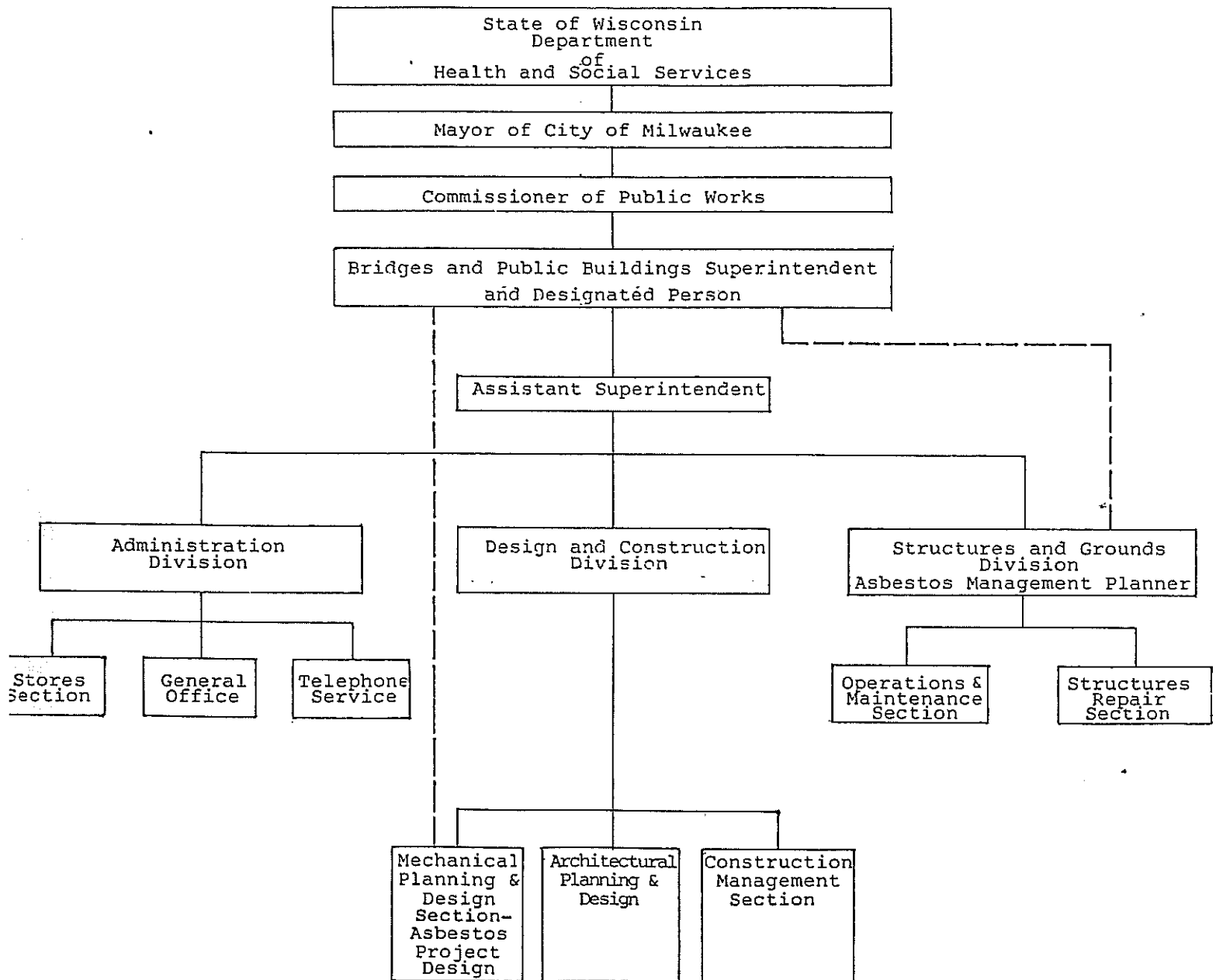
This program will be utilized to cover all costs, including abatement services, design services, employee training, medical surveillance, supplies and equipment.

Data will be maintained and will be available on a current basis for the protection of employees and the public.

Based upon the results of the building inspection by the Certified Inspector, and with additional input from the Designated Person, an accredited Management Planner has recommended appropriate response actions and estimated costs.

It must be understood that the estimated costs for any of the abatement actions as recommended are based upon best knowledge of average unit costs to provide similar work at the time of this report, and should be used as a guide. The prices will change with time and local market conditions, and the magnitude of such changes cannot be determined. In addition, the total abatement costs will be a function of the volume of work to be contracted and the amount of ACBM to be addressed at any one time.

LINE OF AUTHORITY FOR ASBESTOS MATTERS



----- AUTHORITY for ASBESTOS ISSUES

DESIGNATED PERSON

The Designated Person's duties include the following:

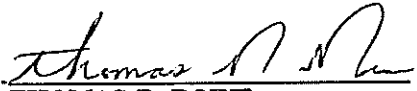
1. Implementation of Operation and Maintenance activities;
2. Training of Custodians, Cleaners and Maintenance Personnel;
3. Oversee Preventive Measures;
4. Posting of Warning Signs and Labels;
5. Work Request Review for potential asbestos hazard;
6. Management of Response Actions.

The following individual has been specified as the Designated Person for the City of Milwaukee buildings listed herein, and authorized to act for the City of Milwaukee in connection with Federal, State and local requirements:

Don M. Hiller, Superintendent
Bureau of Bridges and Public Buildings
Room 311 Municipal Building
841 North Broadway
Milwaukee, Wisconsin 53202

ACCEPTANCE STATEMENT

Based upon the receipt of assignment and authorization from Mr. Don M. Hiller, Superintendent, Bureau of Bridges and Public Buildings, City of Milwaukee, I do hereby certify that to the best of my knowledge and ability, the responsibilities as stipulated in Wisconsin Statutes HSS 159 and s. 140.06 have been or will be met.


THOMAS R. ROWE
Structures and Grounds Engineer

TRAINING

My training for this assignment includes a five day course, "Inspector/Management Planner", given by University of Wisconsin Extension at Madison, Wisconsin, July 25 - 29, 1988. The course included the following topics:

Health effects of asbestos;
Detection, identification and assessment of ACBM;
Options for controlling ACBM;
Federal and State Regulations;
Legal issues.

A copy of the certificate of attendance is on file at the Bureau of Bridges and Public Buildings
(B & B).

LIST OF ABBREVIATIONS

The following abbreviations may appear in this management plan. Definitions for these abbreviations are the following:

ACBM	- Asbestos Containing Building Material (Greater than 1% Asbestos)
ACM	- Asbestos Containing Material (includes those materials not part of the building)
AH	- At the Hanger
AHERA	- Asbestos Hazard Emergency Response Act
AREA ID	- Room Number as shown on floor plan
B	- Barely (reachable)
B & B	- Bridges and Public Buildings
BC	- Building Comment (general)
C	- Cracked
CC	- Cracked Casing
CFR	- Code of Federal Regulations
D	- Damaged
DAM	- Damaged
DEB	- Debris
DG	- Dented Guard
EE	- Exposed End
EPA	- Environmental Protection Agency
FRI	- Friable (can be easily crushed with hand pressure)
H2O	- Damaged by water
HVC	- Part of Heating and Ventilating System
LEA	- Local Education Agency (The School District)
M	- Minor
MT	- Missing Tile
N	- No
NF	- Not Friable
OSHA	- Occupational Safety and Health Administration
O & M	- Operations and Maintenance Program or activities to keep asbestos in good condition
PC	- Peeled Covering or Casing
PD	- Potential for Damage
PSD	- Potential for Significant Damage
RCH	- In Reach
S	- Significantly
SD	- Significantly Damaged
SEE	- Indicates that the inspector wished this situation to be specifically SEEn by the management planner
SPD	- Potential for Significant Damage
VND	- Vandalized
Y	- Yes
1-7	- Number designating type and condition of asbestos: 1. Damaged thermal system insulation 2. Damaged friable surfacing ACBM 3. Significantly damaged friable surfacing ACBM 4. Damaged friable miscellaneous ACBM

5. ACBM with potential for damage
6. ACBM with potential for significant damage
7. Other friable ACBM or friable suspected ACBM.

LIST OF BUILDINGS

Following is a list of buildings, all of which have been inspected for ACBM, and for which a specific Management Plan (Volume 2) is on file at the individual building and at the Bureau of Bridges and Public Buildings.

000 GENERAL CITY BUILDINGS	
1001 CITY HALL	200 EAST WELLS STREET
1002 MUNICIPAL BUILDING	841 NORTH BROADWAY
1004 LAKE TOWER BUILDING	4001 SOUTH 6th STREET
1011 NORTH DISTRICT FIELD STATION	8414 WEST FLORIST AVENUE
1028 FIREBOAT #1	105 NORTH WATER STREET
1108 809 BROADWAY BUILDING	809 NORTH BROADWAY
1189 ABANDONED FIRE BOAT STATION	101 WEST CHERRY STREET
1263 STORAGE GARAGE	1911 NORTH HUMBOLDT AVENUE
1610 CITY SAFETY ACADEMY	6680 NORTH TEUTONIA AVENUE
1634 SALT SHED	7717 WEST GOOD HOPE ROAD
1690 OFFICE BUILDING - SANITATION/FORESTRY HQ	6732 NORTH INDUSTRIAL ROAD
1719 URBAN PARK CONCESSION STAND	540 NORTH HARBOR DRIVE
094 MILWAUKEE FOURTH OF JULY COMMISSION	
1389 QUONSET HUT	8423 SOUTH 51st STREET
250 D.O.A. - PURCHASES DIVISION BUYING/ADMIN.	
1012 BOARD OF PURCHASES WAREHOUSE	1016-28 NORTH HAWLEY ROAD
1129 FRONT QUONSET HUT	1016-28 NORTH HAWLEY ROAD
1141 REAR QUONSET HUT	1016-28 NORTH HAWLEY ROAD
1142 PUMP HOUSE	1016-28 NORTH HAWLEY ROAD
520 TRAFFIC ENGIN. & ELECTRICAL SERV. - ADMIN.	
1063 QUONSET HUT	1500 WEST CANAL STREET
1064 STORAGE BUILDING	1500-A WEST CANAL STREET
1065 STORAGE BUILDING	1500-B WEST CANAL STREET
1102 QUONSET HUT	1100-C NORTH 60th STREET
1103 STORAGE SHED	1100-C NORTH 60th STREET
1104 STORAGE SHED	1100-C NORTH 60th STREET
1152 PLAYGROUND SHOP	1100-C NORTH 60th STREET
1159 SOUTH BRICK BUILDING	1540-A WEST CANAL STREET
1168 NORTH BRICK BUILDING	1540-B WEST CANAL STREET
1174 PARKING STRUCTURE	724 NORTH 2nd STREET
1183 MUNICIPAL SERVICE BUILDING	1540 WEST CANAL STREET
1188 TRAFFIC SIGN SHOP	1430-A WEST CANAL STREET
1257 MILWAUKEE-MICHIGAN PARKING STRUCTURE	535 NORTH MILWAUKEE STREET
1543 YARD OFFICE	1500-C WEST CANAL STREET
1546 MacARTHUR SQUARE PARKING STRUCTURE	841 NORTH 7th STREET
1590 STORAGE SHED	1100-C NORTH 60th STREET
1651 STORAGE BUILDING	1100 NORTH 60th STREET
530 BRIDGES & PUBLIC BUILDINGS - ADMINISTRATION	
1144 BRIDGE SHOP	152 NORTH 6th STREET
1187 BOILER HOUSE	156 NORTH 6th STREET
1495 FIELD HEADQUARTERS	132 NORTH 6th STREET
1670 PAINTING & MATERIAL STORAGE BUILDING	130 NORTH 6th STREET
1700 GARAGE	134 NORTH 6th STREET
540 BUREAU OF ENGINEERS	
1097 ENGINEERS TESTING LABORATORY	3811 WEST LINCOLN AVENUE
565 BUREAU OF SANITATION	
1034 CART REPAIR BUILDING	2669 NORTH 47th STREET
1107 LINCOLN AVENUE TRANSFER STATION	3921 WEST LINCOLN AVENUE
1125 REPAIR SHOP	1122 NORTH EDISON STREET
1140 AREA HEADQUARTERS - CENTRAL AREA II	739 WEST JUNEAU AVENUE
1267 STORAGE - CENTRAL AREA II	739 WEST JUNEAU AVENUE
1547 AREA HEADQUARTERS - NORTH AREA II	2931 WEST CAMERON AVENUE
1548 STORAGE - NORTH AREA II	2931 WEST CAMERON AVENUE
1549 GARAGE - NORTH AREA II	2931 WEST CAMERON AVENUE

LIST OF BUILDINGS, CONT'D.

565 BUREAU OF SANITATION

1550 SALT SHED - NORTH AREA II	2931 WEST CAMERON AVENUE
1551 AREA HEADQUARTERS - SOUTH AREA III	2363 SOUTH 35th STREET
1552 STORAGE - SOUTH AREA III	2363 SOUTH 35th STREET
1553 GARAGE - SOUTH AREA III	2363 SOUTH 35th STREET
1554 SALT SHED - SOUTH AREA III	2363 SOUTH 35th STREET
1605 AREA HEADQUARTERS - SOUTH AREA II	4031 SOUTH 6th STREET
1606 GARAGE - SOUTH AREA II	4031 SOUTH 6th STREET
1607 STORAGE - SOUTH AREA II	4031 SOUTH 6th STREET
1608 SALT SHED - SOUTH AREA II	4031 SOUTH 6th STREET
1614 AREA HEADQUARTERS - CENTRAL AREA I	1333 NORTH 33rd STREET
1615 GARAGE - CENTRAL AREA I	1333 NORTH 33rd STREET
1616 STORAGE - CENTRAL AREA I	1333 NORTH 33rd STREET
1617 SALT SHED - CENTRAL AREA I	1333 NORTH 33rd STREET
1630 AREA HEADQUARTERS - SOUTH AREA I	1912 WEST PIERCE STREET
1631 STORAGE - SOUTH AREA I	1912 WEST PIERCE STREET
1632 GARAGE - SOUTH AREA I	1912 WEST PIERCE STREET
1633 SALT SHED - SOUTH AREA I	1912 WEST PIERCE STREET
1646 GARAGE - CENTRAL AREA II	739 WEST JUNEAU AVENUE
1647 SALT SHED - CENTRAL AREA II	739 WEST JUNEAU AVENUE
1648 STORAGE BUILDING - CENTRAL AREA II	739 WEST JUNEAU AVENUE
1657 TRANSFER STATION	970 NORTH HAWLEY ROAD
1671 NORTHWEST SOLID WASTE TRANSFER STATION	6710 NORTH INDUSTRIAL ROAD
1691 SALT DOME	6732 NORTH INDUSTRIAL ROAD
1692 GARAGE	6732 NORTH INDUSTRIAL ROAD
1721 AREA HEADQUARTERS - NORTH AREA I	7222 WEST FOND DU LAC AVENUE
1733 SALT SHED - NORTH AREA I	7222 WEST FOND DU LAC AVENUE
1734 GARAGE - NORTH AREA I	7222 WEST FOND DU LAC AVENUE
1751 STORAGE/GARAGE - HEADQUARTERS - NORTH AREA I	7318 WEST FOND DU LAC AVENUE
1755 HARTUNG QUARRY OFFICE	3342 NORTH 100th STREET

571 STREET & SEWER MAINTENANCE - ADMINISTRATION

1061 STORAGE WAREHOUSE	8414 WEST FLORIST AVENUE
1120 ASPHALT PLANT	158 NORTH 6th STREET
1573 NORTHWEST STORAGE SHED	8414 WEST FLORIST AVENUE
1624 OIL STORAGE BUILDING	8414 WEST FLORIST AVENUE
1653 TICKET OFFICE	168 NORTH 6th STREET
1676 YARD OFFICE	126 NORTH 6th STREET
1677 STORAGE BUILDING	176 NORTH 6th STREET
1688 STORAGE BUILDING	180 NORTH 6th STREET

581 FORESTRY - ADMINISTRATION & SUPPORT

1099 NURSERY GREENHOUSE	8423 SOUTH 51st STREET
1182 NURSERY RESIDENCE	8423 SOUTH 51st STREET
1211 NURSERY YARD HOUSE	8423 SOUTH 51st STREET
1212 NURSERY GARAGE	8423 SOUTH 51st STREET
1213 NURSERY IMPLEMENT SHED	8423 SOUTH 51st STREET
1214 STORAGE BUILDING	8423 SOUTH 51st STREET
1216 TREE BARN	8423 SOUTH 51st STREET
1650 SERVICE CENTER	5230 WEST STATE STREET
1654 STORAGE	5230 WEST STATE STREET
1675 NORTHEAST HEADQUARTERS	1872 NORTH COMMERCE STREET
1693 GARAGE/STORAGE	6732 NORTH INDUSTRIAL ROAD
1699 SOIL STORAGE DOME	6732 NORTH INDUSTRIAL ROAD
1708 SOUTHEAST HEADQUARTERS	2024 WEST HOLT AVENUE
1720 AUXILIARY GREENHOUSE 1 (SOUTH OF GREENHOUSE)	8423 SOUTH 51st STREET
1722 QUONSET HUT	5230 WEST STATE STREET
1723 WEST STORAGE BUILDING	2024 WEST HOLT AVENUE
1724 NORTH STORAGE BUILDING	2024 WEST HOLT AVENUE
1745 STORAGE BUILDING	5230 WEST STATE STREET
1753 AUXILIARY GREENHOUSE 2 (SOUTH OF GREENHOUSE)	8423 SOUTH 51st STREET

591 MUNICIPAL EQUIPMENT - ADMINISTRATION

1111 SOUTHWEST SHOP	2657 SOUTH 31st STREET
1114 LINCOLN AVENUE SHOP	3921 WEST LINCOLN AVENUE
1178 NORTHWEST GARAGE	3025 WEST RUBY AVENUE
1527 SHED	2657 SOUTH 31st STREET
1528 SHED	2657 SOUTH 31st STREET
1674 CENTRAL REPAIR GARAGE	2142 WEST CANAL STREET

NOTIFICATION POLICY

LOCATION OF MANAGEMENT PLAN

A copy of the Management Plan for all listed buildings is on file at the Bureau of Bridges and Public Buildings in the Municipal Building located at 841 North Broadway, Milwaukee, Wisconsin, and each building's Management Plan is on file at that building. The Management Plans are available to the public for inspection without cost during normal working hours. Copies of the Management Plans may be obtained from the Bureau of Bridges and Public Buildings within a reasonable time, upon written request, for a fee, in accordance with City of Milwaukee practice.

NOTICES

Notices concerning the location of Management Plans to the staff and contractors will be addressed in the following manner:

1. **Staff:** Bulletin board notices will be posted by the Designated Person. Notifications will be sent to the Business Agent of Employee Unions by the Designated Person. Two hour awareness training will be provided to custodians, cleaners and maintenance workers.
2. **Contractors:** Notices will be sent with each Service Order for building maintenance and will be included in all specifications for contract work.

POSTING OF WARNING LABELS

The Designated Person shall arrange to have warning labels attached immediately adjacent to any friable and non-friable ACBM which has potential for damage, during routine maintenance in areas, such as boiler rooms and air handling equipment rooms, of each building. Such material includes friable ACBM which has been responded to by any means other than removal, for example, encapsulation, and other ACBM for which no response action has been carried out. Offices, corridors, libraries, cafeterias, and other such areas are not considered to be routine maintenance areas.

All signs and labels will be displayed in prominent, readily visible locations, and will remain posted until the ACBM which is labeled has been removed or rendered non-friable, and has no potential for damage. Warning labels and signs will be made readily visible.

ASSURANCE OF ACCREDITATION

Employees and supporting professionals selected by the City of Milwaukee to assist in the implementation of the Management Plan will be carefully selected to insure that their qualifications are adequate and that they are certified by the State. Selection criteria will consider Local and State requirements and include but not be limited to the following:

Designers of Abatement Projects:

- Four (4) day course; Asbestos Abatement Project Designer;

Supervisors of Abatement Projects:

- Four (4) day course; Supervision of Abatement Projects;

Management Planner:

- Five (5) day course; Inspector and Management Planner;

Inspector:

- Three (3) day course; Inspector;

Worker:

- Three (3) day course; Asbestos Abatement Worker.

ACTIVITY PLANS

EMPLOYEE TRAINING

Before implementing the operations, maintenance, and repair provisions of the Management Plan, the Designated Person will ensure that all members of its maintenance and custodial staff (custodians, electrical mechanics and heating and ventilating mechanics, etc.), who may work in a building that contains ACBM receive general awareness training of at least two (2) hours duration, whether or not they are required to work with ACBM. New custodial staff and maintenance employees who are hired after the implementation of the management plan will be trained within 60 days after commencement of employment or prior to an assignment which may cause disturbance of ACBM. Individual training records shall be maintained by the City of Milwaukee in the individual's personnel file.

Training shall include, but not be limited to:

- Information regarding asbestos and its various uses and forms;
- Information on the health effects associated with asbestos exposure;
- Locations of ACBM throughout each building in which they work;
- Name and telephone number of the Designated Person and the location of the Management Plan;
- General asbestos safety and regulatory framework.

The City of Milwaukee will ensure that members of its maintenance and custodial staff who will disturb ACBM will receive the three day Asbestos Abatement Worker courses.

PERSONAL PROTECTION EQUIPMENT

Personnel who are required to disturb ACBM shall be instructed in the proper selection and use of respirators and other protection equipment. The personal protection equipment will be provided by the City of Milwaukee at no charge to the employee. Personal protective equipment will be properly maintained by the employee and periodically inspected by the City of Milwaukee. Appropriate records will be kept by each Department, Bureau or Agency in the individual's personnel file.

MEDICAL SURVEILLANCE

Prior to initial use of respirators, workers will have completed the medical monitoring requirement of the EPA Worker Protection Rule and OSHA regulations at City of Milwaukee expense. Medical records will be maintained by the City of Milwaukee in the individual's personnel file for thirty (30) years following termination of employment. This examination shall consist of:

- Medical history;
- Cardio-Pulmonary function evaluation;
- Forced Expiratory Volume Test (FEV) (pulmonary function test);
- Chest x-ray as determined by physician.

ABATEMENT CONTRACT GENERAL BIDDING REQUIREMENTS

Firms which are selected by the City of Milwaukee to complete response actions will be reviewed and selected based on consideration of the following requirements:

- Prior experience with similar projects;
- Equipment and worker qualifications;
- Financial stability;
- Safety record;
- State registrations;
- Ability to meet project schedules;
- Price;
- Insurance and Bonding;
- Disadvantaged Business Enterprise Certification.

CONFLICTS OF INTEREST

There exists a possibility for a conflict of interest between the work being performed by the

design professional and the contractor performing the response actions. For this reason, management planning and project design shall be performed by the City of Milwaukee or a firm independent of the abatement contractor. Similarly, the air monitoring and clearance testing firms must be independent of the contractor conducting the response action.

GENERAL EMERGENCY PROCEDURES

In the event of emergencies related to asbestos materials, the Designated Person will be immediately notified. This person will direct steps to protect the building's occupants by preparing for the following:

- Isolation;
- Evacuation;
- Emergency response procedures as necessary;
- Shut off of air handling systems;
- Establishment of a restricted area;
- Containment of asbestos debris and fibers;

For asbestos response actions which involve small scale, short duration activities, the City of Milwaukee may choose to utilize City personnel. A list of individuals trained and qualified to conduct such response actions in accordance with the regulations will be maintained by the City.

PERIODIC SURVEILLANCE

After the Management Plan is in effect, the Designated Person will schedule and direct periodic surveillance in each building that contains ACBM. Periodic surveillance shall mean every three years or

after each major renovation or change in occupancy. Surveillance shall be performed by a certified inspector or supervisor familiar with the building, and able to accurately perceive any changes in the condition of all ACBM that is identified in the Management Plan. The date of the surveillance, his or her name, and any observable changes in the condition of the material (e.g., water damage) will be recorded. A copy of this information will be submitted to the Designated Person, who will include these records in the Management Plan.

RESPONSE ACTIONS

All response action plans including removal, encapsulation, enclosure, or repair (other than small-scale, short-duration repairs) must be designed and conducted by persons accredited to design and conduct response actions. Response actions are contained in the building's specific management plan.

The Designated Person is responsible for ensuring that asbestos waste materials are transported and disposed of properly after response actions. The transport and disposal of asbestos waste will meet the requirements in the EPA publication "Asbestos Waste Management Guidance" and Appendix D of 40 CFR 763 Part E and any other applicable regulations.

COMPLETION OF RESPONSE ACTIONS

At the conclusion of any action to remove, encapsulate, or enclose ACBM or material assumed to be ACBM, a person appointed by the Designated Person will visually inspect each functional space where such action was conducted to determine whether the action has been properly completed. In addition, a person appointed by the Designated Person will arrange to collect samples using aggressive sampling to monitor air for clearance after each removal, encapsulation, and enclosure project involving ACBM, except for projects that are of a small-scale, short duration.

The Designated Person will have air samples analyzed by laboratories accredited to conduct such analysis.

OPERATION & MAINTENANCE (O & M) POLICIES AND PROCEDURES

Whenever any friable ACBM or nonfriable ACBM with the potential for damage is present in a building, the Designated Person will initiate O & M activities. Any material identified as non-friable ACBM will be treated as friable for the purposes of operations and maintenance when the material is about to become friable as a result of activities performed in the building.

Whenever an O & M activity may disturb friable ACBM, the Designated Person will protect building occupants by enforcing the following procedures:

- Restrict entry into the area by persons other than those necessary to perform the O & M action;
- Post signs to prevent entry into the area by unauthorized persons;
- Shut off or temporarily modify the air-handling system and restrict other sources of air movement;
- Use work practices or other controls to inhibit the spread of any released fibers;
- Clean all fixtures or other components in the immediate work area.
- Seal the asbestos debris and other cleaning materials in a leak-tight container

and dispose of properly.

FIBER RELEASE EPISODES

O & M activities resulting from minor fiber releases from friable ACBM (falling or dislodging of less than three [3] square or linear feet) will be responded to as required in the regulation Appendix B of Subpart E 40 CFR 763.

Major fiber release episodes (more than three [3] square or linear feet of friable ACBM) or maintenance activities other than small-scale, short duration, are not considered O & M activities. These activities will be designed and conducted by persons accredited to design and conduct response actions.

RECORDKEEPING POLICIES AND PROCEDURES

Complete and accurate records are necessary to adequately document the compliance progress of the City of Milwaukee in controlling the asbestos inventory. The recordkeeping requirements are the means by which the public, administration, and the government can monitor the progress of the activities designed to reduce the asbestos risk to the building population.

1. Plan Development and Scope:

The City of Milwaukee will have a Management Plan prepared by an accredited Management Planner which addresses, in detail, how the City will proceed to eliminate asbestos hazards.

2. **Plan Maintenance and Updating:**

The City of Milwaukee is required to maintain and update its Management Plan to reflect any and all operations and maintenance activities, periodic surveillance, inspection and reinspection, and all response actions. The plan is designed to be a dynamic document which accurately reflects any and all asbestos control activities undertaken by the City.

3. All records which become part of the Management Plan shall be kept in designated locations.
4. Records must be maintained for all preventive measures and response actions taken for friable and nonfriable ACBM and must include the following information:
 - a. Records will be maintained for actions taken including methods used, locations, start and completion dates of work, names and addresses of all contractors. If ACBM's were removed, the name and location of the storage or disposal site of asbestos-containing materials.
 - b. Name and signature of any person collecting any air sample required to be collected at the completion of the response action, locations where samples were taken, date of collection, name and address of the lab analyzing the samples, date of analysis, results of analysis, method of analysis, name and signature of person performing the analysis and a statement that the lab is accredited.

- c. Documentation of personnel trained under the training requirements for custodial personnel, etc., including:
 - Name, job title and date of training;
 - Location of training and number of hours completed.
- d. Documentation of each time periodic surveillance is conducted, including:
 - Name of individual conducting surveillance;
 - Any changes in material condition.
- e. When small-scale, short-duration maintenance activities are performed, the following must be documented:
 - Name of each person performing the operation or name of contractor.
 - Start and completion date of activity;
 - Locations where the activity occurred;
 - Description of the activity, including preventive measures used;
 - If ACBM was removed, the name and location of the storage

or disposal site.

f. When a major asbestos activity is performed, the following must be documented:

- Name, signature, state of accreditation and certificate number of each person performing a design activity;
- Name, signature, state of accreditation and certificate number of each person performing the abatement activity or name of contractor;
- Start and completion dates of the activity;
- Locations where the activity occurred;
- A description of the activity, including preventive measures used;
- If ACBM's were removed, the name and location of storage or disposal site.

h. For each fiber release episode:

- Date and location of the episode;
- Method of repair, preventive measures or response action taken;
- Name of each person performing the work;

- If ACBM's were removed, the name and location of storage or disposal site.

SAFETY RULES AND REGULATIONS

EMPLOYEE RESPONSIBILITY

It is the responsibility of the employee to perform his duties in a safe manner to protect himself as well as other people and the environment, and to notify the Designated Person in case of asbestos involvement.

DISCIPLINARY POLICIES AND PROCEDURES

Employees who violate these policies and procedures may be subject to disciplinary action. Such violations may be considered willful misconduct.

CONTRACTORS

Contracts and Service Orders for the building will include notice of responsibility to review the Management Plan for potential asbestos involvement prior to initiation of work.

The Bureau of Bridges and Public Buildings for the City of Milwaukee hereby accepts this document and directs all affected employees to follow the policies and procedures as outlined.

SUPERINTENDENT

BUREAU OF BRIDGES AND PUBLIC BUILDINGS

DEPARTMENT OF PUBLIC WORKS

BY:

Don M. Miller

NAME

5-29-91

DATE

ASBESTOS MANAGEMENT PLAN REPORT

S E C T I O N 2

SPECIFIC BUILDING ASBESTOS MANAGEMENT

SECTION 2 INTRODUCTION

This section of the report is the specific building portion of the Management Plan. It contains information relative to this building only. (Policies, procedures, and other information that apply to all of the buildings and facilities within a City of Milwaukee Bureau or Department are contained in report Section 1 - General Asbestos Management [Departmental Statement Of Policy].)

This section of the document must be constantly updated in order to remain current and effective. In order to ensure that only current information is available, copies will be maintained for review at the following location only:

Bureau of Bridges and Public Buildings
Municipal Building, Room 311
841 North Broadway
Milwaukee, Wisconsin 53202

Copies may be viewed by appointment only. To make an appointment, call (414) 278-3403.

For the convenience of the reader, as stated above, General Asbestos Management is covered in Section 1.

Reports containing inspection data, bulk sample analysis results, and response options for asbestos-containing building materials can be found in the following subsections.

Each subsection is prefaced with a description of the various reports associated with it.

August 3, 1990

SPECIAL INSTRUCTIONS

GARAGE/N AREA 1

This section is provided for the management planners to add any specific comments about the building.

August 3, 1990

CERTIFICATION & SURVEILLANCE STATEMENTS

On the following pages can be found the certification statements (attestations) for Section 2 of this Asbestos Management Plan Report, which cover the Inspection for, Assessment of, and Bulk Sampling of any suspected ACM in the building, and the Response Options prepared for any proven or assumed ACM.

The re-inspection certification and surveillance inspection statement/form are provided for later use.

August 3, 1990

ASBESTOS INSPECTION CERTIFICATION STATEMENT
for
City of Milwaukee
Bldg. No. 1734
GARAGE - NORTH AREA I
7222 WEST FOND DU LAC AVENUE
MILWAUKEE, WISCONSIN 53218

I (We), the undersigned, do hereby certify that the building listed above was inspected for ACM by me (us), or under my (our) direct supervision; that any Bulk Samples of suspected ACM were collected by me (us); and that assessments based on the ACM's condition were made by me (us)..

All inspection, sampling, or assessments were conducted pursuant to the USEPA's "Asbestos-Containing Materials In Schools" rule as ammended in AHERA (40 CFR Part 763), dated October 30, 1987.

Attempts to inspect behind surfaces were limited to moveable surfaces such as ceiling tile, electrical switch/receptacle cover plates, or access panels. Non-destructive sampling techniques (to maintain the material's integrity) were generally employed.

The information contained in this report is, to the best of my (our) knowledge, accurate.

INSPECTOR(S):

EMPLOYED BY: MILWAUKEE PUBLIC SCHOOLS
FACILITIES & MAINTENANCE SERV.
1124 NORTH 11TH STREET
MILWAUKEE, WISCONSIN 53233

DENNIS J. NOWAK

Date Bldg. Inspection Completed:

05/04/90

Signature

Date

State of Accreditation & Number:

WI I-353

August 3, 1990

MANAGEMENT PLANNERS CERTIFICATION STATEMENT

for
City of Milwaukee
Bldg. No. 1734
GARAGE - NORTH AREA I
7222 WEST FOND DU LAC AVENUE
MILWAUKEE, WISCONSIN 53218

We, the undersigned, acting as a management planning team, do hereby certify that the response actions for the City of Milwaukee building listed above, were developed and recommended by us.

The response actions were developed in accordance with the requirements of the United States Environmental Protection Agency's "Asbestos Materials In Schools" rule as ammended in the "Asbestos Hazard Emergency Response Act (AHERA)/40 CFR Part 763, dated October 30, 1987.

The responses contained in this report represent, to the best of our knowledge, the best possible courses of action, and are based on the actual inspection, sampling, and assessment information received, and, in some cases, field checks performed by one or all of us.

MANAGEMENT PLANNERS: EMPLOYED BY: MILWAUKEE PUBLIC SCHOOLS
FACILITIES & MAINTENANCE SERV.
1124 NORTH 11TH STREET
MILWAUKEE, WISCONSIN 53233

THOMAS J. CHOJNACKI

Date Bldg. Inspection Completed:

05/04/90

Signature

Date

State of Accreditation & Number:

WI MP-438

JOSEPH CHROSTOWSKI

Date Bldg. Inspection Completed:

05/04/90

Signature

Date

State of Accreditation & Number:

WI MP-473

PATRICK M. O'DONNELL

Date Bldg. Inspection Completed:

05/04/90

Signature

Date

State of Accreditation & Number:

WI MP-437

* No ACM After Bulk Sample Analysis.

August 3, 1990

RE-INSPECTION CERTIFICATION STATEMENT

for
City of Milwaukee
Bldg. No. 1734
GARAGE - NORTH AREA I
7222 WEST FOND DU LAC AVENUE
MILWAUKEE, WISCONSIN 53218

I hereby certify that the City of Milwaukee building listed above was reinspected for Asbestos Containing Building Materials (ACBM) by me or under my direct supervision. The building was inspected in accordance with the requirements of the U.S. Environmental Protection Agency's "Asbesto-Containing Materials in Schools" rule as ammended in AHERA/40 CFR Part 763 dated, October 30, 1987.

(Print Name)

(Signature)

(Date) _____ (Accreditation No.) _____ (St.)
Any additions, deletions, or other revisions to this management plan as a result of this reinspection are inserted in this book and are printed on _____ (color) paper for easy recognition.

I hereby certify that the City of Milwaukee building listed above was reinspected for Asbestos Containing Building Materials (ACBM) by me or under my direct supervision. The building was inspected in accordance with the requirements of the U.S. Environmental Protection Agency's "Asbesto-Containing Materials in Schools" rule as ammended in AHERA/40 CFR Part 763 dated, October 30, 1987.

(Print Name)

(Signature)

(Date) _____ (Accreditation No.) _____ (St.)
Any additions, deletions, or other revisions to this management plan as a result of this reinspection are inserted in this book and are printed on _____ (color) paper for easy recognition.

August 3, 1990

SURVEILLANCE INSPECTION STATEMENT
for
City of Milwaukee
Bldg. No. 1734
GARAGE - NORTH AREA I
7222 WEST FOND DU LAC AVENUE
MILWAUKEE, WISCONSIN 53218

I, the last person to sign this list, have made a surveillance inspection of the City of Milwaukee building listed above. I visually inspected all materials in all areas that are identified in this report as ACBM. I have also noted any changes in the conditions of the ACBM on the repair requisitions listed below. These requisitions have been forwarded to the appropriate authorities.

NAME	DATE	REPAIR REQUISITION NUMBERS		
Sign _____				
Print _____				
Sign _____				
Print _____				
Sign _____				
Print _____				
Sign _____				
Print _____				
Sign _____				
Print _____				
Sign _____				
Print _____				
Sign _____				
Print _____				
Sign _____				
Print _____				

August 3, 1990

GENERAL BUILDING INFORMATION

The Building Construction Report on the following page describes general aspects of the building's construction which are essential in determining Building Zones (based on actual year of construction of, or renovations and/or additions to a building) and the specific Homogeneous Zones (building materials) within a given Building Zone.

Note:

Data for both "Building Type/Function" and "Construction Classification" was obtained from the City of Milwaukee's "Building Property Insurance Input Forms".

August 3, 1990

BUILDING CONSTRUCTION REPORT

for

Bldg. No. 1734
GARAGE - NORTH AREA I
7222 WEST FOND DU LAC AVENUE
MILWAUKEE, WISCONSIN 53218

Dept. No. 565
BUREAU OF SANITATION

Year Constructed,
Building Function/Type,
Construction Classification,
& Total Area/Square Footage

Building
Modifications
History
Year and Type

1984
PARKING GARAGE
STEEL FRAME WITH BRICK OR BLOCK EXTERIOR WALLS
2,305

N.A. Addition

REPORT 6
BLDGINFO

Page 1

BUILDING HOMOGENEOUS ZONES

The following report lists all building materials suspected of containing asbestos, sorted alpha-numerically by their respective H-Zone Codes, and any special notations regarding same.

Homogeneous Zone Photographs can be found in Appendix B.

Definition:

A "Homogeneous Zone" (H-Zone) is a term applied to a specific building material which is suspected as being an ACBM. AHERA uses the term "Homogeneous Area" and defines it as an area (material) which is similar throughout in terms of color, texture, and date of material application, installation, or construction.

H-Zone Codes:

Each Homogeneous Zone has been assigned a unique code. These codes are comprised of three basic elements as follow:

1. "M", "S", or "T" prefixes are first applied to group the material into one of three basic categories as defined by AHERA.

MISCELLANEOUS MATERIAL (M)

Interior building material on structural members of fixtures, such as floor and ceiling tiles.

SURFACING MATERIAL (S)

Material that is sprayed-on, troweled-on, or otherwise applied to surfaces, such as acoustical plaster on ceilings and fireproofing materials on structural members, or other materials on surfaces for acoustical, fireproofing, or other purposes.

THERMAL SYSTEMS INSULATION (T)

Material applied to pipes, fittings, boilers, breaching, tanks, ducts, or other interior structural components to prevent heat loss or gain, or water condensation, or for other purposes. (Some miscellaneous materials are grouped in this category, i.e., flexible fabric duct connectors, because of their relation to plumbing, mechanical, and electrical building systems.)

2. When the building was constructed or remodeled in phases or different years Building Zone designations ("Z1", "Z2", etc.) are assigned after the prefix. These "Z" numbers are further explained in the Homogeneous Zones definitions Report notes.
3. Abbreviations or acronyms then follow a hyphen and complete the code. This element is generally consistent from building to building such as "CT" for ceiling tile and "FT" for floor tile. If more than one type of a ceiling tile, etc. is inventoried, the H-Zones are further distinguished by numerals (I.e., "CT1", "CT2", etc.)

ACBM Disposition:

The ACBM Disposition indicates whether the H-Zone has

August 3, 1990

been sampled and was subsequently analyzed positive (PROVEN), or the H-Zone has been sampled and was subsequently analyzed negative (NON-ACBM), or the H-Zone was not sampled and must be assumed to contain asbestos (AS-SUMED).

Materials not suspected of containing asbestos (see below) are exempt from inspection. With the exception of inlaid carpeting and carpet tiles these were not inventoried. These two materials appear in the report as having an ACBM Disposition of "(NON-SUSPECT)".

Descriptions:

The H-Zones descriptions are formulated for readability, and generally read as follows:

"GENERIC MATERIAL NAME [Trade Name or Material Composition if applicable], specifics, i.e., material sizes, colors, etc.".

Non-Suspect Materials or Materials Otherwise Exempted from Inspection:

Following is a listing of materials which were not inventoried and do not appear in this report. **Bolded Items** may contain asbestos but are not considered building materials.

Concrete (Includes Poured Concrete, Concrete Block, and Pre-Cast Concrete Structural Members)

Cinder Block

Blackboards (Includes All Chalkboards & Bulletin Board)

Pressed Wood (Includes All Wood Products)

Wall or Ceiling Carpet (Floor carpeting itself is a non-suspect material but could contain asbestos fibers from an adjacent ACBM in friable condition.)

Exterior Roofing Shingles

Auditorium Curtains

Chemical Lab Table and Desk Tops

Stored Suspected ACBM

Fire Blankets

Glass

Steel (Includes All Metal Products)

Brake Shoes

Kiln Bricks & Cement

Bunsen Burner Pads

Chemical Lab Gloves

Fiberglass Products

Foam Glass Products

Rubber Products

Suspected ACBM Not Generally Inventoried:

All **Mastics, Caulking, and similar construction adhesives (i.e., Drywall Joint Compound)** or sealants.

Interior Boiler and Incinerator Insulation or Components such as Gaskets, Firebrick, Cast Refractory Material or Wearing Surfaces, etc.

Electrical Systems Insulating Material for Fixtures, Wiring, Panels Boards, Switchgear, etc.

August 3, 1990

HOMOGENEOUS ZONES DEFINITIONS REPORT
for
City of Milwaukee
Bldg. No. 1734
GARAGE - NORTH AREA I
7222 WEST FOND DU LAC AVENUE
MILWAUKEE, WISCONSIN 53218

H-Zone Code	ACBM Disposition	Homogeneous Zone/ Building Material Description
Note #1:		A Homogeneous Zone is a building material which is similar in terms of color, texture, and date of construction, installation, or application.
Note #2:		H-Zone Codes prefixed w/'M' indicate MISCELLANEOUS materials.
Note #3:		H-Zone Codes prefixed w/'S' indicate SURFACING materials. (No suspect 'surfacing' ACBM was found in the building.)
Note #4:		H-Zone Codes prefixed w/'T' indicate THERMAL SYSTEM INSULATION materials or materials associated with plumbing, mechanical (HVAC), and electrical systems. (No suspect 'thermal' ACBM found.)
Note #5:		H-Zone Codes w/'Z1' following the prefix indicate materials found in (or constructed, installed, or applied in conjunction with) BUILDING ZONE 1 (Original Building constructed in 1984).
Note #6:		H-Zone Codes w/'Z2' following the prefix indicate materials found in (or constructed, installed, or applied in conjunction with) BUILDING ZONE 2 (East Building Addition constructed circa 1987).
Note #7:		H-Zone Code alpha-numerical characters following the hyphen are generally acronyms of the building material specified in the Homogeneous Zone/Building Material Description.
MZ1-CBM	(NON-ACBM)	CONCRETE BLOCK MORTAR
MZ1-DW	(NON-ACBM)	DRYWALL/GYPSUM BOARD [On Ceiling], 2ft. wide
MZ1-GBM	(NON-ACBM)	GLASS BLOCK MORTAR
MZ1-MSNT	(NON-ACBM)	HARDBOARD [Masonite] GARAGE DOORS
MZ2-CBM	(NON-ACBM)	CONCRETE BLOCK MORTAR
MZ2-INS	(NON-ACBM)	ROOF INSULATION, polystyrene [stryofoam]

REPORT-9
HZONEDEF

Page 1

INSPECTION RESULTS/RESPONSE OPTIONS

This subsection contains building floor plans and reports detailing inspection results and appropriate response options for managing ACBM.

Area ID Location Floor Plans:

The floor plans are basically schematic, indicating locations of walls, door openings, etc. Some architectural details such as windows, relative wall thicknesses, plumbing fixtures, etc. may also be included.

Their basic function is to establish each "Area" (Room) of the building and indicate the "Area ID" (Room Number).

The term "AREA" equates to AHERA's term, "FUNCTIONAL SPACE", and is defined as a room, or group of rooms (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.

An "AREA ID" is used to uniquely identify each area within the building. In some instances the Area ID may not match the actual Room Number, Name, or accepted designation.

Note: The reports contained in this sub-section should always be read in conjunction with the Area ID Location Floor Plans.

All-Area

(All Inventoried Areas & Homogeneous Zones Report):

A summary of all suspected ACBM with related disposition (Proven, Assumed, Non-ACBM, or Non-Suspect) and inspector's comments, listed by the Areas in which they can be found.

Pos-Hzon

(ACBM [All Positive H-Zones] / Response Option Summary:

A summary of only proven or assumed ACBM with related disposition (Proven or Assumed), and the Areas in which they are found, listed (sorted) by the H-Zone Code of the ACBM. Friability, existence of damage, AHERA category numbers (friable ACBM assessments [see * below], potential for future damage factors (accessibility, air erosion, and vibration), existence of suspected ACBM debris, **response options** (see ** below), inspector's comments and quantities of materials are also listed.

Note: If the report (Pos-Hzon) is not present, no suspected ACBM were proven after analysis, or no suspected ACBM were determined upon initial inspection.

*** AHERA Category/Friable ACBM Assessments:**

AHERA requires inspectors to assess the condition of all friable ACBM. For the purposes of this report, damaged thermal insulation will be considered friable. This assessment categorizes the material in question into seven classifications. Those seven are:

1. Damaged or significantly damaged thermal system insulation ACM.

This category is selected for 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, waterstained, gouged, punched, 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.

2. Damaged friable surfacing ACM.

This category is selected for friable surfacing ACM which has deteriorated or sustained physical injury such that the internal structure (cohesion) of the material 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 damage.

3. Significantly damaged friable surfacing ACM.

This category is selected for damaged friable surfacing ACM in a functional space where the damage is extensive and severe.

4. Damaged or significantly damaged friable miscellaneous ACM.

This category is selected for friable miscellaneous asbestos containing material which has deteriorated or sustained physical injury such that the internal structure (cohesion) of the material is inadequate or, if applicable, which has determined 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 damage.

5. ACBM with potential for damage.

This category is selected for ACBM with potential for damage which has the following circumstances:

- 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 operations and

maintenance practices, changes in occupancy, or recurrent damage.

6. ACBM with potential for significant damage.

This category is selected for ACBM with potential for significant damage which has the following circumstances:

- 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) 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.

7. Any remaining friable ACBM or friable suspected ACBM.

This category is selected for any remaining friable ACBM or friable suspected ACBM that was not covered by the above.

**** Response Options (Response Actions):**

A response action is a method, including removal, encapsulation, enclosure, repair, and operations and maintenance (O&M), that protects human health and the environment from friable ACBM.

The Pos-Hzon/Response Option Summary Report usually lists "Standard Response Options" ("O&M" or a "concatenated code" as deciphered below [see *** below]).

The materials that would hypothetically remain in this building after nonstandard recommended response actions are completed are those that show O&M as a response action. Current conditions are maintained via the O&M program until either accomplishment or subsequent review of resource availability changes.

Some of the response options involve minor repair, i.e. re-canvas the pipe insulation on an elbow. Those items have been reviewed on a room by room basis. An "**O&M Repair Work Order Report**" has been specifically prepared to address those situations as soon as possible. It addresses specific situations that require action other than simple inspection. The report, if applicable, has been issued (under separate cover) to the appropriate authorities for implementation.

Occasionally a response option may involve activities beyond what is normally included in the O&M program. Those instances are addressed separately by writing up a Scope of Work (SCOPE). A SCOPE may involve one or more ACBM (Proven or Assumed H-Zones) in one or more areas within a building (See "**Scope Report**" below).

***** Standard Response Options:**

The following notations are utilized in the management plan to indicate a given response option. A complete

option is the concatenation of all listed option codes.

For example, a response code of F1R would mean that the appropriate response would be to do what is specified for a friable damaged or significantly damaged thermal system insulation within reach.

CODE OPTION DESCRIPTION

F FRIABLE

(When dry, may be crumbled, pulverized, or reduced to powder by hand pressure)

Repair, encapsulate or enclose to reduce potential for fiber release and protect human health and environment.

1 AHERA CATEGORY 1

- a. At least immediately repair the damaged area.
- b. Remove the damaged material if it is not feasible, due to technological factors, to repair the damage.
- c. Maintain all thermal system ACM and it's covering in an intact state and undamaged condition.

5 AHERA CATEGORY 5

At least implement an operations and maintenance (O&M) program, as described under AHERA 763.91.

6 AHERA CATEGORY 6

- a. Implement an O&M program, as described under AHERA 763.91.
- b. Institute preventive measures appropriate to eliminate the reasonable likelihood that ACM or it's covering will become significantly damaged, or delaminated.
- c. Remove the material as soon as possible if appropriate preventive measures cannot be effectively implemented, or unless other response actions are determined to protect human health and the environment. Immediately isolate the area and restrict access if necessary and substantial endangerment to human health or the environment.

R REACHABLE (Accessible)

(Generally below 7 feet above the finished floor)

Monitor ACBM within reach for a greater potential for disturbance as opposed to material beyond reach.

D DEBRIS

(Pieces of ACBM including dust, that can be identified by color, texture or composition by accredited inspectors to be ACM)

Remove debris using appropriate cleaning methods and investigate it's origin. Institute preventive measures appropriate to eliminate a reoccurrence.

V VIBRATION

(ACBM has been damaged or is subject to damage due to the influence of vibration caused by machinery, etc. or other source)

Monitor ACBM subject to the influence of vibration

for a greater potential for disturbance as opposed to material not subjected to vibration. Institute possible preventive measures of reoccurrence.

H WITHIN AN HVAC SYSTEM

(The material is physically located within, passes through, or is in close proximity to air movement created by a building ventilation system)
Consider for removal as resources become available.

SCOPE Report (Scoped Response Option Form):

As stated above, a response options involving activities beyond "O&M" program are addressed separately by Scope of Work (SCOPE). A SCOPE may involve one or more ACBM (Proven or Assumed H-Zones) in one or more areas within a building.

The first step in completing the SCOPE is to review the hazard potential of ACBM's that are the most difficult to O&M throughout the City. An algorithm detailing material specifics is filled out to rate the worst condition to the best condition. A team of certified management planners, and City administrators review the algorithms to determine those conditions that require heightened response option development.

The worst conditions other than emergencies, are divided into response options detailing other work involved and cost estimates. The response options are reviewed for budget approval and implementation as resources are made available.

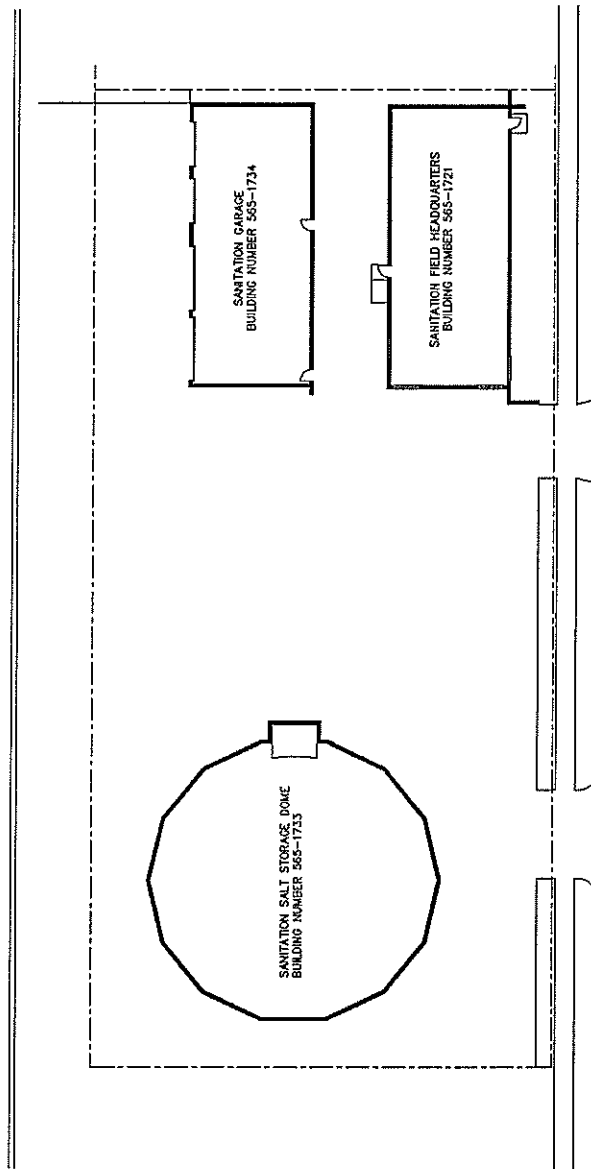
These scopes of work are not full fledged abatement project designs. They simply describe one or more options of work that may be done to correct a particular situation. A copy of the Management Planner's Worksheet is generally included with the Scope Report.

Note: If this report is not present, no ACBM required a response option beyond O&M or repairs.

Emergency Response Actions:

Emergencies are handled on a case by case basis. If during inspection, the accredited inspector observes an especially hazardous or potentially hazardous situation, the details (areas affected, specific material, and nature of hazard) are written up on a special "hot sheet" memo form and are submitted to the appropriate authorities for immediate action. These situations are still reflected in the appropriate subsections of the management plan as original inspection conditions.

August 3, 1990

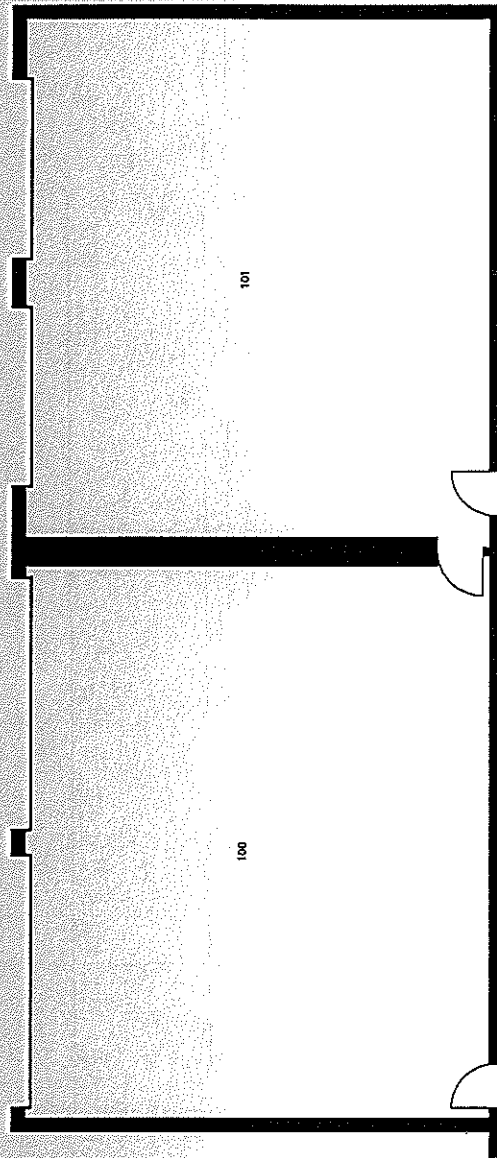


SANITATION HQ. AREA NORTH 1 - SITE PLAN



0 5 10 20 30 40 50 100

August 3, 1998



August 3, 1990

ALL INVENTORIED AREAS & HOMOGENEOUS ZONES REPORT
(Sorted By Area ID)

Bldg. No.	Building Name	Area ID	H-Zone Code & ACBM Disposition	Homogeneous Zone/ Building Material Description	Notes/ Comments
1734	GARAGE/H AREA 1	100	MZ1-CBM (NON-ACBM)	CONCRETE BLOCK MORTAR	
			MZ1-DW (NON-ACBM)	DRYWALL/GYPSUM BOARD [On Ceiling], 2ft. wide	
			MZ1-GBM (NON-ACBM)	GLASS BLOCK MORTAR	
			MZ1-MSNT (NON-ACBM)	HARDBOARD [Masonite] GARAGE DOORS	
		Count 4			
		101	MZ1-MSNT (NON-ACBM)	HARDBOARD [Masonite] GARAGE DOORS	
			MZ2-CBM (NON-ACBM)	CONCRETE BLOCK MORTAR	
			MZ2-INS (NON-ACBM)	ROOF INSULATION, polystyrene [stryofoam]	
		Count 3			

Count 7

REPORT10
ALL-AREA

Page 1

BULK SAMPLING INFORMATION

METHODOLOGY

Bulk sampling was conducted in accordance with AHERA, 40 CFR, part 763.86. General locations of samples were determined for each Homogeneous Zone on a random basis. Each functional space was assigned an Area ID number. Homogeneous Zones Codes were then assigned to each suspect material and listed with the Area ID's that contained that material. The actual field methods utilized to randomly select the Area ID's from which samples would be taken ranged from rolling a single dice to cutting cards. Samples were generally taken from inconspicuous locations.

AHERA does not precisely spell out the amount of samples that are required to be collected for non-friables, thermal fittings and miscellaneous ACBM. The regulations refer to the phrase "in a manner sufficient" when describing the required number of samples. Following is a chart which specifies basic bulk sampling guidelines.

Type of Material	AHERA Minimum
1. SURFACING	
a. Friable < 1000 SF	3
b. Friable > 1000, & < 5000 SF	5
c. Friable > 5000 SF	7
d. Non-friable < 1000 SF	Manner Sufficient
e. Non-Friable >1000, <5000	Manner Sufficient
f. Non-Friable > 5000 SF	Manner Sufficient
2. THERMAL SYSTEM INSULATION	3
a. Patched area < 6 SF or LF	add 1
b. Fittings (cement plaster)	Manner Sufficient
3. MISCELLANEOUS MATERIAL	
a. Friable	Manner Sufficient
b. Non-Friable	Manner Sufficient
c. Patched area < 6 SF or LF	Manner Sufficient

Determining ACBM Disposition:

PROVEN - If one or more samples of any of the samples collected for a specific Homogeneous Zone was analyzed positive (greater than 1% asbestos fibers by weight using PLM microscopy), that Homogeneous Zone, in all areas it is present, is considered to be proven ACBM.

NON-ACBM - If all samples of the samples collected for a specific Homogeneous Zone were analyzed negative, that Homogeneous Zone, in all areas it is present, is considered to be proven non-ACBM.

Although most miscellaneous materials may be broken down and listed as separate Homogeneous Zones based on color schemes and sizes, some non-friable types such as ceramic, mosaic, and quarry tile, terrazzo, and marble, may have been considered as one Homogeneous Zone for purposes of sampling.

For instance, the Homogeneous Zones Definitions Report may list six different Ceramic Tile H-Zones (i.e., MZ1-CR1, MZ1-CR2, etc.) based on different colors. A representative number of samples may have been taken of only three of these different colors. If they all were analyzed as non-asbestos containing a determination was made to consider the disposition of all six colors as Non-ACBM.

Appropriately, the H-Zone Codes that in appear on the Bulk Sample Summary Reports would be generic in nature, i.e., MZ1-CR with the specific code listed in parentheses.

Bulk Sample Summary Reports:

The reports that follow both list Sample Numbers, Area ID where the sample was collected, Date Collected, and Laboratory Results. Actual laboratory reports can be found in Appendix A.

The first report (HZONSAMP), has the data ordered by the H-Zone Code and also lists the Homogeneous Zone Descriptions.

The second report (ALFASAMP), has the data ordered by the Sample Number and also lists the Exact Sample Point Locations. These locations are a three-dimensional description listed in decimal feet. They are read as follows; a location of "2.00'N, 0.00'E, 0.50'AFF" means the sample point was taken on the east wall, two feet from ("from" always being implied) the north wall and six inches above the floor. The abbreviation "AFF" is an accepted construction term meaning "Above Finished Floor". A dimension of "0.00'" always means "on" the wall or floor.

Bulk Sample Point Location Plans:

The plans (IF PRESENT) following the reports explained above are the same as the Area ID Location Plans which appear in an earlier subsection, but also have the bulk sample numbers and points indicated with dimensions. (Dimensions on the plans are listed in feet and inches as opposed to decimal feet on the Bulk Sample Summary Report. If these plans are not present, refer to "ALFASAMP" report for sample point locations.)

Note: If both the Bulk Sample Summary Reports and Location Plans are not present, no samples were collected.

August 3, 1990

BULK SAMPLE SUMMARY REPORT w/ HOMOGENEOUS ZONE DESCRIPTIONS
(Sorted By H-Zone Codes)

Bldg. No. & Name	Homogeneous Zone Code & Material Description				
	Sample Number	Area ID	Date Collected	Positive ACBM?	Results/ Laboratory Analysis
1734 GARAGE/N AREA 1	MZ1-CBM CONCRETE BLOCK MORTAR				
	KM40	100	05/03/90	No	NEGATIVE (<1% Cellulose & <1% Synthetic)
	XE09	100	05/03/90	No	NEGATIVE (Non-Fibrous)
	Count 2				
	MZ1-DW DRYWALL/GYPSUM BOARD [On Ceiling], 2ft. wide				
	AN69	100	05/03/90	No	NEGATIVE (10-15% Cellulose)
	C107	100	05/03/90	No	NEGATIVE (50-55% Cellulose)
	UC96	100	05/03/90	No	NEGATIVE (80-85% Cellulose)
	Count 3				
	MZ1-GBM GLASS BLOCK MORTAR				
	EA79	100	05/03/90	No	NEGATIVE (<1% Synthetic)
	MZ1-MSNT HARDBOARD [Masonite] GARAGE DOORS				
	CB17	100	05/03/90	No	NEGATIVE (70-75% Cellulose)
	NR04	101	05/03/90	No	NEGATIVE (50-55% Cellulose)
	WQ15	101	05/03/90	No	NEGATIVE (85-90% Cellulose)
Count 3					
MZ2-CBM CONCRETE BLOCK MORTAR					
HM76	101	05/04/90	No	NEGATIVE (Non-Fibrous)	
LU46	101	05/03/90	No	NEGATIVE (Non-Fibrous)	
Count 2					
MZ2-INS ROOF INSULATION, polystyrene [stryofoam]					
UW19	101	05/04/90	No	NEGATIVE (Non-Fibrous)	

Count 12

Report13
HZONSAMP

Page 1

August 3, 1990

BULK SAMPLE SUMMARY REPORT w/ EXACT SAMPLE POINT LOCATIONS
(Sorted By Sample Numbers)

Bldg. No.	Building Name	Sample Number	Homogeneous Zone Code	Area ID & Exact Location	Date Collected	Positive ACBM?	Results/ Laboratory Analysis
1734	GARAGE/N AREA 1	AN69	MZ1-DW	100 3.00'S, 0.00'E, 11.58'AFF	05/03/90	No	NEGATIVE (10-15% Cellulose)
		CB17	MZ1-MSNT	100 0.00'N, 18.00'E, 4.83'AFF	05/03/90	No	NEGATIVE (70-75% Cellulose)
		C107	MZ1-DW	100 3.25'S, 0.00'W, 11.58'AFF	05/03/90	No	NEGATIVE (50-55% Cellulose)
		EA79	MZ1-GBM	100 15.17'S, 0.00'W, 4.33'AFF	05/03/90	No	NEGATIVE (<1% Synthetic)
		HM76	MZ2-CBM	101 9.75'N, 0.00'E, 0.17'AFF	05/04/90	No	NEGATIVE (Non-Fibrous)
		KM40	MZ1-CBM	100 0.00'N, 1.75'E, 11.42'AFF	05/03/90	No	NEGATIVE (<1% Cellulose & <1% Synthetic)
		LU46	MZ2-CBM	101 3.33'S, 0.00'W, 0.17'AFF	05/03/90	No	NEGATIVE (Non-Fibrous)
		NR04	MZ1-MSNT	101 0.00'N, 4.50'E, 5.33'AFF	05/03/90	No	NEGATIVE (50-55% Cellulose)
		UC96	MZ1-DW	100 3.00'N, 0.00'E, 11.58'AFF	05/03/90	No	NEGATIVE (80-85% Cellulose)
		UW19	MZ2-INS	101 5.83'S, 0.00'W, 16.00'AFF	05/04/90	No	NEGATIVE (Non-Fibrous)
		WQ15	MZ1-MSNT	101 0.00'N, 3.42'W, 1.33'AFF	05/03/90	No	NEGATIVE (85-90% Cellulose)
		XE09	MZ1-CBM	100 5.00'N, 0.00'W, 10.67'AFF	05/03/90	No	NEGATIVE (Non-Fibrous)

Count 12

Report14
ALFASAMP

Page 1

APPENDIX A

BULK SAMPLES

**CHAIN OF CUSTODY,
LABORATORY ANALYSIS REPORT,
LABORATORY ACCREDITATION**



MILWAUKEE PUBLIC SCHOOLS

ENVIRONMENTAL HEALTH & SAFETY DEPT.

C 54-99094
904625
LOWEN MYER
1124 North 11th Street
P.O. Box 05259
Milwaukee, WI 53205-0529
Phone: 283-4626 Fax: 283-4682
PHYSICAL PLANT DIVISION

**BULK ASBESTOS SAMPLES
CHAIN OF CUSTODY RECORD / ANALYSIS WORKSHEET**
for
GARAGE - NORTH AREA I
7222 WEST FOND DU LAC AVENUE
MILWAUKEE, WISCONSIN 53218

BATCH NO.: C-091
TOTAL SAMPLES: 13
TOTAL PAGES: 3
SITE NO.: 1734
REQUISITION NO.: 05052

Relinquished By: CHAIN OF CUSTODY

Received By:

Rosemary Hicks 5-14-90
(MPS) (Date)

Jill Lyons 5-14-90
(Lab) (Date)

Allan Bullock 7-10-90
(Lab) (Date)

Joseph Chertowski 7/25/90
(MPS) (Date)

WORKSHEET KEY

ASBESTOS FORM MATERIALS

CHR = CHRYSOTILE
AMO = AMOSITE
CRO = CROCIDOLITE
OTHER = (Specify Type)

NON-ASBESTOS FORM MATERIALS

CEL = CELLULOSE
FIB = FIBROUS-GLASS
OTHER = (Specify Type)

LAB NOTES: _____

SAMPLE NUMBER	DATE TAKEN	LAB ID.	ASBESTOS FIBERS				NON-ASBESTOS FIBERS			NON-FIBROUS MATERIALS TYPE
			% CHR	% AMO	% CRO	% OTHER	% CEL	% FIB	% OTHER	
AN69	05/03/90									
CB17	05/03/90									
CI07	05/03/90									
EA79	05/03/90									
HM76	05/04/90									
KM40	05/03/90									
LU46	05/03/90									
NR04	05/03/90									
UC96	05/03/90									

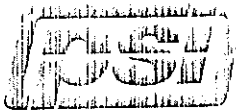
Allan Bullock Laboratory Analyst(s)'s Signature(s)
Date 10 July 1990

SAMPLE NUMBER	DATE TAKEN	LAB ID.	ASBESTOS FIBERS				NON-ASBESTOS FIBERS			NON-FIBROUS MATERIALS %
			% CHR	% AMO	% CRO	% OTHER	% CEL	% FIB	% OTHER	
UW19	05/04/90									
WQ15	05/03/90									
XE09	05/03/90									

Count 12

Allen Bulluck
Laboratory Analyst(s)'s Signature(s)

10 July 1990
Date



Professional Service Industries, Inc.
Pittsburgh Testing Laboratory Division

REPORT

Report To:	PSI - Milwaukee	Job No: 054-99096
Attn:	Jeff Grzeca	Lab No: 904625
Report For:	City of Milwaukee c/o Milwaukee Public Schools	Client No:
Project:	City of Milwaukee Buildings Batch #C 091	Report Date: 7/17/90

Dear Jeff:

Attached is the report of the bulk sample analysis for asbestos for the above referenced project. Analysis was done according to the EPA recommended method of Polarized light microscopy with dispersion staining. Results relate only to items tested. No part of this report may be reproduced except in full and only with the approval of PSI. The report may not be used to claim product endorsement by NVLAP or any government agency.

Respectfully Submitted,

PROFESSIONAL SERVICE INDUSTRIES, INC.
Pittsburgh Testing Laboratory Division

Joseph L. Kuchnicki
Joseph L. Kuchnicki
Laboratory Manager

JK/jam
Distribution: 2 Branch

JOB NUMBER: 054-99096
LAB NUMBER: 904625
ANALYSIS DATE: 7/10/90
REPORT DATE: 7/17/90

[illegible]

Other Fibers:
A. Fibrous glass
B. Cellulose
C. Synthetic
D. Other

N/D - None Detected
N/A - Not Analyzed

Allan Bullock
Allan Bullock

United States Department of Commerce
National Institute of Standards and Technology

NVLAP

Certificate of Accreditation

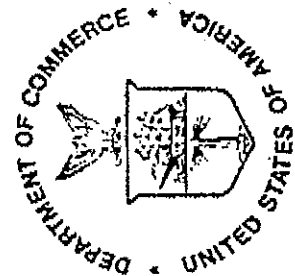
PROFESSIONAL SERVICE INDUSTRIES, INC.
PITTSBURGH TESTING LABORATORY DIVISION
PITTSBURGH, PA

is recognized under the National Voluntary Laboratory Accreditation Program
for satisfactory compliance with criteria established in Title 15, Part 7 Code of Federal Regulations.
Accreditation is awarded for specific services, listed on the Scope of Accreditation, for:

ASBESTOS FIBER ANALYSIS

April 1, 1993

Effective until



For the National Institute of Standards and Technology

National Institute
of Standards and Technology



National Voluntary
Laboratory Accreditation Program

SCOPE OF ACCREDITATION

ASBESTOS FIBER ANALYSIS

NVLAP LAB CODE 10 00

Professional Service Industries, Inc.
Pittsburgh Testing Laboratory Division
950 Poplar Street
Pittsburgh, PA 15220
Mr. Bruce Erdner Phone: 412-922-4000

Accreditation Renewal Date: April 1, 1990

NVLAP Test

Method Code

Test Method Designation

18/A01

40 Code of Federal Regulations Chapter I (1-1-87 edition)
Part 763, Subpart F, Appendix A, pages 293-299 or the current
U.S. Environmental Protection Agency method for the analysis
of asbestos in building materials by polarized light
microscopy.



B. I. Marks

For the National Institute of Standards and Technology



Department
of
Public Works

Bureau of
Bridges and
Public
Buildings

ASBESTOS MANAGEMENT PLAN REPORT

DEPARTMENT 565
BUREAU OF SANITATION

BUILDING 1721
AREA HEADQUARTERS - NORTH AREA I
7222 WEST FOND DU LAC AVENUE
MILWAUKEE, WISCONSIN 53218

August, 1990

GENERAL INTRODUCTION

On Friday, October 30, 1987, the United States Environmental Protection Agency (EPA) issued a final rule under section 203 of Title II of the Toxic Substances Control Act (TSCA), 15 U.S.C. 2643 that requires the nation's School Districts to identify asbestos containing materials (ACM) in their school buildings and that they use specially trained and certified persons to conduct the inspections. The law that enabled the EPA to issue these rules is called the "Asbestos Hazard Emergency Response Act" (AHERA). These rules and regulations are contained in 40 CFR Part 763, "Asbestos Containing Materials in Schools Rule", dated October 30, 1987.

In anticipation of issuance of a further rule by the EPA requiring the inspection and management of ACM in all governmental and public buildings, the City of Milwaukee has undertaken this task and has done so according to the rules and regulations of AHERA.

The terms "AHERA" and "40 CFR Part 763" will be used interchangeably throughout this report to describe the regulations under which the City of Milwaukee proposes to operate.

This report represents the results of the prescribed inspection for the building as specified herein-after.

The following page is a summary of the existence of ACBM for the specified building.



Department
of
Public Works

Bureau of
Bridges and
Public
Buildings

ASBESTOS MANAGEMENT PLAN REPORT

DEPARTMENT 565
BUREAU OF SANITATION

BUILDING 1721
AREA HEADQUARTERS - NORTH AREA I
7222 WEST FOND DU LAC AVENUE
MILWAUKEE, WISCONSIN 53218

August, 1990

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This report represents the results of the prescribed inspection for the building as specified hereinafter.

The following page is a summary of the existence of ACBM for the specified building.

ASBESTOS MANAGEMENT PLAN REPORT

S E C T I O N 1

**GENERAL ASBESTOS MANAGEMENT
(Departmental Statement Of Policy)**

STATEMENT OF POLICY

- A. It is the purpose of the City of Milwaukee, as stated in this manual, to provide a healthy and safe place of employment for all employees.
- B. To abide by all Federal, State and local regulations as they apply to the City of Milwaukee.
- C. To apply good work practices as dictated by location and/or circumstances.
- D. To exercise good judgment in application and training.

IMPLEMENTATION POLICY

This Management Plan will be implemented on or before July 29, 1991 and response actions as recommended and authorized will be completed in a timely fashion, within the limits of resources allocated to the tasks. The Designated Person will maintain and update the Management Plan to keep it current with ongoing O & M activities, response actions, periodic surveillance and reinspections.

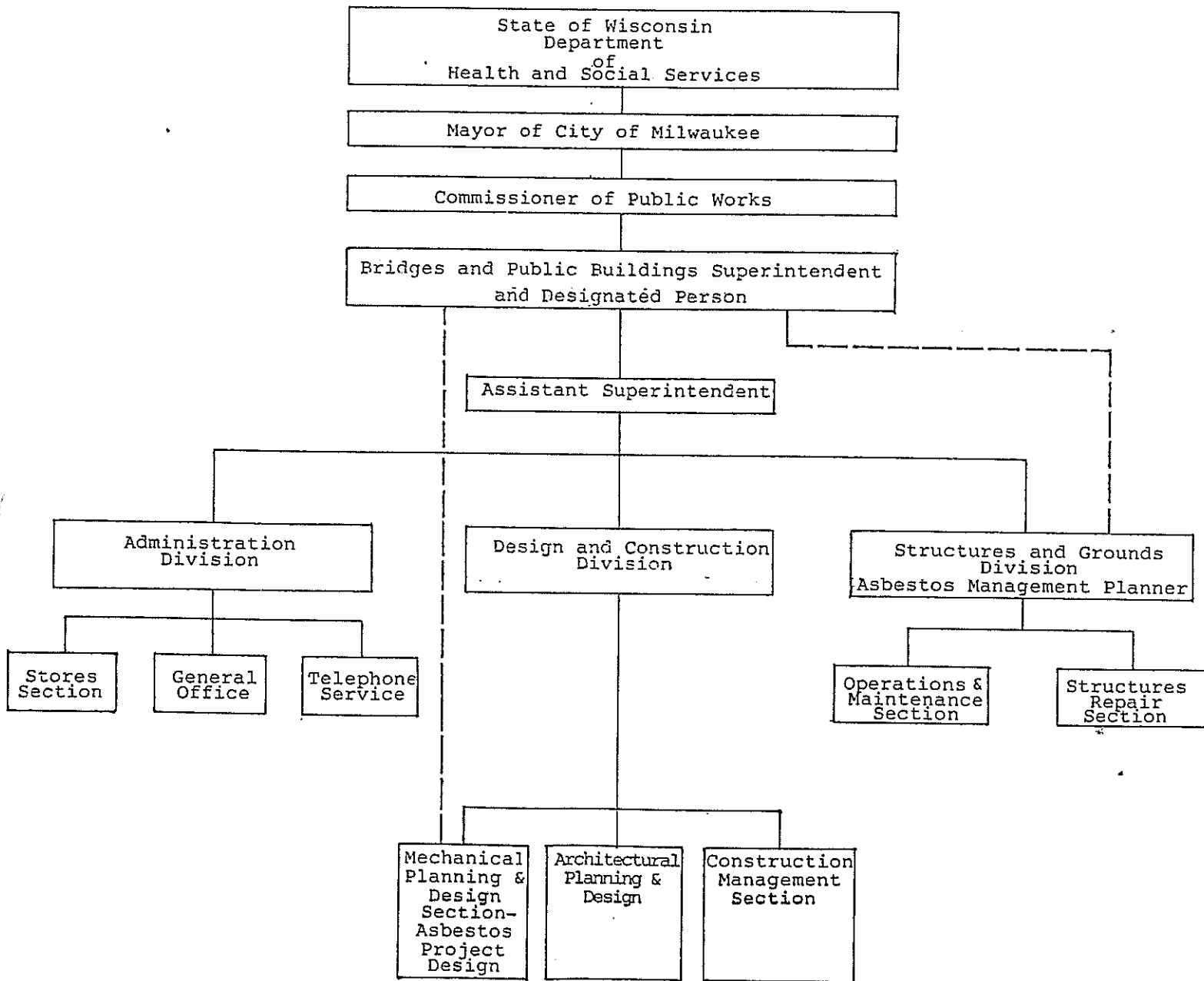
This program will be utilized to cover all costs, including abatement services, design services, employee training, medical surveillance, supplies and equipment.

Data will be maintained and will be available on a current basis for the protection of employees and the public.

Based upon the results of the building inspection by the Certified Inspector, and with additional input from the Designated Person, an accredited Management Planner has recommended appropriate response actions and estimated costs.

It must be understood that the estimated costs for any of the abatement actions as recommended are based upon best knowledge of average unit costs to provide similar work at the time of this report, and should be used as a guide. The prices will change with time and local market conditions, and the magnitude of such changes cannot be determined. In addition, the total abatement costs will be a function of the volume of work to be contracted and the amount of ACBM to be addressed at any one time.

LINE OF AUTHORITY FOR ASBESTOS MATTERS



----- AUTHORITY for ASBESTOS ISSUES

DESIGNATED PERSON

The Designated Person's duties include the following:

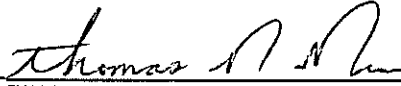
1. Implementation of Operation and Maintenance activities;
2. Training of Custodians, Cleaners and Maintenance Personnel;
3. Oversee Preventive Measures;
4. Posting of Warning Signs and Labels;
5. Work Request Review for potential asbestos hazard;
6. Management of Response Actions.

The following individual has been specified as the Designated Person for the City of Milwaukee buildings listed herein, and authorized to act for the City of Milwaukee in connection with Federal, State and local requirements:

Don M. Hiller, Superintendent
Bureau of Bridges and Public Buildings
Room 811 Municipal Building
841 North Broadway
Milwaukee, Wisconsin 53202

ACCEPTANCE STATEMENT

Based upon the receipt of assignment and authorization from Mr. Don M. Hiller, Superintendent, Bureau of Bridges and Public Buildings, City of Milwaukee, I do hereby certify that to the best of my knowledge and ability, the responsibilities as stipulated in Wisconsin Statutes HSS 159 and s. 140.06 have been or will be met.


THOMAS R. ROWE
Structures and Grounds Engineer

TRAINING

My training for this assignment includes a five day course, "Inspector/Management Planner", given by University of Wisconsin Extension at Madison, Wisconsin, July 25 - 29, 1988. The course included the following topics:

Health effects of asbestos;
Detection, identification and assessment of ACBM;
Options for controlling ACBM;
Federal and State Regulations;
Legal issues.

A copy of the certificate of attendance is on file at the Bureau of Bridges and Public Buildings (B & B).

LIST OF ABBREVIATIONS

The following abbreviations may appear in this management plan. Definitions for these abbreviations are the following:

ACBM	- Asbestos Containing Building Material (Greater than 1% Asbestos)
ACM	- Asbestos Containing Material (includes those materials not part of the building)
AH	- At the Hanger
AHERA	- Asbestos Hazard Emergency Response Act
AREA ID	- Room Number as shown on floor plan
B	- Barely (reachable)
B & B	- Bridges and Public Buildings
BC	- Building Comment (general)
C	- Cracked
CC	- Cracked Casing
CFR	- Code of Federal Regulations
D	- Damaged
DAM	- Damaged
DEB	- Debris
DG	- Dented Guard
EE	- Exposed End
EPA	- Environmental Protection Agency
FRI	- Friable (can be easily crushed with hand pressure)
H2O	- Damaged by water
HVC	- Part of Heating and Ventilating System
LEA	- Local Education Agency (The School District)
M	- Minor
MT	- Missing Tile
N	- No
NF	- Not Friable
OSHA	- Occupational Safety and Health Administration
O & M	- Operations and Maintenance Program or activities to keep asbestos in good condition
PC	- Peeled Covering or Casing
PD	- Potential for Damage
PSD	- Potential for Significant Damage
RCH	- In Reach
S	- Significantly
SD	- Significantly Damaged
SEE	- Indicates that the inspector wished this situation to be specifically SEEn by the management planner
SPD	- Potential for Significant Damage
VND	- Vandalized
Y	- Yes
1-7	- Number designating type and condition of asbestos: 1. Damaged thermal system insulation 2. Damaged friable surfacing ACBM 3. Significantly damaged friable surfacing ACBM 4. Damaged friable miscellaneous ACBM

5. ACBM with potential for damage
6. ACBM with potential for significant damage
7. Other friable ACBM or friable suspected ACBM.

LIST OF BUILDINGS

Following is a list of buildings, all of which have been inspected for ACBM, and for which a specific Management Plan (Volume 2) is on file at the individual building and at the Bureau of Bridges and Public Buildings.

000 GENERAL CITY BUILDINGS

1001 CITY HALL	200 EAST WELLS STREET
1002 MUNICIPAL BUILDING	841 NORTH BROADWAY
1004 LAKE TOWER BUILDING	4001 SOUTH 6th STREET
1011 NORTH DISTRICT FIELD STATION	8414 WEST FLORIST AVENUE
1028 FIREBOAT #1	105 NORTH WATER STREET
1108 809 BROADWAY BUILDING	809 NORTH BROADWAY
1189 ABANDONED FIRE BOAT STATION	101 WEST CHERRY STREET
1263 STORAGE GARAGE	1911 NORTH HUMBOLDT AVENUE
1610 CITY SAFETY ACADEMY	6680 NORTH TEUTONIA AVENUE
1634 SALT SHED	7717 WEST GOOD HOPE ROAD
1690 OFFICE BUILDING - SANITATION/FORESTRY HQ	6732 NORTH INDUSTRIAL ROAD
1719 URBAN PARK CONCESSION STAND	540 NORTH HARBOR DRIVE

094 MILWAUKEE FOURTH OF JULY COMMISSION

1389 QUONSET HUT	8423 SOUTH 51st STREET
------------------	------------------------

250 D.O.A. - PURCHASES DIVISION BUYING/ADMIN.

1012 BOARD OF PURCHASES WAREHOUSE	1016-28 NORTH HAWLEY ROAD
1129 FRONT QUONSET HUT	1016-28 NORTH HAWLEY ROAD
1141 REAR QUONSET HUT	1016-28 NORTH HAWLEY ROAD
1142 PUMP HOUSE	1016-28 NORTH HAWLEY ROAD

520 TRAFFIC ENGIN. & ELECTRICAL SERV. - ADMIN.

1063 QUONSET HUT	1500 WEST CANAL STREET
1064 STORAGE BUILDING	1500-A WEST CANAL STREET
1065 STORAGE BUILDING	1500-B WEST CANAL STREET
1102 QUONSET HUT	1100-C NORTH 60th STREET
1103 STORAGE SHED	1100-C NORTH 60th STREET
1104 STORAGE SHED	1100-C NORTH 60th STREET
1152 PLAYGROUND SHOP	1100-C NORTH 60th STREET
1159 SOUTH BRICK BUILDING	1540-A WEST CANAL STREET
1168 NORTH BRICK BUILDING	1540-B WEST CANAL STREET
1174 PARKING STRUCTURE	724 NORTH 2nd STREET
1183 MUNICIPAL SERVICE BUILDING	1540 WEST CANAL STREET
1188 TRAFFIC SIGN SHOP	1430-A WEST CANAL STREET
1257 MILWAUKEE-MICHIGAN PARKING STRUCTURE	535 NORTH MILWAUKEE STREET
1543 YARD OFFICE	1500-C WEST CANAL STREET
1546 MacARTHUR SQUARE PARKING STRUCTURE	841 NORTH 7th STREET
1590 STORAGE SHED	1100-C NORTH 60th STREET
1651 STORAGE BUILDING	1100 NORTH 60th STREET

530 BRIDGES & PUBLIC BUILDINGS - ADMINISTRATION

1144 BRIDGE SHOP	152 NORTH 6th STREET
1187 BOILER HOUSE	156 NORTH 6th STREET
1495 FIELD HEADQUARTERS	132 NORTH 6th STREET
1670 PAINTING & MATERIAL STORAGE BUILDING	130 NORTH 6th STREET
1700 GARAGE	134 NORTH 6th STREET

540 BUREAU OF ENGINEERS

1097 ENGINEERS TESTING LABORATORY	3811 WEST LINCOLN AVENUE
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565 BUREAU OF SANITATION

1034 CART REPAIR BUILDING	2669 NORTH 47th STREET
1107 LINCOLN AVENUE TRANSFER STATION	3921 WEST LINCOLN AVENUE
1125 REPAIR SHOP	1122 NORTH EDISON STREET
1140 AREA HEADQUARTERS - CENTRAL AREA II	739 WEST JUNEAU AVENUE
1267 STORAGE - CENTRAL AREA II	739 WEST JUNEAU AVENUE
1547 AREA HEADQUARTERS - NORTH AREA II	2931 WEST CAMERON AVENUE
1548 STORAGE - NORTH AREA II	2931 WEST CAMERON AVENUE
1549 GARAGE - NORTH AREA II	2931 WEST CAMERON AVENUE

LIST OF BUILDINGS, CONT'D.

565 BUREAU OF SANITATION

1550 SALT SHED - NORTH AREA II	2931 WEST CAMERON AVENUE
1551 AREA HEADQUARTERS - SOUTH AREA III	2363 SOUTH 35th STREET
1552 STORAGE - SOUTH AREA III	2363 SOUTH 35th STREET
1553 GARAGE - SOUTH AREA III	2363 SOUTH 35th STREET
1554 SALT SHED - SOUTH AREA III	2363 SOUTH 35th STREET
1605 AREA HEADQUARTERS - SOUTH AREA II	4031 SOUTH 6th STREET
1606 GARAGE - SOUTH AREA II	4031 SOUTH 6th STREET
1607 STORAGE - SOUTH AREA II	4031 SOUTH 6th STREET
1608 SALT SHED - SOUTH AREA II	4031 SOUTH 6th STREET
1614 AREA HEADQUARTERS - CENTRAL AREA I	1333 NORTH 33rd STREET
1615 GARAGE - CENTRAL AREA I	1333 NORTH 33rd STREET
1616 STORAGE - CENTRAL AREA I	1333 NORTH 33rd STREET
1617 SALT SHED - CENTRAL AREA I	1333 NORTH 33rd STREET
1630 AREA HEADQUARTERS - SOUTH AREA I	1912 WEST PIERCE STREET
1631 STORAGE - SOUTH AREA I	1912 WEST PIERCE STREET
1632 GARAGE - SOUTH AREA I	1912 WEST PIERCE STREET
1633 SALT SHED - SOUTH AREA I	1912 WEST PIERCE STREET
1646 GARAGE - CENTRAL AREA II	739 WEST JUNEAU AVENUE
1647 SALT SHED - CENTRAL AREA II	739 WEST JUNEAU AVENUE
1648 STORAGE BUILDING - CENTRAL AREA II	739 WEST JUNEAU AVENUE
1657 TRANSFER STATION	970 NORTH HAWLEY ROAD
1671 NORTHWEST SOLID WASTE TRANSFER STATION	6710 NORTH INDUSTRIAL ROAD
1691 SALT DOME	6732 NORTH INDUSTRIAL ROAD
1692 GARAGE	6732 NORTH INDUSTRIAL ROAD
1721 AREA HEADQUARTERS - NORTH AREA I	7222 WEST FOND DU LAC AVENUE
1733 SALT SHED - NORTH AREA I	7222 WEST FOND DU LAC AVENUE
1734 GARAGE - NORTH AREA I	7222 WEST FOND DU LAC AVENUE
1751 STORAGE/GARAGE - HEADQUARTERS - NORTH AREA I	7318 WEST FOND DU LAC AVENUE
1755 HARTUNG QUARRY OFFICE	3342 NORTH 100th STREET

571 STREET & SEWER MAINTENANCE - ADMINISTRATION

1061 STORAGE WAREHOUSE	8414 WEST FLORIST AVENUE
1120 ASPHALT PLANT	158 NORTH 6th STREET
1573 NORTHWEST STORAGE SHED	8414 WEST FLORIST AVENUE
1624 OIL STORAGE BUILDING	8414 WEST FLORIST AVENUE
1653 TICKET OFFICE	168 NORTH 6th STREET
1676 YARD OFFICE	126 NORTH 6th STREET
1677 STORAGE BUILDING	176 NORTH 6th STREET
1688 STORAGE BUILDING	180 NORTH 6th STREET

581 FORESTRY - ADMINISTRATION & SUPPORT

1099 NURSERY GREENHOUSE	8423 SOUTH 51st STREET
1182 NURSERY RESIDENCE	8423 SOUTH 51st STREET
1211 NURSERY YARD HOUSE	8423 SOUTH 51st STREET
1212 NURSERY GARAGE	8423 SOUTH 51st STREET
1213 NURSERY IMPLEMENT SHED	8423 SOUTH 51st STREET
1214 STORAGE BUILDING	8423 SOUTH 51st STREET
1216 TREE BARN	8423 SOUTH 51st STREET
1650 SERVICE CENTER	5230 WEST STATE STREET
1654 STORAGE	5230 WEST STATE STREET
1675 NORTHEAST HEADQUARTERS	1872 NORTH COMMERCE STREET
1693 GARAGE/STORAGE	6732 NORTH INDUSTRIAL ROAD
1699 SOIL STORAGE DOME	6732 NORTH INDUSTRIAL ROAD
1708 SOUTHEAST HEADQUARTERS	2024 WEST HOLT AVENUE
1720 AUXILIARY GREENHOUSE 1 (SOUTH OF GREENHOUSE)	8423 SOUTH 51st STREET
1722 QUONSET HUT	5230 WEST STATE STREET
1723 WEST STORAGE BUILDING	2024 WEST HOLT AVENUE
1724 NORTH STORAGE BUILDING	2024 WEST HOLT AVENUE
1745 STORAGE BUILDING	5230 WEST STATE STREET
1753 AUXILIARY GREENHOUSE 2 (SOUTH OF GREENHOUSE)	8423 SOUTH 51st STREET

591 MUNICIPAL EQUIPMENT - ADMINISTRATION

1111 SOUTHWEST SHOP	2657 SOUTH 31st STREET
1114 LINCOLN AVENUE SHOP	3921 WEST LINCOLN AVENUE
1178 NORTHWEST GARAGE	3025 WEST RUBY AVENUE
1527 SHED	2657 SOUTH 31st STREET
1528 SHED	2657 SOUTH 31st STREET
1674 CENTRAL REPAIR GARAGE	2142 WEST CANAL STREET

NOTIFICATION POLICY

LOCATION OF MANAGEMENT PLAN

A copy of the Management Plan for all listed buildings is on file at the Bureau of Bridges and Public Buildings in the Municipal Building located at 841 North Broadway, Milwaukee, Wisconsin, and each building's Management Plan is on file at that building. The Management Plans are available to the public for inspection without cost during normal working hours. Copies of the Management Plans may be obtained from the Bureau of Bridges and Public Buildings within a reasonable time, upon written request, for a fee, in accordance with City of Milwaukee practice.

NOTICES

Notices concerning the location of Management Plans to the staff and contractors will be addressed in the following manner:

1. **Staff:** Bulletin board notices will be posted by the Designated Person. Notifications will be sent to the Business Agent of Employee Unions by the Designated Person. Two hour awareness training will be provided to custodians, cleaners and maintenance workers.
2. **Contractors:** Notices will be sent with each Service Order for building maintenance and will be included in all specifications for contract work.

POSTING OF WARNING LABELS

The Designated Person shall arrange to have warning labels attached immediately adjacent to any friable and non-friable ACM which has potential for damage, during routine maintenance in areas, such as boiler rooms and air handling equipment rooms, of each building. Such material includes friable ACM which has been responded to by any means other than removal, for example, encapsulation, and other ACM for which no response action has been carried out. Offices, corridors, libraries, cafeterias, and other such areas are not considered to be routine maintenance areas.

All signs and labels will be displayed in prominent, readily visible locations, and will remain posted until the ACM which is labeled has been removed or rendered non-friable, and has no potential for damage. Warning labels and signs will be made readily visible.

ASSURANCE OF ACCREDITATION

Employees and supporting professionals selected by the City of Milwaukee to assist in the implementation of the Management Plan will be carefully selected to insure that their qualifications are adequate and that they are certified by the State. Selection criteria will consider Local and State requirements and include but not be limited to the following:

Designers of Abatement Projects:

- Four (4) day course; Asbestos Abatement Project Designer;

Supervisors of Abatement Projects:

- Four (4) day course; Supervision of Abatement Projects;

Management Planner:

- Five (5) day course; Inspector and Management Planner;

Inspector:

- Three (3) day course; Inspector;

Worker:

- Three (3) day course; Asbestos Abatement Worker.

ACTIVITY PLANS

EMPLOYEE TRAINING

Before implementing the operations, maintenance, and repair provisions of the Management Plan, the Designated Person will ensure that all members of its maintenance and custodial staff (custodians, electrical mechanics and heating and ventilating mechanics, etc.), who may work in a building that contains ACBM receive general awareness training of at least two (2) hours duration, whether or not they are required to work with ACBM. New custodial staff and maintenance employees who are hired after the implementation of the management plan will be trained within 60 days after commencement of employment or prior to an assignment which may cause disturbance of ACBM. Individual training records shall be maintained by the City of Milwaukee in the individual's personnel file.

Training shall include, but not be limited to:

- Information regarding asbestos and its various uses and forms;
- Information on the health effects associated with asbestos exposure;
- Locations of ACBM throughout each building in which they work;
- Name and telephone number of the Designated Person and the location of the Management Plan;
- General asbestos safety and regulatory framework.

The City of Milwaukee will ensure that members of its maintenance and custodial staff who will disturb ACBM will receive the three day Asbestos Abatement Worker courses.

PERSONAL PROTECTION EQUIPMENT

Personnel who are required to disturb ACBM shall be instructed in the proper selection and use of respirators and other protection equipment. The personal protection equipment will be provided by the City of Milwaukee at no charge to the employee. Personal protective equipment will be properly maintained by the employee and periodically inspected by the City of Milwaukee. Appropriate records will be kept by each Department, Bureau or Agency in the individual's personnel file.

MEDICAL SURVEILLANCE

Prior to initial use of respirators, workers will have completed the medical monitoring requirement of the EPA Worker Protection Rule and OSHA regulations at City of Milwaukee expense. Medical records will be maintained by the City of Milwaukee in the individual's personnel file for thirty (30) years following termination of employment. This examination shall consist of:

- Medical history;
- Cardio-Pulmonary function evaluation;
- Forced Expiratory Volume Test (FEV) (pulmonary function test);
- Chest x-ray as determined by physician.

ABATEMENT CONTRACT GENERAL BIDDING REQUIREMENTS

Firms which are selected by the City of Milwaukee to complete response actions will be reviewed and selected based on consideration of the following requirements:

- Prior experience with similar projects;
- Equipment and worker qualifications;
- Financial stability;
- Safety record;
- State registrations;
- Ability to meet project schedules;
- Price;
- Insurance and Bonding;
- Disadvantaged Business Enterprise Certification.

CONFLICTS OF INTEREST

There exists a possibility for a conflict of interest between the work being performed by the

design professional and the contractor performing the response actions. For this reason, management planning and project design shall be performed by the City of Milwaukee or a firm independent of the abatement contractor. Similarly, the air monitoring and clearance testing firms must be independent of the contractor conducting the response action.

GENERAL EMERGENCY PROCEDURES

In the event of emergencies related to asbestos materials, the Designated Person will be immediately notified. This person will direct steps to protect the building's occupants by preparing for the following:

- Isolation;
- Evacuation;
- Emergency response procedures as necessary;
- Shut off of air handling systems;
- Establishment of a restricted area;
- Containment of asbestos debris and fibers;

For asbestos response actions which involve small scale, short duration activities, the City of Milwaukee may choose to utilize City personnel. A list of individuals trained and qualified to conduct such response actions in accordance with the regulations will be maintained by the City.

PERIODIC SURVEILLANCE

After the Management Plan is in effect, the Designated Person will schedule and direct periodic surveillance in each building that contains ACBM. Periodic surveillance shall mean every three years or

after each major renovation or change in occupancy. Surveillance shall be performed by a certified inspector or supervisor familiar with the building, and able to accurately perceive any changes in the condition of all ACBM that is identified in the Management Plan. The date of the surveillance, his or her name, and any observable changes in the condition of the material (e.g., water damage) will be recorded. A copy of this information will be submitted to the Designated Person, who will include these records in the Management Plan.

RESPONSE ACTIONS

All response action plans including removal, encapsulation, enclosure, or repair (other than small-scale, short-duration repairs) must be designed and conducted by persons accredited to design and conduct response actions. Response actions are contained in the building's specific management plan.

The Designated Person is responsible for ensuring that asbestos waste materials are transported and disposed of properly after response actions. The transport and disposal of asbestos waste will meet the requirements in the EPA publication "Asbestos Waste Management Guidance" and Appendix D of 40 CFR 763 Part E and any other applicable regulations.

COMPLETION OF RESPONSE ACTIONS

At the conclusion of any action to remove, encapsulate, or enclose ACBM or material assumed to be ACBM, a person appointed by the Designated Person will visually inspect each functional space where such action was conducted to determine whether the action has been properly completed. In addition, a person appointed by the Designated Person will arrange to collect samples using aggressive sampling to monitor air for clearance after each removal, encapsulation, and enclosure project involving ACBM, except for projects that are of a small-scale, short duration.

The Designated Person will have air samples analyzed by laboratories accredited to conduct such analysis.

OPERATION & MAINTENANCE (O & M) POLICIES AND PROCEDURES

Whenever any friable ACBM or nonfriable ACBM with the potential for damage is present in a building, the Designated Person will initiate O & M activities. Any material identified as non-friable ACBM will be treated as friable for the purposes of operations and maintenance when the material is about to become friable as a result of activities performed in the building.

Whenever an O & M activity may disturb friable ACBM, the Designated Person will protect building occupants by enforcing the following procedures:

- Restrict entry into the area by persons other than those necessary to perform the O & M action;
- Post signs to prevent entry into the area by unauthorized persons;
- Shut off or temporarily modify the air-handling system and restrict other sources of air movement;
- Use work practices or other controls to inhibit the spread of any released fibers;
- Clean all fixtures or other components in the immediate work area.
- Seal the asbestos debris and other cleaning materials in a leak-tight container

and dispose of properly.

FIBER RELEASE EPISODES

O & M activities resulting from minor fiber releases from friable ACBM (falling or dislodging of less than three [3] square or linear feet) will be responded to as required in the regulation Appendix B of Subpart E 40 CFR 763.

Major fiber release episodes (more than three [3] square or linear feet of friable ACBM) or maintenance activities other than small-scale, short duration, are not considered O & M activities. These activities will be designed and conducted by persons accredited to design and conduct response actions.

RECORDKEEPING POLICIES AND PROCEDURES

Complete and accurate records are necessary to adequately document the compliance progress of the City of Milwaukee in controlling the asbestos inventory. The recordkeeping requirements are the means by which the public, administration, and the government can monitor the progress of the activities designed to reduce the asbestos risk to the building population.

1. Plan Development and Scope:

The City of Milwaukee will have a Management Plan prepared by an accredited Management Planner which addresses, in detail, how the City will proceed to eliminate asbestos hazards.

2. **Plan Maintenance and Updating:**

The City of Milwaukee is required to maintain and update its Management Plan to reflect any and all operations and maintenance activities, periodic surveillance, inspection and reinspection, and all response actions. The plan is designed to be a dynamic document which accurately reflects any and all asbestos control activities undertaken by the City.

3. All records which become part of the Management Plan shall be kept in designated locations.
4. Records must be maintained for all preventive measures and response actions taken for friable and nonfriable ACBM and must include the following information:
 - a. Records will be maintained for actions taken including methods used, locations, start and completion dates of work, names and addresses of all contractors. If ACBM's were removed, the name and location of the storage or disposal site of asbestos-containing materials.
 - b. Name and signature of any person collecting any air sample required to be collected at the completion of the response action, locations where samples were taken, date of collection, name and address of the lab analyzing the samples, date of analysis, results of analysis, method of analysis, name and signature of person performing the analysis and a statement that the lab is accredited.

- c. Documentation of personnel trained under the training requirements for custodial personnel, etc., including:
 - Name, job title and date of training;
 - Location of training and number of hours completed.
- d. Documentation of each time periodic surveillance is conducted, including:
 - Name of individual conducting surveillance;
 - Any changes in material condition.
- e. When small-scale, short-duration maintenance activities are performed, the following must be documented:
 - Name of each person performing the operation or name of contractor.
 - Start and completion date of activity;
 - Locations where the activity occurred;
 - Description of the activity, including preventive measures used;
 - If ACBM was removed, the name and location of the storage

or disposal site.

f. When a major asbestos activity is performed, the following must be documented:

- Name, signature, state of accreditation and certificate number of each person performing a design activity;
- Name, signature, state of accreditation and certificate number of each person performing the abatement activity or name of contractor;
- Start and completion dates of the activity;
- Locations where the activity occurred;
- A description of the activity, including preventive measures used;
- If ACBM's were removed, the name and location of storage or disposal site.

h. For each fiber release episode:

- Date and location of the episode;
- Method of repair, preventive measures or response action taken;
- Name of each person performing the work;

- If ACBM's were removed, the name and location of storage or disposal site.

SAFETY RULES AND REGULATIONS

EMPLOYEE RESPONSIBILITY

It is the responsibility of the employee to perform his duties in a safe manner to protect himself as well as other people and the environment, and to notify the Designated Person in case of asbestos involvement.

DISCIPLINARY POLICIES AND PROCEDURES

Employees who violate these policies and procedures may be subject to disciplinary action. Such violations may be considered willful misconduct.

CONTRACTORS

Contracts and Service Orders for the building will include notice of responsibility to review the Management Plan for potential asbestos involvement prior to initiation of work.

The Bureau of Bridges and Public Buildings for the City of Milwaukee hereby accepts this document and directs all affected employees to follow the policies and procedures as outlined.

SUPERINTENDENT

BUREAU OF BRIDGES AND PUBLIC BUILDINGS

DEPARTMENT OF PUBLIC WORKS

BY: Don M. Fuller, 5-29-91
NAME DATE

ASBESTOS MANAGEMENT PLAN REPORT

S E C T I O N 2

SPECIFIC BUILDING ASBESTOS MANAGEMENT

SECTION 2 INTRODUCTION

This section of the report is the specific building portion of the Management Plan. It contains information relative to this building only. (Policies, procedures, and other information that apply to all of the buildings and facilities within a City of Milwaukee Bureau or Department are contained in report Section 1 - General Asbestos Management [Departmental Statement Of Policy].)

This section of the document must be constantly updated in order to remain current and effective. In order to ensure that only current information is available, copies will be maintained for review at the following location only:

Bureau of Bridges and Public Buildings
Municipal Building, Room 311
841 North Broadway
Milwaukee, Wisconsin 53202

Copies may be viewed by appointment only. To make an appointment, call (414) 278-3403.

For the convenience of the reader, as stated above, General Asbestos Management is covered in Section 1.

Reports containing inspection data, bulk sample analysis results, and response options for asbestos-containing building materials can be found in the following subsections.

Each subsection is prefaced with a description of the various reports associated with it.

August 17, 1990

SPECIAL INSTRUCTIONS

AREA HQ/N AREA 1

This section is provided for the management planners to add any specific comments about the building.

August 17, 1990

CERTIFICATION & SURVEILLANCE STATEMENTS

On the following pages can be found the certification statements (attestations) for Section 2 of this Asbestos Management Plan Report, which cover the Inspection for, Assessment of, and Bulk Sampling of any suspected ACBM in the building, and the Response Options prepared for any proven or assumed ACBM.

The re-inspection certification and surveillance inspection statement/form are provided for later use.

August 17, 1990

ASBESTOS INSPECTION CERTIFICATION STATEMENT

for
City of Milwaukee
Bldg. No. 1721
AREA HEADQUARTERS - NORTH AREA I
7222 WEST FOND DU LAC AVENUE
MILWAUKEE, WISCONSIN 53218

I (We), the undersigned, do hereby certify that the building listed above was inspected for ACBM by me (us), or under my (our) direct supervision; that any Bulk Samples of suspected ACBM were collected by me (us); and that assessments based on the ACBM's condition were made by me (us)..

All inspection, sampling, or assessments were conducted pursuant to the USEPA's "Asbestos-Containing Materials In Schools" rule as ammended in AHERA (40 CFR Part 763), dated October 30, 1987.

Attempts to inspect behind surfaces were limited to moveable surfaces such as ceiling tile, electrical switch/receptacle cover plates, or access panels. Non-destructive sampling techniques (to maintain the material's integrity) were generally employed.

The information contained in this report is, to the best of my (our) knowledge, accurate.

INSPECTOR(S):

EMPLOYED BY: MILWAUKEE PUBLIC SCHOOLS
FACILITIES & MAINTENANCE SERV.
1124 NORTH 11TH STREET
MILWAUKEE, WISCONSIN 53233

DENNIS J. NOWAK

Signature

Date

Date Bldg. Inspection Completed:

05/04/90

State of Accreditation & Number:

WI I-353

August 17, 1990

MANAGEMENT PLANNERS CERTIFICATION STATEMENT
for
City of Milwaukee
Bldg. No. 1721
AREA HEADQUARTERS - NORTH AREA I
7222 WEST FOND DU LAC AVENUE
MILWAUKEE, WISCONSIN 53218

We, the undersigned, acting as a management planning team, do hereby certify that the response actions for the City of Milwaukee building listed above, were developed and recommended by us.

The response actions were developed in accordance with the requirements of the United States Environmental Protection Agency's "Asbestos Materials In Schools" rule as amended in the "Asbestos Hazard Emergency Response Act (AHERA)/40 CFR Part 763, dated October 30, 1987.

The responses contained in this report represent, to the best of our knowledge, the best possible courses of action, and are based on the actual inspection, sampling, and assessment information received, and, in some cases, field checks performed by one or all of us.

MANAGEMENT PLANNERS: EMPLOYED BY: MILWAUKEE PUBLIC SCHOOLS
FACILITIES & MAINTENANCE SERV.
1124 NORTH 11TH STREET
MILWAUKEE, WISCONSIN 53233

THOMAS J. SHOJNACKI


Signature Date 2/20/92

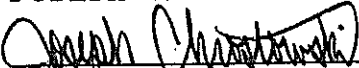
Date Bldg. Inspection Completed:

05/04/90

State of Accreditation & Number:

WI MP-438

JOSEPH CHROSTOWSKI


Signature Date 2/18/92

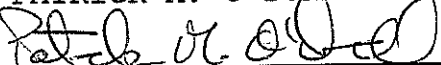
Date Bldg. Inspection Completed:

05/04/90

State of Accreditation & Number:

WI MP-473

PATRICK M. O'DONNELL


Signature Date 2/20/92

Date Bldg. Inspection Completed:

05/04/90

State of Accreditation & Number:

WI MP-437

August 17, 1990

RE-INSPECTION CERTIFICATION STATEMENT
for
City of Milwaukee
Bldg. No. 1721
AREA HEADQUARTERS - NORTH AREA I
7222 WEST FOND DU LAC AVENUE
MILWAUKEE, WISCONSIN 53218

I hereby certify that the City of Milwaukee building listed above was reinspected for Asbestos Containing Building Materials (ACBM) by me or under my direct supervision. The building was inspected in accordance with the requirements of the U.S. Environmental Protection Agency's "Asbesto-Containing Materials in Schools" rule as ammended in AHERA/40 CFR Part 763 dated, October 30, 1987.

(Print Name)

(Signature)

(Date) (Accreditation No.) (St.)
Any additions, deletions, or other revisions to this management plan as a result of this reinspection are inserted in this book and are printed on _____ (color) paper for easy recognition.

I hereby certify that the City of Milwaukee building listed above was reinspected for Asbestos Containing Building Materials (ACBM) by me or under my direct supervision. The building was inspected in accordance with the requirements of the U.S. Environmental Protection Agency's "Asbesto-Containing Materials in Schools" rule as ammended in AHERA/40 CFR Part 763 dated, October 30, 1987.

(Print Name)

(Signature)

(Date) (Accreditation No.) (St.)
Any additions, deletions, or other revisions to this management plan as a result of this reinspection are inserted in this book and are printed on _____ (color) paper for easy recognition.

August 17, 1990

SURVEILLANCE INSPECTION STATEMENT
for
City of Milwaukee
Bldg. No. 1721
AREA HEADQUARTERS - NORTH AREA I
7222 WEST FOND DU LAC AVENUE
MILWAUKEE, WISCONSIN 53218

I, the last person to sign this list, have made a surveillance inspection of the City of Milwaukee building listed above. I visually inspected all materials in all areas that are identified in this report as ACBM. I have also noted any changes in the conditions of the ACBM on the repair requisitions listed below. These requisitions have been forwarded to the appropriate authorities.

NAME	DATE	REPAIR REQUISITION NUMBERS		
Sign _____				
Print _____				
Sign _____				
Print _____				
Sign _____				
Print _____				
Sign _____				
Print _____				
Sign _____				
Print _____				
Sign _____				
Print _____				
Sign _____				
Print _____				
Sign _____				
Print _____				

GENERAL BUILDING INFORMATION

The Building Construction Report on the following page describes general aspects of the building's construction which are essential in determining Building Zones (based on actual year of construction of, or renovations and/or additions to a building) and the specific Homogeneous Zones (building materials) within a given Building Zone.

Note:

Data for both "Building Type/Function" and "Construction Classification" was obtained from the City of Milwaukee's "Building Property Insurance Input Forms".

August 17, 1990

BUILDING CONSTRUCTION REPORT

for

Bldg. No. 1721
AREA HEADQUARTERS - NORTH AREA I
7222 WEST FOND DU LAC AVENUE
MILWAUKEE, WISCONSIN 53218

Dept. No. 565
BUREAU OF SANITATION

Year Constructed,
Building Function/Type,
Construction Classification,
& Total Area/Square Footage

Building
Modifications
History
Year and Type

1984
ADMINISTRATIVE OFFICE
STEEL FRAME WITH BRICK OR BLOCK EXTERIOR WALLS
2,556

REPORT 6
BLDGINFO

Page 1

BUILDING HOMOGENEOUS ZONES

The following report lists all building materials suspected of containing asbestos, sorted alpha-numerically by their respective H-Zone Codes, and any special notations regarding same.

Homogeneous Zone Photographs can be found in Appendix B.

Definition:

A "Homogeneous Zone" (H-Zone) is a term applied to a specific building material which is suspected as being an ACBM. AHERA uses the term "Homogeneous Area" and defines it as an area (material) which is similar throughout in terms of color, texture, and date of material application, installation, or construction.

H-Zone Codes:

Each Homogeneous Zone has been assigned a unique code. These codes are comprised of three basic elements as follow:

1. "M", "S", or "T" prefixes are first applied to group the material into one of three basic categories as defined by AHERA.

MISCELLANEOUS MATERIAL (M)

Interior building material on structural members of fixtures, such as floor and ceiling tiles.

SURFACING MATERIAL (S)

Material that is sprayed-on, troweled-on, or otherwise applied to surfaces, such as acoustical plaster on ceilings and fireproofing materials on structural members, or other materials on surfaces for acoustical, fireproofing, or other purposes.

THERMAL SYSTEMS INSULATION (T)

Material applied to pipes, fittings, boilers, breaching, tanks, ducts, or other interior structural components to prevent heat loss or gain, or water condensation, or for other purposes. (Some miscellaneous materials are grouped in this category, i.e., flexible fabric duct connectors, because of their relation to plumbing, mechanical, and electrical building systems.)

2. When the building was constructed or remodeled in phases or different years Building Zone designations ("Z1", "Z2", etc.) are assigned after the prefix. These "Z" numbers are further explained in the Homogeneous Zones definitions Report notes.
3. Abbreviations or acronyms then follow a hyphen and complete the code. This element is generally consistent from building to building such as "CT" for ceiling tile and "FT" for floor tile. If more than one type of a ceiling tile, etc. is inventoried, the H-Zones are further distinguished by numerals (I.e., "CT1", "CT2", etc.)

ACBM Disposition:

The ACBM Disposition indicates whether the H-Zone has

been sampled and was subsequently analyzed positive (PROVEN), or the H-Zone has been sampled and was subsequently analyzed negative (NON-ACBM), or the H-Zone was not sampled and must be assumed to contain asbestos (ASSUMED).

Materials not suspected of containing asbestos (see below) are exempt from inspection. With the exception of inlaid carpeting and carpet tiles these were not inventoried. These two materials appear in the report as having an ACBM Disposition of "(NON-SUSPECT)".

Descriptions:

The H-Zones descriptions are formulated for readability, and generally read as follows:

"GENERIC MATERIAL NAME [Trade Name or Material Composition if applicable], specifics, i.e., material sizes, colors, etc."

Non-Suspect Materials or

Materials Otherwise Exempted from Inspection:

Following is a listing of materials which were not inventoried and do not appear in this report. **Bolded Items** may contain asbestos but are not considered building materials.

Concrete (Includes Poured Concrete, Concrete Block, and Pre-Cast Concrete Structural Members)

Cinder Block

Blackboards (Includes All Chalkboards & Bulletin Board)

Pressed Wood (Includes All Wood Products)

Wall or Ceiling Carpet (Floor carpeting itself is a non-suspect material but could contain asbestos fibers from an adjacent ACBM in friable condition.)

Exterior Roofing Shingles

Auditorium Curtains

Chemical Lab Table and Desk Tops

Stored Suspected ACBM

Fire Blankets

Glass

Steel (Includes All Metal Products)

Brake Shoes

Kiln Bricks & Cement

Bunsen Burner Pads

Chemical Lab Gloves

Fiberglass Products

Foam Glass Products

Rubber Products

Suspected ACBM Not Generally Inventoried:

All **Mastics, Caulking, and similar construction adhesives (i.e., Drywall Joint Compound) or sealants.**

Interior Boiler and Incinerator Insulation or Components such as Gaskets, Firebrick, Cast Refractory Material or Wearing Surfaces, etc.

Electrical Systems Insulating Material for Fixtures, Wiring, Panels Boards, Switchgear, etc.

HOMOGENEOUS ZONES DEFINITIONS REPORT
for
City of Milwaukee
Bldg. No. 1721
AREA HEADQUARTERS - NORTH AREA I
7222 WEST FOND DU LAC AVENUE
MILWAUKEE, WISCONSIN 53218

H-Zone Code	ACBM Disposition	Homogeneous Zone/ Building Material Description
Note #1:		A Homogeneous Zone is a building material which is similar in terms of color, texture, and date of construction, installation, or application.
Note #2:		H-Zone Codes prefixed w/'M' indicate MISCELLANEOUS materials.
Note #3:		H-Zone Codes prefixed w/'S' indicate SURFACING materials. (Note: No suspect SURFACING ACBM was found in the building!
Note #4:		H-Zone Codes prefixed w/'T' indicate THERMAL SYSTEM INSULATION materials or materials associated with plumbing, mechanical (HVAC), and electrical systems.
Note #5:		H-Zone Code alpha-numerical characters following the hyphen are generally acronyms of the building material specified in the Homogeneous Zone/Building Material Description.
Note #6:		All Thermal Pipe and Pipe Fitting Insulation throughout this building is non-suspect ACBM (Non-Asbestos containing Fiberglass with Zeston/PVC fitting covers).
M-CBM	(NON-ACBM)	CONCRETE BLOCK MORTAR
M-CR	(NON-ACBM)	CERAMIC TILE, 6in.x 6in. black & GROUT
M-CT1	(NON-ACBM)	CEILING TILE, 2ft.x 2ft. etched pressboard
M-CT2	(NON-ACBM)	CEILING TILE, 2ft.x 2ft. vinyl covered gypsum panels
M-FTL	(ASSUMED)	FLOOR TILE, 12in.x 12in. off-white w/gray streaked accents & MASTIC
M-FTRS	(ASSUMED)	FLOOR TILE REDUCING STRIPS
M-MT	(NON-ACBM)	MOSAIC TILE, 2in.x 2in. gray & GROUT
M-VB	(NON-ACBM)	VINYL BASE, 6in. black
T-DC	(NON-ACBM)	DUCT CONNECTORS, black vinyl

REPORT-9
HZONEDEF

August 17, 1990

H-Zone Code	ACBM Disposition	Homogeneous Zone/ Building Material Description
T-FRN	(ASSUMED)	FURNACE

REPORT-9
HZONEDEF

Page 2

INSPECTION RESULTS/RESPONSE OPTIONS

This subsection contains building floor plans and reports detailing inspection results and appropriate response options for managing ACBM.

Area ID Location Floor Plans:

The floor plans are basically schematic, indicating locations of walls, door openings, etc. Some architectural details such as windows, relative wall thicknesses, plumbing fixtures, etc. may also be included.

Their basic function is to establish each "Area" (Room) of the building and indicate the "Area ID" (Room Number).

The term "AREA" equates to AHERA's term, "FUNCTIONAL SPACE", and is defined as a room, or group of rooms (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.

An "AREA ID" is used to uniquely identify each area within the building. In some instances the Area ID may not match the actual Room Number, Name, or accepted designation.

Note: The reports contained in this sub-section should always be read in conjunction with the Area ID Location Floor Plans.

All-Area

(All Inventoried Areas & Homogeneous Zones Report):

A summary of all suspected ACBM with related disposition (Proven, Assumed, Non-ACBM, or Non-Suspect) and inspector's comments, listed by the Areas in which they can be found.

Pos-Hzon

(ACBM [All Positive H-Zones] / Response Option Summary:

A summary of only proven or assumed ACBM with related disposition (Proven or Assumed), and the Areas in which they are found, listed (sorted) by the H-Zone Code of the ACBM. Friability, existence of damage, AHERA category numbers (friable ACBM assessments [see * below], potential for future damage factors (accessibility, air erosion, and vibration), existence of suspected ACBM debris, response options (see ** below), inspector's comments and quantities of materials are also listed.

Note: If the report (Pos-Hzon) is not present, no suspected ACBM were proven after analysis, or no suspected ACBM were determined upon initial inspection.

*** AHERA Category/Friable ACBM Assessments:**

AHERA requires inspectors to assess the condition of all friable ACBM. For the purposes of this report, damaged thermal insulation will be considered friable. This assessment categorizes the material in question into seven classifications. Those seven are:

1. Damaged or significantly damaged thermal system insulation ACM.

This category is selected for 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, waterstained, gouged, punched, 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.

2. Damaged friable surfacing ACM.

This category is selected for friable surfacing ACM which has deteriorated or sustained physical injury such that the internal structure (cohesion) of the material 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 damage.

3. Significantly damaged friable surfacing ACM.

This category is selected for damaged friable surfacing ACM in a functional space where the damage is extensive and severe.

4. Damaged or significantly damaged friable miscellaneous ACM.

This category is selected for friable miscellaneous asbestos containing material which has deteriorated or sustained physical injury such that the internal structure (cohesion) of the material is inadequate or, if applicable, which has determined 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 damage.

5. ACBM with potential for damage.

This category is selected for ACBM with potential for damage which has the following circumstances:

- 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 operations and

maintenance practices, changes in occupancy, or recurrent damage.

6. ACBM with potential for significant damage.

This category is selected for ACBM with potential for significant damage which has the following circumstances:

- 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) 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.

7. Any remaining friable ACBM or friable suspected ACBM.

This category is selected for any remaining friable ACBM or friable suspected ACBM that was not covered by the above.

**** Response Options (Response Actions):**

A response action is a method, including removal, encapsulation, enclosure, repair, and operations and maintenance (O&M), that protects human health and the environment from friable ACBM.

The Pos-Hzon/Response Option Summary Report usually lists "Standard Response Options" ("O&M" or a "concatenated code" as deciphered below [see *** below]).

The materials that would hypothetically remain in this building after nonstandard recommended response actions are completed are those that show O&M as a response action. Current conditions are maintained via the O&M program until either accomplishment or subsequent review of resource availability changes.

Some of the response options involve minor repair, i.e. re-canvas the pipe insulation on an elbow. Those items have been reviewed on a room by room basis. An "O&M Repair Work Order Report" has been specifically prepared to address those situations as soon as possible. It addresses specific situations that require action other than simple inspection. The report, if applicable, has been issued (under separate cover) to the appropriate authorities for implementation.

Occasionally a response option may involve activities beyond what is normally included in the O&M program. Those instances are addressed separately by writing up a Scope of Work (SCOPE). A SCOPE may involve one or more ACBM (Proven or Assumed H-Zones) in one or more areas within a building (See "Scope Report" below).

***** Standard Response Options:**

The following notations are utilized in the management plan to indicate a given response option. A complete

option is the concatenation of all listed option codes.

For example, a response code of F1R would mean that the appropriate response would be to do what is specified for a friable damaged or significantly damaged thermal system insulation within reach.

CODE OPTION DESCRIPTION

- F FRIABLE**
(When dry, may be crumbled, pulverized, or reduced to powder by hand pressure)
Repair, encapsulate or enclose to reduce potential for fiber release and protect human health and environment.
- 1 AHERA CATEGORY 1**
a. At least immediately repair the damaged area.
b. Remove the damaged material if it is not feasible, due to technological factors, to repair the damage.
c. Maintain all thermal system ACM and it's covering in an intact state and undamaged condition.
- 5 AHERA CATEGORY 5**
At least implement an operations and maintenance (O&M) program, as described under AHERA 763.91.
- 6 AHERA CATEGORY 6**
a. Implement an O&M program, as described under AHERA 763.91.
b. Institute preventive measures appropriate to eliminate the reasonable likelihood that ACM or it's covering will become significantly damaged, or delaminated.
c. Remove the material as soon as possible if appropriate preventive measures cannot be effectively implemented, or unless other response actions are determined to protect human health and the environment. Immediately isolate the area and restrict access if necessary and substantial endangerment to human health or the environment.
- R REACHABLE (Accessible)**
(Generally below 7 feet above the finished floor)
Monitor ACBM within reach for a greater potential for disturbance as opposed to material beyond reach.
- D DEBRIS**
(Pieces of ACBM including dust, that can be identified by color, texture or composition by accredited inspectors to be ACM)
Remove debris using appropriate cleaning methods and investigate it's origin. Institute preventive measures appropriate to eliminate a reoccurrence.
- V VIBRATION**
(ACBM has been damaged or is subject to damage due to the influence of vibration caused by machinery, etc. or other source)
Monitor ACBM subject to the influence of vibration

for a greater potential for disturbance as opposed to material not subjected to vibration. Institute possible preventive measures of reoccurrence.

H WITHIN AN HVAC SYSTEM

(The material is physically located within, passes through, or is in close proximity to air movement created by a building ventilation system)
Consider for removal as resources become available.

SCOPE Report (Scoped Response Option Form):

As stated above, a response options involving activities beyond "O&M" program are addressed separately by Scope of Work (SCOPE). A SCOPE may involve one or more ACBM (Proven or Assumed H-Zones) in one or more areas within a building.

The first step in completing the SCOPE is to review the hazard potential of ACBM's that are the most difficult to O&M throughout the City. An algorithm detailing material specifics is filled out to rate the worst condition to the best condition. A team of certified management planners, and City administrators review the algorithms to determine those conditions that require heightened response option development.

The worst conditions other than emergencies, are divided into response options detailing other work involved and cost estimates. The response options are reviewed for budget approval and implementation as resources are made available.

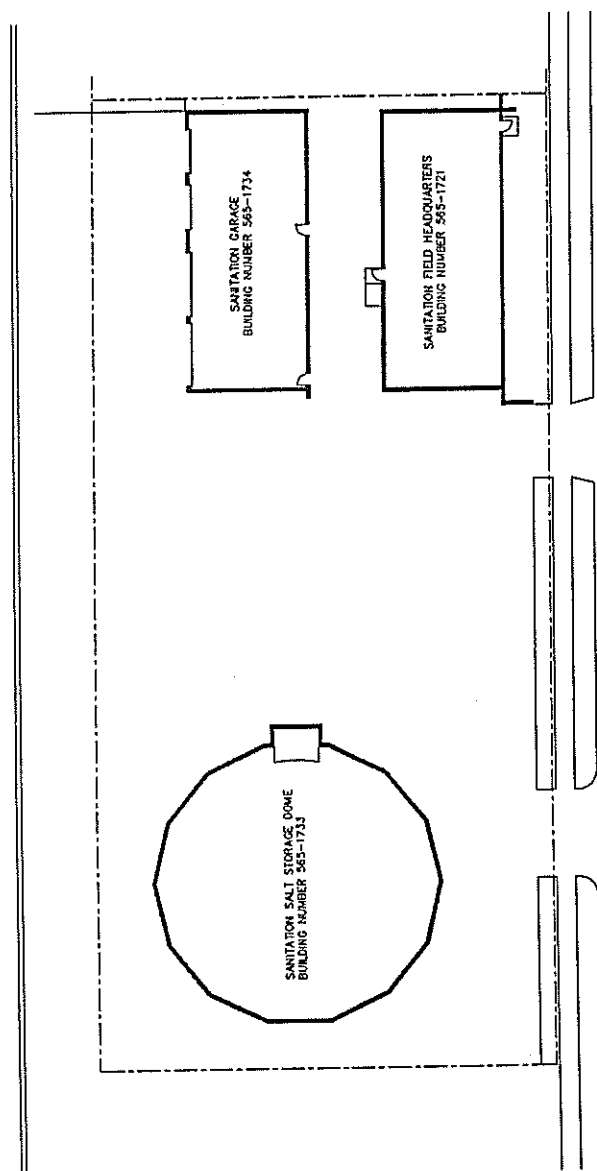
These scopes of work are not full fledged abatement project designs. They simply describe one or more options of work that may be done to correct a particular situation. A copy of the Management Planner's Worksheet is generally included with the Scope Report.

Note: If this report is not present, no ACBM required a response option beyond O&M or repairs.

Emergency Response Actions:

Emergencies are handled on a case by case basis. If during inspection, the accredited inspector observes an especially hazardous or potentially hazardous situation, the details (areas affected, specific material, and nature of hazard) are written up on a special "hot sheet" memo form and are submitted to the appropriate authorities for immediate action. These situations are still reflected in the appropriate subsections of the management plan as original inspection conditions.

August 17, 1990

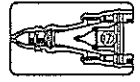


SANITATION HQ. AREA NORTH 1 - SITE PLAN

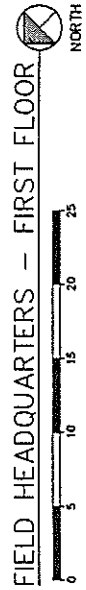
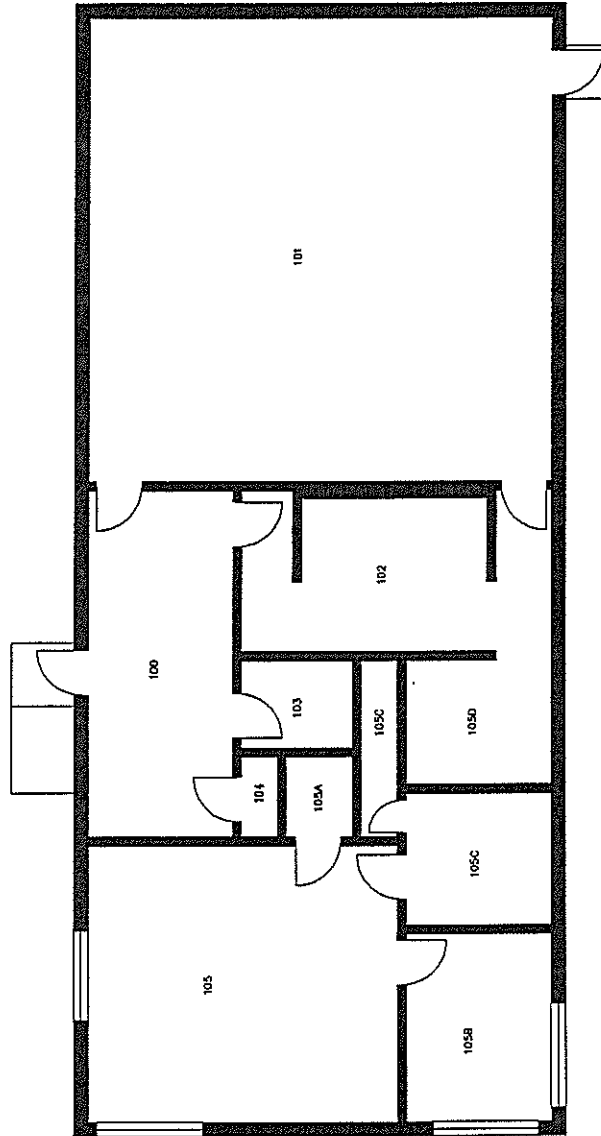


0 5 10 20 30 40 50 100

August 17, 1990



Milwaukee
FIELD HEADQUARTERS (565-1721)
FIRST FLOOR
JANUARY 1991



August 17, 1990

ALL INVENTORIED AREAS & HOMOGENEOUS ZONES REPORT
(Sorted By Area ID)

Bldg. No.	Building Name	Area ID	H-Zone Code & ACBM Disposition	Homogeneous Zone/ Building Material Description	Notes/ Comments
1721	AREA HQ/N AREA 1	100	M-CBM (NON-ACBM)	CONCRETE BLOCK MORTAR	
			M-CT1 (NON-ACBM)	CEILING TILE, 2ft.x 2ft. etched pressboard	
			M-FTL (ASSUMED)	FLOOR TILE, 12in.x 12in. off-white w/gray streaked accents & MASTIC	
			M-VB (NON-ACBM)	VINYL BASE, 6in. black	
		Count 4			
		101	M-CBM (NON-ACBM)	CONCRETE BLOCK MORTAR	
			M-CT1 (NON-ACBM)	CEILING TILE, 2ft.x 2ft. etched pressboard	
			M-FTL (ASSUMED)	FLOOR TILE, 12in.x 12in. off-white w/gray streaked accents & MASTIC	
			M-VB (NON-ACBM)	VINYL BASE, 6in. black	
		Count 4			
		102	M-CBM (NON-ACBM)	CONCRETE BLOCK MORTAR	
			M-CR (NON-ACBM)	CERAMIC TILE, 6in.x 6in. black & GROUT	
			M-CT2 (NON-ACBM)	CEILING TILE, 2ft.x 2ft. vinyl covered gypsum panels	
			M-MT (NON-ACBM)	MOSAIC TILE, 2in.x 2in. gray & GROUT	
		Count 4			
		103	M-CBM (NON-ACBM)	CONCRETE BLOCK MORTAR	
			M-CR (NON-ACBM)	CERAMIC TILE, 6in.x 6in. black & GROUT	
			M-CT2 (NON-ACBM)	CEILING TILE, 2ft.x 2ft. vinyl covered gypsum panels	
			M-MT (NON-ACBM)	MOSAIC TILE, 2in.x 2in. gray & GROUT	
		Count 4			

REPORT10
ALL-AREA

Page 1

August 17, 1990

ALL INVENTORIED AREAS & HOMOGENEOUS ZONES REPORT
(Sorted By Area ID)

Bldg. No.	Building Name	Area ID	H-Zone Code & ACBM Disposition	Homogeneous Zone/ Building Material Description	Notes/ Comments
1721	AREA HQ/N AREA 1	104	M-CBM (NON-ACBM)	CONCRETE BLOCK MORTAR	
			M-CR (NON-ACBM)	CERAMIC TILE, 6in.x 6in. black & GROUT	
			M-MT (NON-ACBM)	MOSAIC TILE, 2in.x 2in. gray & GROUT	
		Count 3			
		105	M-CBM (NON-ACBM)	CONCRETE BLOCK MORTAR	
			M-CT1 (NON-ACBM)	CEILING TILE, 2ft.x 2ft. etched pressboard	
			M-FTL (ASSUMED)	FLOOR TILE, 12in.x 12in. off-white w/gray streaked accents & MASTIC	
			M-FTRS (ASSUMED)	FLOOR TILE REDUCING STRIPS	
			M-VB (NON-ACBM)	VINYL BASE, 6in. black	
		Count 5			
		105A	M-CBM (NON-ACBM)	CONCRETE BLOCK MORTAR	
			M-FTL (ASSUMED)	FLOOR TILE, 12in.x 12in. off-white w/gray streaked accents & MASTIC	
			M-VB (NON-ACBM)	VINYL BASE, 6in. black	
		Count 3			
		105B	M-CBM (NON-ACBM)	CONCRETE BLOCK MORTAR	
			M-CT1 (NON-ACBM)	CEILING TILE, 2ft.x 2ft. etched pressboard	
			M-FTL (ASSUMED)	FLOOR TILE, 12in.x 12in. off-white w/gray streaked accents & MASTIC	
			M-VB (NON-ACBM)	VINYL BASE, 6in. black	
		Count 4			
		105C	M-CBM (NON-ACBM)	CONCRETE BLOCK MORTAR	

REPORT10
ALL-AREA

Page 2

August 17, 1990

ALL INVENTORIED AREAS & HOMOGENEOUS ZONES REPORT
(Sorted By Area ID)

Bldg. No.	Building Name	Area ID	H-Zone Code & ACBM Disposition	Homogeneous Zone/ Building Material Description	Notes/ Comments
1721	AREA HQ/N AREA 1	105C	T-DC (NON-ACBM)	DUCT CONNECTORS, black vinyl	
			T-FRN (ASSUMED)	FURNACE	

Count 3

Count 34

REPORT10
ALL-AREA

Page 3

August 17, 1990

RESPONSE OPTION SUMMARY-ALL POSITIVE H-ZONES (ACBM) & AREAS
(Sorted By H-Zone Codes)

Bldg. No.	Building Name	H-Zone Code & ACBM Disposition	Homogeneous Zone/ Bldg. Material Description	Area ID	Fri	Dam	1-7	Rch	Deb	Vib	Air	Response, Notes/Comments	Quantity
1721	AREA HQ/N AREA 1	M-FTL (ASSUMED)	FLOOR TILE, 12in.x 12in. off-white w/gray streaked accents & MASTIC	100	N	N						O&M	
				101	N	N						O&M	
				105	N	N						O&M	
				105A	N	N						O&M	
				105B	N	N						O&M	
Count 5													
		M-FTRS (ASSUMED)	FLOOR TILE REDUCING STRIPS	105	N	N						O&M	
		T-FRN (ASSUMED)	FURNACE	105C	N	N	5	N	N	N	N	5	

Count 7

REPORT11
POS-HZON

Page 1

BULK SAMPLING INFORMATION

METHODOLOGY

Bulk sampling was conducted in accordance with AHERA, 40 CFR, part 763.86. General locations of samples were determined for each Homogeneous Zone on a random basis. Each functional space was assigned an Area ID number. Homogeneous Zones Codes were then assigned to each suspect material and listed with the Area ID's that contained that material. The actual field methods utilized to randomly select the Area ID's from which samples would be taken ranged from rolling a single dice to cutting cards. Samples were generally taken from inconspicuous locations.

AHERA does not precisely spell out the amount of samples that are required to be collected for non-friables, thermal fittings and miscellaneous ACBM. The regulations refer to the phrase "in a manner sufficient" when describing the required number of samples. Following is a chart which specifies basic bulk sampling guidelines.

<u>Type of Material</u>		<u>AHERA Minimum</u>
1.	SURFACING	
a.	Friable < 1000 SF	3
b.	Friable > 1000, & < 5000 SF	5
c.	Friable > 5000 SF	7
d.	Non-friable < 1000 SF	Manner Sufficient
e.	Non-Friable >1000, <5000	Manner Sufficient
f.	Non-Friable > 5000 SF	Manner Sufficient
2.	THERMAL SYSTEM INSULATION	3
a.	Patched area < 6 SF or LF	add 1
b.	Fittings (cement plaster)	Manner Sufficient
3.	MISCELLANEOUS MATERIAL	
a.	Friable	Manner Sufficient
b.	Non-Friable	Manner Sufficient
c.	Patched area < 6 SF or LF	Manner Sufficient

Determining ACBM Disposition:

PROVEN - If one or more samples of any of the samples collected for a specific Homogeneous Zone was analyzed positive (greater than 1% asbestos fibers by weight using PLM microscopy), that Homogeneous Zone, in all areas it is present, is considered to be proven ACBM.

NON-ACBM - If all samples of the samples collected for a specific Homogeneous Zone were analyzed negative, that Homogenous Zone, in all areas it is present, is considered to be proven non-ACBM.

Although most miscellaneous materials may be broken down and listed as separate Homogeneous Zones based on color schemes and sizes, some non-friable types such as ceramic, mosaic, and quarry tile, terrazzo, and marble, may have been considered as one Homogeneous Zone for purposes of sampling.

For instance, the Homogeneous Zones Definitions Report may list six different Ceramic Tile H-Zones (i.e., MZ1-CR1, MZ1-CR2, etc.) based on different colors. A representative number of samples may have been taken of only three of these different colors. If they all were analyzed as non-asbestos containing a determination was made to consider the disposition of all six colors as Non-ACBM.

Appropriately, the H-Zone Codes that in appear on the Bulk Sample Summary Reports would be generic in nature, i.e., MZ1-CR with the specific code listed in parentheses.

Bulk Sample Summary Reports:

The reports that follow both list Sample Numbers, Area ID where the sample was collected, Date Collected, and Laboratory Results. Actual laboratory reports can be found in Appendix A.

The first report (HZONSAMP), has the data ordered by the H-Zone Code and also lists the Homogeneous Zone Descriptions.

The second report (ALFASAMP), has the data ordered by the Sample Number and also lists the Exact Sample Point Locations. These locations are a three-dimensional description listed in decimal feet. They are read as follows; a location of "2.00'N, 0.00'E, 0.50'AFF" means the sample point was taken on the east wall, two feet from ("from" always being implied) the north wall and six inches above the floor. The abbreviation "AFF" is an accepted construction term meaning "Above Finished Floor". A dimension of "0.00'" always means "on" the wall or floor.

Bulk Sample Point Location Plans:

The plans (IF PRESENT) following the reports explained above are the same as the Area ID Location Plans which appear in an earlier subsection, but also have the bulk sample numbers and points indicated with dimensions. (Dimensions on the plans are listed in feet and inches as opposed to decimal feet on the Bulk Sample Summary Report. If these plans are not present, refer to "ALFASAMP" report for sample point locations.)

Note: If both the Bulk Sample Summary Reports and Location Plans are not present, no samples were collected.

August 17, 1990 ,

BULK SAMPLE SUMMARY REPORT w/ HOMOGENEOUS ZONE DESCRIPTIONS
(Sorted By H-Zone Codes)

Bldg. No. & Name Homogeneous Zone Code & Material Description

Sample Area Date Positive Results/
Number ID Collected ACBM? Laboratory Analysis

1721 AREA HQ/N
AREA 1

M-CBM CONCRETE BLOCK MORTAR

HM17 105C 05/04/90 No NEGATIVE (1-3% Cellulose & 1-3% Synthetic)
KM12 102 05/04/90 No NEGATIVE (<1% Cellulose)
SE60 101 05/04/90 No NEGATIVE (<1% Cellulose)
Count 3

M-CR CERAMIC TILE, 6in.x 6in. black & GROUT
AT49 102 05/04/90 No NEGATIVE (Non-Fibrous)

M-CT1 CEILING TILE, 2ft.x 2ft. etched pressboard
CV24 105B 05/04/90 No NEGATIVE (75-80% Fibrous Glass)
MG95 105 05/04/90 No NEGATIVE (65-70% Fibrous Glass & <1% Cellulose)
VK55 101 05/04/90 No NEGATIVE (75-80% Fibrous Glass & 1-3% Cellulose)
Count 3

M-CT2 CEILING TILE, 2ft.x 2ft. vinyl covered gypsum panels
PK45 102 05/04/90 No NEGATIVE (45-50% Cellulose)
QP64 103 05/04/90 No NEGATIVE (45-50% Cellulose)
TH72 102 05/04/90 No NEGATIVE (1-3% Fibrous Glass & 25-30% Cellulose)
Count 3

M-MT MOSAIC TILE, 2in.x 2in. gray & GROUT
WP64 102 05/04/90 No NEGATIVE (7-10% Cellulose)

M-VB VINYL BASE, 6in. black
IZ15 105B 05/04/90 No NEGATIVE (Non-Fibrous)
KO18 101 05/04/90 No NEGATIVE (<1% Cellulose)
Count 2

T-DC DUCT CONNECTORS, black vinyl
NF95 105C 05/04/90 No NEGATIVE (30-35% Synthetic)

Count 14

Report13
HZONSAMP

Page 1

August 17, 1990

BULK SAMPLE SUMMARY REPORT w/ EXACT SAMPLE POINT LOCATIONS
(Sorted By Sample Numbers)

Bldg. No.	Building Name	Sample Number	Homogeneous Zone Code	Area ID & Exact Location	Date Collected	Positive ACBM?	Results/ Laboratory Analysis
1721	AREA HQ/N AREA 1	AT49	M-CR	102	05/04/90	No	NEGATIVE (Non-Fibrous)
				1.42'S, 0.00'W, 0.50'AFF			
		CV24	M-CT1	105B	05/04/90	No	NEGATIVE (75-80% Fibrous Glass)
				2.00'S, 1.25'E, 8.92'AFF			
		HM17	M-CBM	105C	05/04/90	No	NEGATIVE (1-3% Cellulose & 1-3% Synthetic)
				0.00'N, 1.33'W, 0.67'AFF			
		IZ15	M-VB	105B	05/04/90	No	NEGATIVE (Non-Fibrous)
				0.00'S, 0.00'W, 0.00'AFF			
		KM12	M-CBM	102	05/04/90	No	NEGATIVE (<1% Cellulose)
				3.83'N, 0.67'E, 6.00'AFF			
		KO18	M-VB	101	05/04/90	No	NEGATIVE (<1% Cellulose)
				0.00'S, 0.00'E, 0.00'AFF			
		MG95	M-CT1	105	05/04/90	No	NEGATIVE (65-70% Fibrous Glass & <1% Cellulose)
				2.17'N, 3.50'E, 8.08'AFF			
		NF95	T-DC	105C	05/04/90	No	NEGATIVE (30-35% Synthetic)
				2.58'S, 0.25'W, 4.50'AFF			
		PK45	M-CT2	102	05/04/90	No	NEGATIVE (45-50% Cellulose)
				2.08'N, 1.83'W, 8.08'AFF			
		QP64	M-CT2	103	05/04/90	No	NEGATIVE (45-50% Cellulose)
				4.00'S, 0.00'W, 8.08'AFF			
		SE60	M-CBM	101	05/04/90	No	NEGATIVE (<1% Cellulose)
				15.00'S, 0.00'W, 1.00'AFF			
		TH72	M-CT2	102	05/04/90	No	NEGATIVE (1-3% Fibrous Glass & 25-30% Cellulose)
				1.33'S, 3.00'E, 8.08'AFF			
		VK55	M-CT1	101	05/04/90	No	NEGATIVE (75-80% Fibrous Glass & 1-3% Cellulose)
				2.17'N, 6.00'W, 8.08'AFF			
		WP64	M-MT	102	05/04/90	No	NEGATIVE (7-10% Cellulose)

Report14
ALFASAMP

Page 1

August 17, 1990 ,

BULK SAMPLE SUMMARY REPORT w/ EXACT SAMPLE POINT LOCATIONS
(Sorted By Sample Numbers)

Bldg. No.	Building Name	Sample Number	Homogeneous Zone Code	Area ID & Exact Location	Date Collected	Positive ACBM?	Results/ Laboratory Analysis
--------------	------------------	------------------	--------------------------	-----------------------------	-------------------	-------------------	---------------------------------

9.08'N, 0.50'W, 0.00'AFF

Count 14

Report14
ALFASAMP

Page 2

APPENDIX A

BULK SAMPLES

CHAIN OF CUSTODY,
LABORATORY ANALYSIS REPORT,
LABORATORY ACCREDITATION



MILWAUKEE PUBLIC SCHOOLS

ENVIRONMENTAL HEALTH & SAFETY DEPT.

654-99096

L904562

1124 North 11th Street

P.O. Box 05259

Milwaukee, WI 53205-0529

Phone: 283-4626 Fax: 283-4682

PHYSICAL PLANT DIVISION

BULK ASBESTOS SAMPLES
CHAIN OF CUSTODY RECORD / ANALYSIS WORKSHEET
for.

AREA HEADQUARTERS - NORTH AREA I
7222 WEST FOND DU LAC AVENUE
MILWAUKEE, WISCONSIN 53218

BATCH NO.: C-089
TOTAL SAMPLES: 17
TOTAL PAGES: 3
SITE NO.: 1721
REQUISITION NO.: 05052

CHAIN OF CUSTODY

Relinquished By:

Received By:

Rosmary Beck (MPS) 5-14-90 (Date)

Jeff Ingram (Lab) 5-14-90 (Date)

Alan Bullock (Lab) 7-19-90 (Date)

Joseph Chustinski (MPS) 9/5/90 (Date)

WORKSHEET KEY

ASBESTOS FORM MATERIALS

CHR = CHRYSOTILE

AMO = AMOSITE

CRO = CROCIDOLITE

OTHER = (Specify Type)

NON-ASBESTOS FORM MATERIALS

CEL = CELLULOSE

FIB = FIBROUS-GLASS

OTHER = (Specify Type)

irregularly - C/h
8/16/90

LAB NOTES: _____

SAMPLE NUMBER	DATE TAKEN	LAB ID.	ASBESTOS FIBERS				NON-ASBESTOS FIBERS			NON-FIBROUS MATERIALS %
			% CHR	% AMO	% CRO	% OTHER	% CEL	% FIB	% OTHER	
✓ AT49	05/04/90									
✓ CV24	05/04/90									
✓ HM17	05/04/90									
✓ IZ15	05/04/90									
✓ KM12	05/04/90									
✓ KO18	05/04/90									
✓ MG95	05/04/90									
✓ NF95	05/04/90									
✓ PK45	05/04/90									

Alan Bullock

Laboratory Analyst(s)'s Signature(s)

19 July 1990
Date

SAMPLE NUMBER	DATE TAKEN	LAB ID.	ASBESTOS FIBERS				NON-ASBESTOS FIBERS			NON-FIBROUS MATERIALS % TYPE
			% CHR	% AMO	% CRO	% OTHER	% CEL	% FIB	% OTHER	
QP64	05/04/90									
SE60	05/04/90									
TH72	05/04/90									
VK55	05/04/90									
WP64	05/04/90									

Count 14

William Bullock

Laboratory Analyst(s)'s Signature(s)

19 July 1990
Date



Professional Service Industries, Inc.
Pittsburgh Testing Laboratory Division

DEPARTMENT OF
FACILITIES AND
MAINT. SERVICES

90 AUG 17 A9:28

REPORT

Report To: PSI - Milwaukee Job No: 054-99096
Attn: Jeff Grzeca Lab No: 904562
Report For: City of Milwaukee Client No:
c/o Milwaukee Public Schools
Project: City of Milwaukee Buildings Report Date: 8/7/90
Batch #C 089

1721

Dear Jeff:

Attached is the report of the bulk sample analysis for asbestos for the above referenced project. Analysis was done according to the EPA recommended method of Polarized light microscopy with dispersion staining. Results relate only to items tested. No part of this report may be reproduced except in full and only with the approval of PSI. The report may not be used to claim product endorsement by NVLAP or any government agency.

Respectfully Submitted,

PROFESSIONAL SERVICE INDUSTRIES, INC.
Pittsburgh Testing Laboratory Division

Joseph L. Kuchnicki
Joseph L. Kuchnicki
Laboratory Manager

JK/jam

Distribution: 2 Branch

CLIENT: City of Milwaukee c/o Milwaukee Public Schools
PROJECT: City of Milwaukee Buildings Batch #C-089

JOB NUMBER: 054-99096
LAB NUMBER: 904562
ANALYSIS DATE: 7/19/90
REPORT DATE: 8/7/90

REPORT OF BULK SAMPLE ANALYSIS

SERIAL NO	FIELD ID	CONTAINS ASBESTOS	TYPE OF ASBESTOS (1,2,3,4,5)	TOTAL %	COLOR	FIBEROUS	HOMO-GENEOUS	LAYERED	OTHER FIBERS (A,B,C,D)	NONFIBER MATERIAL	COMMENTS
ASB 13928	AT 49	No	NAD	-	Gray	No	Yes	No	N/D	N/A	
ASB 13929	CV 24	No	NAD	-	White	Yes	Yes	No	A 75-80%	N/A	
ASB 13930	HM 17	No	NAD	-	Gray	Yes	Yes	No	B 1-3%	N/A	
ASB 13931	IZ 15	No	NAD	-	Brown	No	Yes	No	C 1-3%	N/A	
ASB 13932	KM 12	No	NAD	-	Gray/Aqua	Yes	Yes	No	N/D	N/A	
ASB 13933	KO 18	No	NAD	-	Black	Yes	Yes	No	B <1%	N/A	
ASB 13934	MG 95	No	NAD	-	White	Yes	Yes	No	B <1%	N/A	
ASB 13935	NF 95	No	NAD	-	Black	Yes	Yes	No	A 65-70%	N/A	
ASB 13936	PK 45	No	NAD	-	Tan/Gray	Yes	Yes	No	B <1%	N/A	
ASB 13937	QP 64	No	NAD	-	Tan/Gray	Yes	Yes	No	C 30-35%	N/A	
ASB 13938	SE 60	No	NAD	-	Blue/Gray	Yes	Yes	No	B 45-50%	N/A	
ASB 13939	TH 72	No	NAD	-	Tan/Gray	Yes	Yes	No	B 45-50%	N/A	
ASB 13940	VK 55	No	NAD	-	White	Yes	Yes	No	B <1%	N/A	
ASB 13941	WP 64	No	NAD	-	Black/Gray	Yes	Yes	No	A 1-3%	N/A	
									B 25-30%	N/A	
									A 75-80%	N/A	
									B 1-3%	N/A	
									B 7-10%	N/A	

Asbestos Type:
1. Chrysotile
2. Amosite
3. Crocidolite
4. Tremolite/
Actinolite
5. Anthophyllite

ANALYTICAL ANALYSIS METHOD: EPA recommended PLM
with dispersion staining

Other Fibers:
A. Fibrous glass
B. Cellulose
C. Synthetic
D. Other

ANALYZED BY: Allan Bullock
Allan Bullock

N/D - None Detected
N/A - Not Analyzed
NAD - No Asbestos Detected

United States Department of Commerce
National Institute of Standards and Technology

NVLAP

Certificate of Accreditation

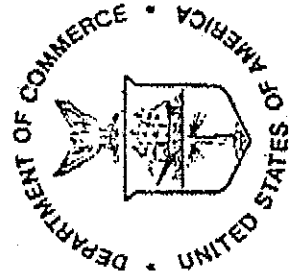
PROFESSIONAL SERVICE INDUSTRIES, INC.
PITTSBURGH TESTING LABORATORY DIVISION
PITTSBURGH, PA

is recognized under the National Voluntary Laboratory Accreditation Program
for satisfactory compliance with criteria established in Title 15, Part 7 Code of Federal Regulations.
Accreditation is awarded for specific services, listed on the Scope of Accreditation, for:

ASBESTOS FIBER ANALYSIS

April 1, 1990

Effective until



A handwritten signature in dark ink, appearing to read "R. P. Mendenhall".

For the National Institute of Standards and Technology

National Institute
of Standards and Technology



National Voluntary
Laboratory Accreditation Program

SCOPE OF ACCREDITATION

ASBESTOS FIBER ANALYSIS

NVLAP LAB CODE 1110 00

Professional Service Industries, Inc.
Pittsburgh Testing Laboratory Division
950 Poplar Street
Pittsburgh, PA 15220
Mr. Bruce Erdner Phone: 412-922-4000

Accreditation Renewal Date: April 1, 1990

NVLAP Test

Method Code

Test Method Designation

18/A01

40 Code of Federal Regulations Chapter I (1-1-87 edition)
Part 763, Subpart F, Appendix A, pages 293-299 or the current
U.S. Environmental Protection Agency method for the analysis
of asbestos in building materials by polarized light
microscopy.



A handwritten signature in dark ink, appearing to read "B. I. Weisler".

For the National Institute of Standards and Technology



Department
of
Public Works

Bureau of
Bridges and
Public
Buildings

ASBESTOS MANAGEMENT PLAN REPORT

DEPARTMENT 565
BUREAU OF SANITATION

BUILDING 1733
SALT SHED - NORTH AREA I
7222 WEST FOND DU LAC AVENUE
MILWAUKEE, WISCONSIN 53218

August, 1990

August 3, 1990

GENERAL INTRODUCTION

On Friday, October 30, 1987, the United States Environmental Protection Agency (EPA) issued a final rule under section 203 of Title II of the Toxic Substances Control Act (TSCA), 15 U.S.C. 2643 that requires the nation's School Districts to identify asbestos containing materials (ACM) in their school buildings and that they use specially trained and certified persons to conduct the inspections. The law that enabled the EPA to issue these rules is called the "Asbestos Hazard Emergency Response Act" (AHERA). These rules and regulations are contained in 40 CFR Part 763, "Asbestos Containing Materials in Schools Rule", dated October 30, 1987.

In anticipation of issuance of a further rule by the EPA requiring the inspection and management of ACM in all governmental and public buildings, the City of Milwaukee has undertaken this task and has done so according to the rules and regulations of AHERA.

The terms "AHERA" and "40 CFR Part 763" will be used interchangeably throughout this report to describe the regulations under which the City of Milwaukee proposes to operate.

This report represents the results of the prescribed inspection for the building as specified hereinafter.

The following page is a summary of the existence of ACBM for the specified building.

August 3, 1990

SALT SHED - NORTH AREA I
7222 WEST FOND DU LAC AVENUE
MILWAUKEE, WISCONSIN 53218

ACBM DECLARATION

This Building contains Asbestos Containing
Building Materials (ACBM) in the following forms:

- ☐ Friable Proven Surfacing ACBM
- ☐ Friable Proven Thermal Systems ACBM
- ☐ Non-Friable Proven ACBM
- ☐ Friable Assumed ACBM
- ☐ Friable Assumed Thermal Systems ACBM
- ☐ Non-Friable Assumed ACBM
- ☒ No Suspected ACBM *(After Bulk Sample Analysis. JC 2/14/92)*

ACCEPTANCE STATEMENT

Please refer to
SECTION 1 - GENERAL ASBESTOS MANAGEMENT
(Departmental Statement Of Policy)
for Management Plan ACCEPTANCE STATEMENT.

August 3, 1990

**TABLE OF CONTENTS
FOR
ASBESTOS MANAGEMENT PLAN REPORT**

GENERAL INTRODUCTION	1
ACBM DECLARATION & MANAGEMENT PLAN ACCEPTANCE STATEMENT . . .	2
TABLE OF CONTENTS	3

SECTION 1 - GENERAL ASBESTOS MANAGEMENT

DEPARTMENTAL STATEMENT OF POLICY	1
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SECTION 2 - SPECIFIC BUILDING ASBESTOS MANAGEMENT

SECTION 2 INTRODUCTION	1
SPECIAL INSTRUCTIONS	2
CERTIFICATION & SURVEILLANCE STATEMENTS	3
GENERAL BUILDING INFORMATION	8
Building Construction Report	
BUILDING HOMOGENEOUS ZONES	10
Homogeneous Zones Definitions Report	
INSPECTION RESULTS/RESPONSE OPTIONS	13
Area ID Location Floor Plans	18
All-Area Inventory Report	20
ACBM/Response Option Summary Report	Not Applicable
Scoped Response Option Form	Not Applicable
BULK SAMPLING INFORMATION	21
Bulk Sampling Methodology	
Bulk Sample Summary Reports	

BULK SAMPLE LABORATORY ANALYSIS	APPENDIX A
HOMOGENEOUS ZONE PHOTOGRAPHS	APPENDIX B
NOTIFICATION STATEMENTS	APPENDIX C
ABATEMENT/RESPONSE ACTION RECORDS	Not Applicable

<u>O&M ACTIONS REQUIRED BEYOND SURVEILLANCE</u>	Not Applicable
O&M Repair Work Order Report	
Initial & Periodic Cleaning Report	
Area ID Location Floor Plans	

ASBESTOS MANAGEMENT PLAN REPORT

S E C T I O N 1

**GENERAL ASBESTOS MANAGEMENT
(Departmental Statement Of Policy)**

STATEMENT OF POLICY

- A. It is the purpose of the City of Milwaukee, as stated in this manual, to provide a healthy and safe place of employment for all employees.
- B. To abide by all Federal, State and local regulations as they apply to the City of Milwaukee.
- C. To apply good work practices as dictated by location and/or circumstances.
- D. To exercise good judgment in application and training.

IMPLEMENTATION POLICY

This Management Plan will be implemented on or before July 29, 1991 and response actions as recommended and authorized will be completed in a timely fashion, within the limits of resources allocated to the tasks. The Designated Person will maintain and update the Management Plan to keep it current with ongoing O & M activities, response actions, periodic surveillance and reinspections.

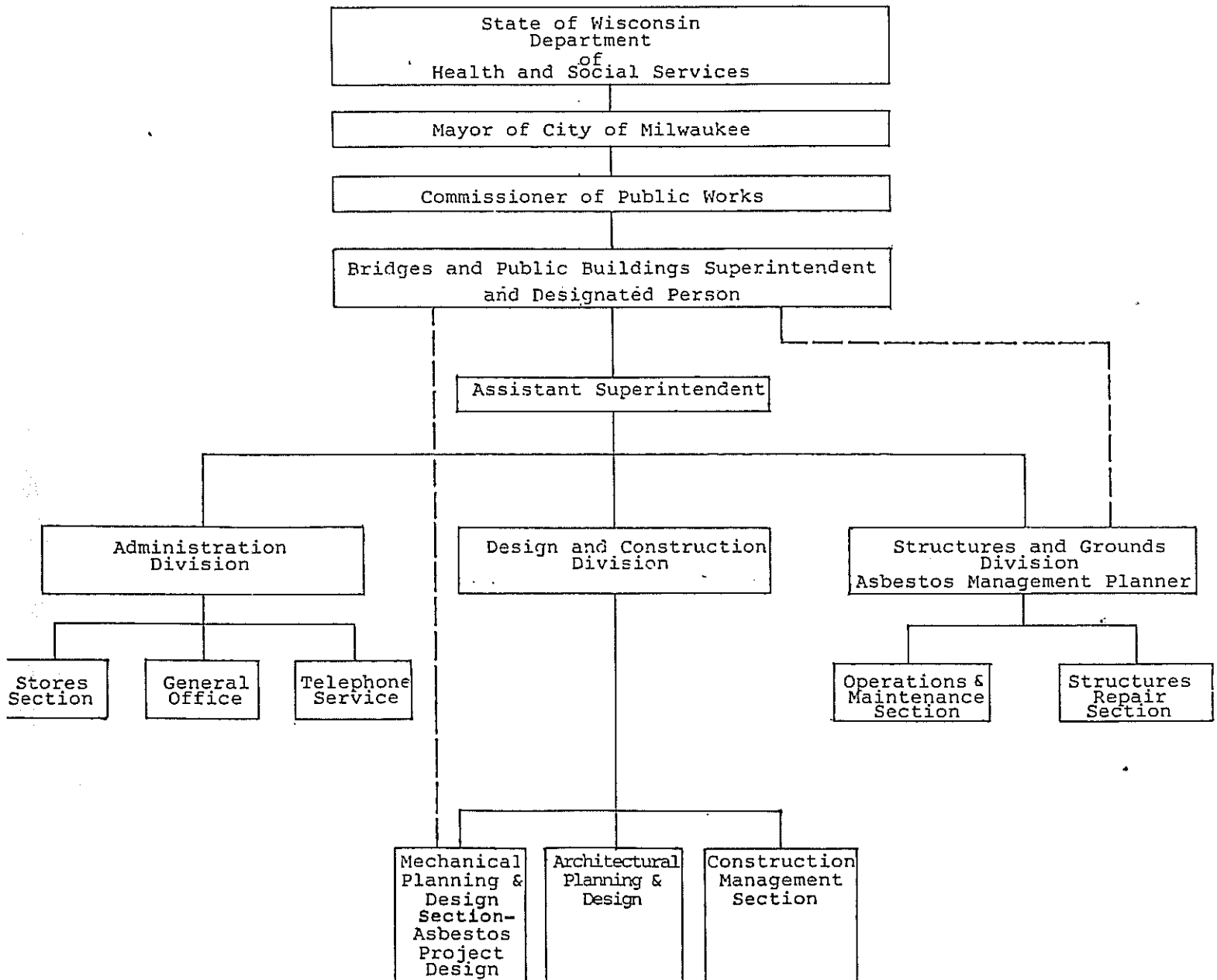
This program will be utilized to cover all costs, including abatement services, design services, employee training, medical surveillance, supplies and equipment.

Data will be maintained and will be available on a current basis for the protection of employees and the public.

Based upon the results of the building inspection by the Certified Inspector, and with additional input from the Designated Person, an accredited Management Planner has recommended appropriate response actions and estimated costs.

It must be understood that the estimated costs for any of the abatement actions as recommended are based upon best knowledge of average unit costs to provide similar work at the time of this report, and should be used as a guide. The prices will change with time and local market conditions, and the magnitude of such changes cannot be determined. In addition, the total abatement costs will be a function of the volume of work to be contracted and the amount of ACBM to be addressed at any one time.

LINE OF AUTHORITY FOR ASBESTOS MATTERS



----- AUTHORITY for ASBESTOS ISSUES

DESIGNATED PERSON

The Designated Person's duties include the following:

1. Implementation of Operation and Maintenance activities;
2. Training of Custodians, Cleaners and Maintenance Personnel;
3. Oversee Preventive Measures;
4. Posting of Warning Signs and Labels;
5. Work Request Review for potential asbestos hazard;
6. Management of Response Actions.

The following individual has been specified as the Designated Person for the City of Milwaukee buildings listed herein, and authorized to act for the City of Milwaukee in connection with Federal, State and local requirements:

Don M. Hiller, Superintendent
Bureau of Bridges and Public Buildings
Room 311 Municipal Building
841 North Broadway
Milwaukee, Wisconsin 53202

ACCEPTANCE STATEMENT

Based upon the receipt of assignment and authorization from Mr. Don M. Hiller, Superintendent, Bureau of Bridges and Public Buildings, City of Milwaukee, I do hereby certify that to the best of my knowledge and ability, the responsibilities as stipulated in Wisconsin Statutes HSS 159 and s. 140.06 have been or will be met.


THOMAS R. ROWE
Structures and Grounds Engineer

TRAINING

My training for this assignment includes a five day course, "Inspector/Management Planner", given by University of Wisconsin Extension at Madison, Wisconsin, July 25 - 29, 1988. The course included the following topics:

Health effects of asbestos;
Detection, identification and assessment of ACBM;
Options for controlling ACBM;
Federal and State Regulations;
Legal issues.

A copy of the certificate of attendance is on file at the Bureau of Bridges and Public Buildings
(B & B).

LIST OF ABBREVIATIONS

The following abbreviations may appear in this management plan. Definitions for these abbreviations are the following:

ACBM	- Asbestos Containing Building Material (Greater than 1% Asbestos)
ACM	- Asbestos Containing Material (includes those materials not part of the building)
AH	- At the Hanger
AHERA	- Asbestos Hazard Emergency Response Act
AREA ID	- Room Number as shown on floor plan
B	- Barely (reachable)
B & B	- Bridges and Public Buildings
BC	- Building Comment (general)
C	- Cracked
CC	- Cracked Casing
CFR	- Code of Federal Regulations
D	- Damaged
DAM	- Damaged
DEB	- Debris
DG	- Dented Guard
EE	- Exposed End
EPA	- Environmental Protection Agency
FRI	- Friable (can be easily crushed with hand pressure)
H2O	- Damaged by water
HVC	- Part of Heating and Ventilating System
LEA	- Local Education Agency (The School District)
M	- Minor
MT	- Missing Tile
N	- No
NF	- Not Friable
OSHA	- Occupational Safety and Health Administration
O & M	- Operations and Maintenance Program or activities to keep asbestos in good condition
PC	- Peeled Covering or Casing
PD	- Potential for Damage
PSD	- Potential for Significant Damage
RCH	- In Reach
S	- Significantly
SD	- Significantly Damaged
SEE	- Indicates that the inspector wished this situation to be specifically SEEn by the management planner
SPD	- Potential for Significant Damage
VND	- Vandalized
Y	- Yes
1-7	- Number designating type and condition of asbestos:
	1. Damaged thermal system insulation
	2. Damaged friable surfacing ACBM
	3. Significantly damaged friable surfacing ACBM
	4. Damaged friable miscellaneous ACBM

5. ACBM with potential for damage
6. ACBM with potential for significant damage
7. Other friable ACBM or friable suspected ACBM.

LIST OF BUILDINGS

Following is a list of buildings, all of which have been inspected for ACBM, and for which a specific Management Plan (Volume 2) is on file at the individual building and at the Bureau of Bridges and Public Buildings.

000 GENERAL CITY BUILDINGS

1001 CITY HALL	200 EAST WELLS STREET
1002 MUNICIPAL BUILDING	841 NORTH BROADWAY
1004 LAKE TOWER BUILDING	4001 SOUTH 6th STREET
1011 NORTH DISTRICT FIELD STATION	8414 WEST FLORIST AVENUE
1028 FIREBOAT #1	105 NORTH WATER STREET
1108 809 BROADWAY BUILDING	809 NORTH BROADWAY
1189 ABANDONED FIRE BOAT STATION	101 WEST CHERRY STREET
1263 STORAGE GARAGE	1911 NORTH HUMBOLDT AVENUE
1610 CITY SAFETY ACADEMY	6680 NORTH TEUTONIA AVENUE
1634 SALT SHED	7717 WEST GOOD HOPE ROAD
1690 OFFICE BUILDING - SANITATION/FORESTRY HQ	6732 NORTH INDUSTRIAL ROAD
1719 URBAN PARK CONCESSION STAND	540 NORTH HARBOR DRIVE

094 MILWAUKEE FOURTH OF JULY COMMISSION

1389 QUONSET HUT	8423 SOUTH 51st STREET
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250 D.O.A. - PURCHASES DIVISION BUYING/ADMIN.

1012 BOARD OF PURCHASES WAREHOUSE	1016-28 NORTH HAWLEY ROAD
1129 FRONT QUONSET HUT	1016-28 NORTH HAWLEY ROAD
1141 REAR QUONSET HUT	1016-28 NORTH HAWLEY ROAD
1142 PUMP HOUSE	1016-28 NORTH HAWLEY ROAD

520 TRAFFIC ENGIN. & ELECTRICAL SERV. - ADMIN.

1063 QUONSET HUT	1500 WEST CANAL STREET
1064 STORAGE BUILDING	1500-A WEST CANAL STREET
1065 STORAGE BUILDING	1500-B WEST CANAL STREET
1102 QUONSET HUT	1100-C NORTH 60th STREET
1103 STORAGE SHED	1100-C NORTH 60th STREET
1104 STORAGE SHED	1100-C NORTH 60th STREET
1152 PLAYGROUND SHOP	1100-C NORTH 60th STREET
1159 SOUTH BRICK BUILDING	1540-A WEST CANAL STREET
1168 NORTH BRICK BUILDING	1540-B WEST CANAL STREET
1174 PARKING STRUCTURE	724 NORTH 2nd STREET
1183 MUNICIPAL SERVICE BUILDING	1540 WEST CANAL STREET
1188 TRAFFIC SIGN SHOP	1430-A WEST CANAL STREET
1257 MILWAUKEE-MICHIGAN PARKING STRUCTURE	535 NORTH MILWAUKEE STREET
1543 YARD OFFICE	1500-C WEST CANAL STREET
1546 MacARTHUR SQUARE PARKING STRUCTURE	841 NORTH 7th STREET
1590 STORAGE SHED	1100-C NORTH 60th STREET
1651 STORAGE BUILDING	1100 NORTH 60th STREET

530 BRIDGES & PUBLIC BUILDINGS - ADMINISTRATION

1144 BRIDGE SHOP	152 NORTH 6th STREET
1187 BOILER HOUSE	156 NORTH 6th STREET
1495 FIELD HEADQUARTERS	132 NORTH 6th STREET
1670 PAINTING & MATERIAL STORAGE BUILDING	130 NORTH 6th STREET
1700 GARAGE	134 NORTH 6th STREET

540 BUREAU OF ENGINEERS

1097 ENGINEERS TESTING LABORATORY	3811 WEST LINCOLN AVENUE
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565 BUREAU OF SANITATION

1034 CART REPAIR BUILDING	2669 NORTH 47th STREET
1107 LINCOLN AVENUE TRANSFER STATION	3921 WEST LINCOLN AVENUE
1125 REPAIR SHOP	1122 NORTH EDISON STREET
1140 AREA HEADQUARTERS - CENTRAL AREA II	739 WEST JUNEAU AVENUE
1267 STORAGE - CENTRAL AREA II	739 WEST JUNEAU AVENUE
1547 AREA HEADQUARTERS - NORTH AREA II	2931 WEST CAMERON AVENUE
1548 STORAGE - NORTH AREA II	2931 WEST CAMERON AVENUE
1549 GARAGE - NORTH AREA II	2931 WEST CAMERON AVENUE

LIST OF BUILDINGS, CONT'D.

565 BUREAU OF SANITATION

1550 SALT SHED - NORTH AREA II	2931 WEST CAMERON AVENUE
1551 AREA HEADQUARTERS - SOUTH AREA III	2363 SOUTH 35th STREET
1552 STORAGE - SOUTH AREA III	2363 SOUTH 35th STREET
1553 GARAGE - SOUTH AREA III	2363 SOUTH 35th STREET
1554 SALT SHED - SOUTH AREA III	2363 SOUTH 35th STREET
1605 AREA HEADQUARTERS - SOUTH AREA II	4031 SOUTH 6th STREET
1606 GARAGE - SOUTH AREA II	4031 SOUTH 6th STREET
1607 STORAGE - SOUTH AREA II	4031 SOUTH 6th STREET
1608 SALT SHED - SOUTH AREA II	4031 SOUTH 6th STREET
1614 AREA HEADQUARTERS - CENTRAL AREA I	1333 NORTH 33rd STREET
1615 GARAGE - CENTRAL AREA I	1333 NORTH 33rd STREET
1616 STORAGE - CENTRAL AREA I	1333 NORTH 33rd STREET
1617 SALT SHED - CENTRAL AREA I	1333 NORTH 33rd STREET
1630 AREA HEADQUARTERS - SOUTH AREA I	1912 WEST PIERCE STREET
1631 STORAGE - SOUTH AREA I	1912 WEST PIERCE STREET
1632 GARAGE - SOUTH AREA I	1912 WEST PIERCE STREET
1633 SALT SHED - SOUTH AREA I	1912 WEST PIERCE STREET
1646 GARAGE - CENTRAL AREA II	739 WEST JUNEAU AVENUE
1647 SALT SHED - CENTRAL AREA II	739 WEST JUNEAU AVENUE
1648 STORAGE BUILDING - CENTRAL AREA II	739 WEST JUNEAU AVENUE
1657 TRANSFER STATION	970 NORTH HAWLEY ROAD
1671 NORTHWEST SOLID WASTE TRANSFER STATION	6710 NORTH INDUSTRIAL ROAD
1691 SALT DOME	6732 NORTH INDUSTRIAL ROAD
1692 GARAGE	6732 NORTH INDUSTRIAL ROAD
1721 AREA HEADQUARTERS - NORTH AREA I	7222 WEST FOND DU LAC AVENUE
1733 SALT SHED - NORTH AREA I	7222 WEST FOND DU LAC AVENUE
1734 GARAGE - NORTH AREA I	7222 WEST FOND DU LAC AVENUE
1751 STORAGE/GARAGE - HEADQUARTERS - NORTH AREA I	7318 WEST FOND DU LAC AVENUE
1755 HARTUNG QUARRY OFFICE	3342 NORTH 100th STREET

571 STREET & SEWER MAINTENANCE - ADMINISTRATION

1061 STORAGE WAREHOUSE	8414 WEST FLORIST AVENUE
1120 ASPHALT PLANT	158 NORTH 6th STREET
1573 NORTHWEST STORAGE SHED	8414 WEST FLORIST AVENUE
1624 OIL STORAGE BUILDING	8414 WEST FLORIST AVENUE
1653 TICKET OFFICE	168 NORTH 6th STREET
1676 YARD OFFICE	126 NORTH 6th STREET
1677 STORAGE BUILDING	176 NORTH 6th STREET
1688 STORAGE BUILDING	180 NORTH 6th STREET

581 FORESTRY - ADMINISTRATION & SUPPORT

1099 NURSERY GREENHOUSE	8423 SOUTH 51st STREET
1182 NURSERY RESIDENCE	8423 SOUTH 51st STREET
1211 NURSERY YARD HOUSE	8423 SOUTH 51st STREET
1212 NURSERY GARAGE	8423 SOUTH 51st STREET
1213 NURSERY IMPLEMENT SHED	8423 SOUTH 51st STREET
1214 STORAGE BUILDING	8423 SOUTH 51st STREET
1216 TREE BARN	8423 SOUTH 51st STREET
1650 SERVICE CENTER	5230 WEST STATE STREET
1654 STORAGE	5230 WEST STATE STREET
1675 NORTHEAST HEADQUARTERS	1872 NORTH COMMERCE STREET
1693 GARAGE/STORAGE	6732 NORTH INDUSTRIAL ROAD
1699 SOIL STORAGE DOME	6732 NORTH INDUSTRIAL ROAD
1708 SOUTHEAST HEADQUARTERS	2024 WEST HOLT AVENUE
1720 AUXILIARY GREENHOUSE 1 (SOUTH OF GREENHOUSE)	8423 SOUTH 51st STREET
1722 QUONSET HUT	5230 WEST STATE STREET
1723 WEST STORAGE BUILDING	2024 WEST HOLT AVENUE
1724 NORTH STORAGE BUILDING	2024 WEST HOLT AVENUE
1745 STORAGE BUILDING	5230 WEST STATE STREET
1753 AUXILIARY GREENHOUSE 2 (SOUTH OF GREENHOUSE)	8423 SOUTH 51st STREET

591 MUNICIPAL EQUIPMENT - ADMINISTRATION

1111 SOUTHWEST SHOP	2657 SOUTH 31st STREET
1114 LINCOLN AVENUE SHOP	3921 WEST LINCOLN AVENUE
1178 NORTHWEST GARAGE	3025 WEST RUBY AVENUE
1527 SHED	2657 SOUTH 31st STREET
1528 SHED	2657 SOUTH 31st STREET
1674 CENTRAL REPAIR GARAGE	2142 WEST CANAL STREET

NOTIFICATION POLICY

LOCATION OF MANAGEMENT PLAN

A copy of the Management Plan for all listed buildings is on file at the Bureau of Bridges and Public Buildings in the Municipal Building located at 841 North Broadway, Milwaukee, Wisconsin, and each building's Management Plan is on file at that building. The Management Plans are available to the public for inspection without cost during normal working hours. Copies of the Management Plans may be obtained from the Bureau of Bridges and Public Buildings within a reasonable time, upon written request, for a fee, in accordance with City of Milwaukee practice.

NOTICES

Notices concerning the location of Management Plans to the staff and contractors will be addressed in the following manner:

1. **Staff:** Bulletin board notices will be posted by the Designated Person. Notifications will be sent to the Business Agent of Employee Unions by the Designated Person. Two hour awareness training will be provided to custodians, cleaners and maintenance workers.
2. **Contractors:** Notices will be sent with each Service Order for building maintenance and will be included in all specifications for contract work.

POSTING OF WARNING LABELS

The Designated Person shall arrange to have warning labels attached immediately adjacent to any friable and non-friable ACBM which has potential for damage, during routine maintenance in areas, such as boiler rooms and air handling equipment rooms, of each building. Such material includes friable ACBM which has been responded to by any means other than removal, for example, encapsulation, and other ACBM for which no response action has been carried out. Offices, corridors, libraries, cafeterias, and other such areas are not considered to be routine maintenance areas.

All signs and labels will be displayed in prominent, readily visible locations, and will remain posted until the ACBM which is labeled has been removed or rendered non-friable, and has no potential for damage. Warning labels and signs will be made readily visible.

ASSURANCE OF ACCREDITATION

Employees and supporting professionals selected by the City of Milwaukee to assist in the implementation of the Management Plan will be carefully selected to insure that their qualifications are adequate and that they are certified by the State. Selection criteria will consider Local and State requirements and include but not be limited to the following:

Designers of Abatement Projects:

- Four (4) day course; Asbestos Abatement Project Designer;

Supervisors of Abatement Projects:

- Four (4) day course; Supervision of Abatement Projects;

Management Planner:

- Five (5) day course; Inspector and Management Planner;

Inspector:

- Three (3) day course; Inspector;

Worker:

- Three (3) day course; Asbestos Abatement Worker.

ACTIVITY PLANS

EMPLOYEE TRAINING

Before implementing the operations, maintenance, and repair provisions of the Management Plan, the Designated Person will ensure that all members of its maintenance and custodial staff (custodians, electrical mechanics and heating and ventilating mechanics, etc.), who may work in a building that contains ACBM receive general awareness training of at least two (2) hours duration, whether or not they are required to work with ACBM. New custodial staff and maintenance employees who are hired after the implementation of the management plan will be trained within 60 days after commencement of employment or prior to an assignment which may cause disturbance of ACBM. Individual training records shall be maintained by the City of Milwaukee in the individual's personnel file.

Training shall include, but not be limited to:

- Information regarding asbestos and its various uses and forms;
- Information on the health effects associated with asbestos exposure;
- Locations of ACBM throughout each building in which they work;
- Name and telephone number of the Designated Person and the location of the Management Plan;
- General asbestos safety and regulatory framework.

The City of Milwaukee will ensure that members of its maintenance and custodial staff who will disturb ACBM will receive the three day Asbestos Abatement Worker courses.

PERSONAL PROTECTION EQUIPMENT

Personnel who are required to disturb ACBM shall be instructed in the proper selection and use of respirators and other protection equipment. The personal protection equipment will be provided by the City of Milwaukee at no charge to the employee. Personal protective equipment will be properly maintained by the employee and periodically inspected by the City of Milwaukee. Appropriate records will be kept by each Department, Bureau or Agency in the individual's personnel file.

MEDICAL SURVEILLANCE

Prior to initial use of respirators, workers will have completed the medical monitoring requirement of the EPA Worker Protection Rule and OSHA regulations at City of Milwaukee expense. Medical records will be maintained by the City of Milwaukee in the individual's personnel file for thirty (30) years following termination of employment. This examination shall consist of:

- Medical history;
- Cardio-Pulmonary function evaluation;
- Forced Expiratory Volume Test (FEV) (pulmonary function test);
- Chest x-ray as determined by physician.

ABATEMENT CONTRACT GENERAL BIDDING REQUIREMENTS

Firms which are selected by the City of Milwaukee to complete response actions will be reviewed and selected based on consideration of the following requirements:

- Prior experience with similar projects;
- Equipment and worker qualifications;
- Financial stability;
- Safety record;
- State registrations;
- Ability to meet project schedules;
- Price;
- Insurance and Bonding;
- Disadvantaged Business Enterprise Certification.

CONFLICTS OF INTEREST

There exists a possibility for a conflict of interest between the work being performed by the

design professional and the contractor performing the response actions. For this reason, management planning and project design shall be performed by the City of Milwaukee or a firm independent of the abatement contractor. Similarly, the air monitoring and clearance testing firms must be independent of the contractor conducting the response action.

GENERAL EMERGENCY PROCEDURES

In the event of emergencies related to asbestos materials, the Designated Person will be immediately notified. This person will direct steps to protect the building's occupants by preparing for the following:

- Isolation;
- Evacuation;
- Emergency response procedures as necessary;
- Shut off of air handling systems;
- Establishment of a restricted area;
- Containment of asbestos debris and fibers;

For asbestos response actions which involve small scale, short duration activities, the City of Milwaukee may choose to utilize City personnel. A list of individuals trained and qualified to conduct such response actions in accordance with the regulations will be maintained by the City.

PERIODIC SURVEILLANCE

After the Management Plan is in effect, the Designated Person will schedule and direct periodic surveillance in each building that contains ACBM. Periodic surveillance shall mean every three years or

after each major renovation or change in occupancy. Surveillance shall be performed by a certified inspector or supervisor familiar with the building, and able to accurately perceive any changes in the condition of all ACBM that is identified in the Management Plan. The date of the surveillance, his or her name, and any observable changes in the condition of the material (e.g., water damage) will be recorded. A copy of this information will be submitted to the Designated Person, who will include these records in the Management Plan.

RESPONSE ACTIONS

All response action plans including removal, encapsulation, enclosure, or repair (other than small-scale, short-duration repairs) must be designed and conducted by persons accredited to design and conduct response actions. Response actions are contained in the building's specific management plan.

The Designated Person is responsible for ensuring that asbestos waste materials are transported and disposed of properly after response actions. The transport and disposal of asbestos waste will meet the requirements in the EPA publication "Asbestos Waste Management Guidance" and Appendix D of 40 CFR 763 Part E and any other applicable regulations.

COMPLETION OF RESPONSE ACTIONS

At the conclusion of any action to remove, encapsulate, or enclose ACBM or material assumed to be ACBM, a person appointed by the Designated Person will visually inspect each functional space where such action was conducted to determine whether the action has been properly completed. In addition, a person appointed by the Designated Person will arrange to collect samples using aggressive sampling to monitor air for clearance after each removal, encapsulation, and enclosure project involving ACBM, except for projects that are of a small-scale, short duration.

The Designated Person will have air samples analyzed by laboratories accredited to conduct such analysis.

OPERATION & MAINTENANCE (O & M) POLICIES AND PROCEDURES

Whenever any friable ACBM or nonfriable ACBM with the potential for damage is present in a building, the Designated Person will initiate O & M activities. Any material identified as non-friable ACBM will be treated as friable for the purposes of operations and maintenance when the material is about to become friable as a result of activities performed in the building.

Whenever an O & M activity may disturb friable ACBM, the Designated Person will protect building occupants by enforcing the following procedures:

- Restrict entry into the area by persons other than those necessary to perform the O & M action;
- Post signs to prevent entry into the area by unauthorized persons;
- Shut off or temporarily modify the air-handling system and restrict other sources of air movement;
- Use work practices or other controls to inhibit the spread of any released fibers;
- Clean all fixtures or other components in the immediate work area.
- Seal the asbestos debris and other cleaning materials in a leak-tight container

and dispose of properly.

FIBER RELEASE EPISODES

O & M activities resulting from minor fiber releases from friable ACBM (falling or dislodging of less than three [3] square or linear feet) will be responded to as required in the regulation Appendix B of Subpart E 40 CFR 763.

Major fiber release episodes (more than three [3] square or linear feet of friable ACBM) or maintenance activities other than small-scale, short duration, are not considered O & M activities. These activities will be designed and conducted by persons accredited to design and conduct response actions.

RECORDKEEPING POLICIES AND PROCEDURES

Complete and accurate records are necessary to adequately document the compliance progress of the City of Milwaukee in controlling the asbestos inventory. The recordkeeping requirements are the means by which the public, administration, and the government can monitor the progress of the activities designed to reduce the asbestos risk to the building population.

1. Plan Development and Scope:

The City of Milwaukee will have a Management Plan prepared by an accredited Management Planner which addresses, in detail, how the City will proceed to eliminate asbestos hazards.

2. **Plan Maintenance and Updating:**

The City of Milwaukee is required to maintain and update its Management Plan to reflect any and all operations and maintenance activities, periodic surveillance, inspection and reinspection, and all response actions. The plan is designed to be a dynamic document which accurately reflects any and all asbestos control activities undertaken by the City.

3. All records which become part of the Management Plan shall be kept in designated locations.
4. Records must be maintained for all preventive measures and response actions taken for friable and nonfriable ACBM and must include the following information:
 - a. Records will be maintained for actions taken including methods used, locations, start and completion dates of work, names and addresses of all contractors. If ACBM's were removed, the name and location of the storage or disposal site of asbestos-containing materials.
 - b. Name and signature of any person collecting any air sample required to be collected at the completion of the response action, locations where samples were taken, date of collection, name and address of the lab analyzing the samples, date of analysis, results of analysis, method of analysis, name and signature of person performing the analysis and a statement that the lab is accredited.

- c. Documentation of personnel trained under the training requirements for custodial personnel, etc., including:
 - Name, job title and date of training;
 - Location of training and number of hours completed.
- d. Documentation of each time periodic surveillance is conducted, including:
 - Name of individual conducting surveillance;
 - Any changes in material condition.
- e. When small-scale, short-duration maintenance activities are performed, the following must be documented:
 - Name of each person performing the operation or name of contractor.
 - Start and completion date of activity;
 - Locations where the activity occurred;
 - Description of the activity, including preventive measures used;
 - If ACBM was removed, the name and location of the storage

or disposal site.

f. When a major asbestos activity is performed, the following must be documented:

- Name, signature, state of accreditation and certificate number of each person performing a design activity;
- Name, signature, state of accreditation and certificate number of each person performing the abatement activity or name of contractor;
- Start and completion dates of the activity;
- Locations where the activity occurred;
- A description of the activity, including preventive measures used;
- If ACM's were removed, the name and location of storage or disposal site.

h. For each fiber release episode:

- Date and location of the episode;
- Method of repair, preventive measures or response action taken;
- Name of each person performing the work;

-22-

- If ACBM's were removed, the name and location of storage or disposal site.

SAFETY RULES AND REGULATIONS

EMPLOYEE RESPONSIBILITY

It is the responsibility of the employee to perform his duties in a safe manner to protect himself as well as other people and the environment, and to notify the Designated Person in case of asbestos involvement.

DISCIPLINARY POLICIES AND PROCEDURES

Employees who violate these policies and procedures may be subject to disciplinary action. Such violations may be considered willful misconduct.

CONTRACTORS

Contracts and Service Orders for the building will include notice of responsibility to review the Management Plan for potential asbestos involvement prior to initiation of work.

The Bureau of Bridges and Public Buildings for the City of Milwaukee hereby accepts this document and directs all affected employees to follow the policies and procedures as outlined.

SUPERINTENDENT

BUREAU OF BRIDGES AND PUBLIC BUILDINGS

DEPARTMENT OF PUBLIC WORKS

BY:

Don M. Miller

5-29-91

NAME

DATE

ASBESTOS MANAGEMENT PLAN REPORT

S E C T I O N 2

SPECIFIC BUILDING ASBESTOS MANAGEMENT

August 3, 1990

SECTION 2 INTRODUCTION

This section of the report is the specific building portion of the Management Plan. It contains information relative to this building only. (Policies, procedures, and other information that apply to all of the buildings and facilities within a City of Milwaukee Bureau or Department are contained in report Section 1 - General Asbestos Management [Departmental Statement Of Policy].)

This section of the document must be constantly updated in order to remain current and effective. In order to ensure that only current information is available, copies will be maintained for review at the following location only:

Bureau of Bridges and Public Buildings
Municipal Building, Room 311
841 North Broadway
Milwaukee, Wisconsin 53202

Copies may be viewed by appointment only. To make an appointment, call (414) 278-3403.

For the convenience of the reader, as stated above, General Asbestos Management is covered in Section 1.

Reports containing inspection data, bulk sample analysis results, and response options for asbestos-containing building materials can be found in the following subsections.

Each subsection is prefaced with a description of the various reports associated with it.

August 3, 1990

SPECIAL INSTRUCTIONS

SALTSHED/N AREA 1

This section is provided for the management planners to add any specific comments about the building.

August 3, 1990

CERTIFICATION & SURVEILLANCE STATEMENTS

On the following pages can be found the certification statements (attestations) for Section 2 of this Asbestos Management Plan Report, which cover the Inspection for, Assessment of, and Bulk Sampling of any suspected ACBM in the building, and the Response Options prepared for any proven or assumed ACBM.

The re-inspection certification and surveillance inspection statement/form are provided for later use.

August 3, 1990

ASBESTOS INSPECTION CERTIFICATION STATEMENT

for
City of Milwaukee
Bldg. No. 1733
SALT SHED - NORTH AREA I
7222 WEST FOND DU LAC AVENUE
MILWAUKEE, WISCONSIN 53218

I (We), the undersigned, do hereby certify that the building listed above was inspected for ACBM by me (us), or under my (our) direct supervision; that any Bulk Samples of suspected ACBM were collected by me (us); and that assessments based on the ACBM's condition were made by me (us)..

All inspection, sampling, or assessments were conducted pursuant to the USEPA's "Asbestos-Containing Materials In Schools" rule as ammended in AHERA (40 CFR Part 763), dated October 30, 1987.

Attempts to inspect behind surfaces were limited to moveable surfaces such as ceiling tile, electrical switch/receptacle cover plates, or access panels. Non-destructive sampling techniques (to maintain the material's integrity) were generally employed.

The information contained in this report is, to the best of my (our) knowledge, accurate.

INSPECTOR(S):

EMPLOYED BY: MILWAUKEE PUBLIC SCHOOLS
FACILITIES & MAINTENANCE SERV.
1124 NORTH 11TH STREET
MILWAUKEE, WISCONSIN 53233

DENNIS J. NOWAK

Date Bldg. Inspection Completed:

05/03/90

Signature

Date

State of Accreditation & Number:

WI I-353

August 3, 1990

MANAGEMENT PLANNERS CERTIFICATION STATEMENT
for
City of Milwaukee
Bldg. No. 1733
SALT SHED - NORTH AREA I
7222 WEST FOND DU LAC AVENUE
MILWAUKEE, WISCONSIN 53218

We, the undersigned, acting as a management planning team, do hereby certify that the response actions for the City of Milwaukee building listed above, were developed and recommended by us.

The response actions were developed in accordance with the requirements of the United States Environmental Protection Agency's "Asbestos Materials In Schools" rule as ammended in the "Asbestos Hazard Emergency Response Act (AHERA)/40 CFR Part 763, dated October 30, 1987.

The responses contained in this report represent, to the best of our knowledge, the best possible courses of action, and are based on the actual inspection, sampling, and assessment information received, and, in some cases, field checks performed by one or all of us.

MANAGEMENT PLANNERS: EMPLOYED BY: MILWAUKEE PUBLIC SCHOOLS
FACILITIES & MAINTENANCE SERV.
1124 NORTH 11TH STREET
MILWAUKEE, WISCONSIN 53233

THOMAS J. CHOJNACKI

Date Bldg. Inspection Completed:

05/03/90

Signature

Date

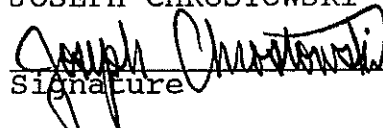
State of Accreditation & Number:

WI MP-438

JOSEPH CHROSTOWSKI

Date Bldg. Inspection Completed:

05/03/90

*  Signature

Date

State of Accreditation & Number:

WI MP-473

PATRICK M. O'DONNELL

Date Bldg. Inspection Completed:

05/03/90

Signature

Date

State of Accreditation & Number:

WI MP-437

* No Suspected ACM, After Bulk Sample Analysis.

August 3, 1990

RE-INSPECTION CERTIFICATION STATEMENT

for
City of Milwaukee
Bldg. No. 1733
SALT SHED - NORTH AREA I
7222 WEST FOND DU LAC AVENUE
MILWAUKEE, WISCONSIN 53218

I hereby certify that the City of Milwaukee building listed above was reinspected for Asbestos Containing Building Materials (ACBM) by me or under my direct supervision. The building was inspected in accordance with the requirements of the U.S. Environmental Protection Agency's "Asbesto-Containing Materials in Schools" rule as ammended in AHERA/40 CFR Part 763 dated, October 30, 1987.

(Print Name)

(Signature)

(Date) (Accreditation No.) (St.)
Any additions, deletions, or other revisions to this management plan as a result of this reinspection are inserted in this book and are printed on _____ (color) paper for easy recognition.

I hereby certify that the City of Milwaukee building listed above was reinspected for Asbestos Containing Building Materials (ACBM) by me or under my direct supervision. The building was inspected in accordance with the requirements of the U.S. Environmental Protection Agency's "Asbesto-Containing Materials in Schools" rule as ammended in AHERA/40 CFR Part 763 dated, October 30, 1987.

(Print Name)

(Signature)

(Date) (Accreditation No.) (St.)
Any additions, deletions, or other revisions to this management plan as a result of this reinspection are inserted in this book and are printed on _____ (color) paper for easy recognition.

August 3, 1990

SURVEILLANCE INSPECTION STATEMENT
for
City of Milwaukee
Bldg. No. 1733
SALT SHED - NORTH AREA I
7222 WEST FOND DU LAC AVENUE
MILWAUKEE, WISCONSIN 53218

I, the last person to sign this list, have made a surveillance inspection of the City of Milwaukee building listed above. I visually inspected all materials in all areas that are identified in this report as ACBM. I have also noted any changes in the conditions of the ACBM on the repair requisitions listed below. These requisitions have been forwarded to the appropriate authorities.

NAME	DATE	REPAIR REQUISITION NUMBERS		
Sign				
Print				
Sign				
Print				
Sign				
Print				
Sign				
Print				
Sign				
Print				
Sign				
Print				
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Sign				
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Sign				
Print				

August 3, 1990

GENERAL BUILDING INFORMATION

The Building Construction Report on the following page describes general aspects of the building's construction which are essential in determining Building Zones (based on actual year of construction of, or renovations and/or additions to a building) and the specific Homogeneous Zones (building materials) within a given Building Zone.

Note:

Data for both "Building Type/Function" and "Construction Classification" was obtained from the City of Milwaukee's "Building Property Insurance Input Forms".

August 3, 1990

BUILDING CONSTRUCTION REPORT

for

Bldg. No. 1733
SALT SHED - NORTH AREA I
7222 WEST FOND DU LAC AVENUE
MILWAUKEE, WISCONSIN 53218

Dept. No. 565
BUREAU OF SANITATION

Year Constructed,
Building Function/Type,
Construction Classification,
& Total Area/Square Footage

Building
Modifications
History
Year and Type

1984
SALT STORAGE BUILDING
REINF. CONC. FRAME W/BRICK, BLOCK, OR CONC. PANEL EXT. WALLS
4,475

REPORT 6
BLDGINFO

Page 1

BUILDING HOMOGENEOUS ZONES

The following report lists all building materials suspected of containing asbestos, sorted alpha-numerically by their respective H-Zone Codes, and any special notations regarding same.

Homogeneous Zone Photographs can be found in Appendix B.

Definition:

A "Homogeneous Zone" (H-Zone) is a term applied to a specific building material which is suspected as being an ACBM. AHERA uses the term "Homogeneous Area" and defines it as an area (material) which is similar throughout in terms of color, texture, and date of material application, installation, or construction.

H-Zone Codes:

Each Homogeneous Zone has been assigned a unique code. These codes are comprised of three basic elements as follow:

1. "M", "S", or "T" prefixes are first applied to group the material into one of three basic categories as defined by AHERA.

MISCELLANEOUS MATERIAL (M)

Interior building material on structural members of fixtures, such as floor and ceiling tiles.

SURFACING MATERIAL (S)

Material that is sprayed-on, troweled-on, or otherwise applied to surfaces, such as acoustical plaster on ceilings and fireproofing materials on structural members, or other materials on surfaces for acoustical, fireproofing, or other purposes.

THERMAL SYSTEMS INSULATION (T)

Material applied to pipes, fittings, boilers, breaching, tanks, ducts, or other interior structural components to prevent heat loss or gain, or water condensation, or for other purposes. (Some miscellaneous materials are grouped in this category, i.e., flexible fabric duct connectors, because of their relation to plumbing, mechanical, and electrical building systems.)

2. When the building was constructed or remodeled in phases or different years Building Zone designations ("Z1", "Z2", etc.) are assigned after the prefix. These "Z" numbers are further explained in the Homogeneous Zones definitions Report notes.
3. Abbreviations or acronyms then follow a hyphen and complete the code. This element is generally consistent from building to building such as "CT" for ceiling tile and "FT" for floor tile. If more than one type of a ceiling tile, etc. is inventoried, the H-Zones are further distinguished by numerals (i.e., "CT1", "CT2", etc.)

ACBM Disposition:

The ACBM Disposition indicates whether the H-Zone has

August 3, 1990

been sampled and was subsequently analyzed positive (PROVEN), or the H-Zone has been sampled and was subsequently analyzed negative (NON-ACBM), or the H-Zone was not sampled and must be assumed to contain asbestos (AS-SUMED).

Materials not suspected of containing asbestos (see below) are exempt from inspection. With the exception of inlaid carpeting and carpet tiles these were not inventoried. These two materials appear in the report as having an ACBM Disposition of "(NON-SUSPECT)".

Descriptions:

The H-Zones descriptions are formulated for readability, and generally read as follows:

"GENERIC MATERIAL NAME [Trade Name or Material Composition if applicable], specifics, i.e., material sizes, colors, etc.".

**Non-Suspect Materials or
Materials Otherwise Exempted from Inspection:**

Following is a listing of materials which were not inventoried and do not appear in this report. **Bolded Items** may contain asbestos but are not considered building materials.

Concrete (Includes Poured Concrete, Concrete Block, and Pre-Cast Concrete Structural Members)

Cinder Block

Blackboards (Includes All Chalkboards & Bulletin Board)

Pressed Wood (Includes All Wood Products)

Wall or Ceiling Carpet (Floor carpeting itself is a non-suspect material but could contain asbestos fibers from an adjacent ACBM in friable condition.)

Exterior Roofing Shingles

Auditorium Curtains

Chemical Lab Table and Desk Tops

Stored Suspected ACBM

Fire Blankets

Glass

Steel (Includes All Metal Products)

Brake Shoes

Kiln Bricks & Cement

Bunsen Burner Pads

Chemical Lab Gloves

Fiberglass Products

Foam Glass Products

Rubber Products

Suspected ACBM Not Generally Inventoried:

All Mastics, Caulking, and similar construction adhesives (i.e., Drywall Joint Compound) or sealants.

Interior Boiler and Incinerator Insulation or Components such as Gaskets, Firebrick, Cast Refractory Material or Wearing Surfaces, etc.

Electrical Systems Insulating Material for Fixtures, Wiring, Panels Boards, Switchgear, etc.

August 3, 1990

HOMOGENEOUS ZONES DEFINITIONS REPORT
for
City of Milwaukee
Bldg. No. 1733
SALT SHED - NORTH AREA I
7222 WEST FOND DU LAC AVENUE
MILWAUKEE, WISCONSIN 53218

H-Zone Code	ACBM Disposition	Homogeneous Zone/ Building Material Description
Note #1:		A Homogeneous Zone is a building material which is similar in terms of color, texture, and date of construction, installation, or application.
Note #2:		H-Zone Codes prefixed w/'M' indicate MISCELLANEOUS materials.
Note #3:		H-Zone Codes prefixed w/'S' indicate SURFACING materials. (No suspect 'surfacing' ACBM was found in the building.)
Note #4:		H-Zone Codes prefixed w/'T' indicate THERMAL SYSTEM INSULATION materials or materials associated with plumbing, mechanical (HVAC), and electrical systems. (No suspect 'thermal' ACBM found.)
Note #5:		H-Zone Code alpha-numerical characters following the hyphen are generally acronyms of the building material specified in the Homogeneous Zone/Building Material Description.
M-CBM	(NON-ACBM)	CONCRETE BLOCK MORTAR

REPORT-9
HZONEDEF

Page 1

INSPECTION RESULTS/RESPONSE OPTIONS

This subsection contains building floor plans and reports detailing inspection results and appropriate response options for managing ACBM.

Area ID Location Floor Plans:

The floor plans are basically schematic, indicating locations of walls, door openings, etc. Some architectural details such as windows, relative wall thicknesses, plumbing fixtures, etc. may also be included.

Their basic function is to establish each "Area" (Room) of the building and indicate the "Area ID" (Room Number).

The term "AREA" equates to AHERA's term, "FUNCTIONAL SPACE", and is defined as a room, or group of rooms (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.

An "AREA ID" is used to uniquely identify each area within the building. In some instances the Area ID may not match the actual Room Number, Name, or accepted designation.

Note: The reports contained in this sub-section should always be read in conjunction with the Area ID Location Floor Plans.

All-Area

(All Inventoried Areas & Homogeneous Zones Report):

A summary of all suspected ACBM with related disposition (Proven, Assumed, Non-ACBM, or Non-Suspect) and inspector's comments, listed by the Areas in which they can be found.

Pos-Hzon

(ACBM [All Positive H-Zones] / Response Option Summary:

A summary of only proven or assumed ACBM with related disposition (Proven or Assumed), and the Areas in which they are found, listed (sorted) by the H-Zone Code of the ACBM. Friability, existence of damage, AHERA category numbers (friable ACBM assessments [see * below], potential for future damage factors (accessibility, air erosion, and vibration), existence of suspected ACBM debris, response options (see ** below), inspector's comments and quantities of materials are also listed.

Note: If the report (Pos-Hzon) is not present, no suspected ACBM were proven after analysis, or no suspected ACBM were determined upon initial inspection.

*** AHERA Category/Friable ACBM Assessments:**

AHERA requires inspectors to assess the condition of all friable ACBM. For the purposes of this report, damaged thermal insulation will be considered friable. This assessment categorizes the material in question into seven classifications. Those seven are:

1. Damaged or significantly damaged thermal system insulation ACM.

This category is selected for 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, waterstained, gouged, punchcored, 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.

2. Damaged friable surfacing ACM.

This category is selected for friable surfacing ACM which has deteriorated or sustained physical injury such that the internal structure (cohesion) of the material 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 damage.

3. Significantly damaged friable surfacing ACM.

This category is selected for damaged friable surfacing ACM in a functional space where the damage is extensive and severe.

4. Damaged or significantly damaged friable miscellaneous ACM.

This category is selected for friable miscellaneous asbestos containing material which has deteriorated or sustained physical injury such that the internal structure (cohesion) of the material is inadequate or, if applicable, which has determined 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 damage.

5. ACBM with potential for damage.

This category is selected for ACBM with potential for damage which has the following circumstances:

- 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 operations and

maintenance practices, changes in occupancy, or recurrent damage.

6. ACBM with potential for significant damage.

This category is selected for ACBM with potential for significant damage which has the following circumstances:

- 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) 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.

7. Any remaining friable ACBM or friable suspected ACBM.

This category is selected for any remaining friable ACBM or friable suspected ACBM that was not covered by the above.

**** Response Options (Response Actions):**

A response action is a method, including removal, encapsulation, enclosure, repair, and operations and maintenance (O&M), that protects human health and the environment from friable ACBM.

The Pos-Hzon/Response Option Summary Report usually lists "Standard Response Options" ("O&M" or a "concatenated code" as deciphered below [see *** below]).

The materials that would hypothetically remain in this building after nonstandard recommended response actions are completed are those that show O&M as a response action. Current conditions are maintained via the O&M program until either accomplishment or subsequent review of resource availability changes.

Some of the response options involve minor repair, i.e. re-canvas the pipe insulation on an elbow. Those items have been reviewed on a room by room basis. An "O&M Repair Work Order Report" has been specifically prepared to address those situations as soon as possible. It addresses specific situations that require action other than simple inspection. The report, if applicable, has been issued (under separate cover) to the appropriate authorities for implementation.

Occasionally a response option may involve activities beyond what is normally included in the O&M program. Those instances are addressed separately by writing up a Scope of Work (SCOPE). A SCOPE may involve one or more ACBM (Proven or Assumed H-Zones) in one or more areas within a building (See "Scope Report" below).

***** Standard Response Options:**

The following notations are utilized in the management plan to indicate a given response option. A complete

option is the concatenation of all listed option codes.

For example, a response code of F1R would mean that the appropriate response would be to do what is specified for a friable damaged or significantly damaged thermal system insulation within reach.

CODE OPTION DESCRIPTION

- F FRIABLE**
 (When dry, may be crumbled, pulverized, or reduced to powder by hand pressure)
 Repair, encapsulate or enclose to reduce potential for fiber release and protect human health and environment.
- 1 AHERA CATEGORY 1**
 a. At least immediately repair the damaged area.
 b. Remove the damaged material if it is not feasible, due to technological factors, to repair the damage.
 c. Maintain all thermal system ACM and it's covering in an intact state and undamaged condition.
- 5 AHERA CATEGORY 5**
 At least implement an operations and maintenance (O&M) program, as described under AHERA 763.91.
- 6 AHERA CATEGORY 6**
 a. Implement an O&M program, as described under AHERA 763.91.
 b. Institute preventive measures appropriate to eliminate the reasonable likelihood that ACM or it's covering will become significantly damaged, or delaminated.
 c. Remove the material as soon as possible if appropriate preventive measures cannot be effectively implemented, or unless other response actions are determined to protect human health and the environment. Immediately isolate the area and restrict access if necessary and substantial endangerment to human health or the environment.
- R REACHABLE (Accessible)**
 (Generally below 7 feet above the finished floor)
 Monitor ACBM within reach for a greater potential for disturbance as opposed to material beyond reach.
- D DEBRIS**
 (Pieces of ACBM including dust, that can be identified by color, texture or composition by accredited inspectors to be ACM)
 Remove debris using appropriate cleaning methods and investigate it's origin. Institute preventive measures appropriate to eliminate a reoccurrence.
- V VIBRATION**
 (ACBM has been damaged or is subject to damage due to the influence of vibration caused by machinery, etc. or other source)
 Monitor ACBM subject to the influence of vibration

August 3, 1990

for a greater potential for disturbance as opposed to material not subjected to vibration. Institute possible preventive measures of reoccurrence.

H WITHIN AN HVAC SYSTEM

(The material is physically located within, passes through, or is in close proximity to air movement created by a building ventilation system)
Consider for removal as resources become available.

SCOPE Report (Scoped Response Option Form):

As stated above, a response options involving activities beyond "O&M" program are addressed separately by Scope of Work (SCOPE). A SCOPE may involve one or more ACBM (Proven or Assumed H-Zones) in one or more areas within a building.

The first step in completing the SCOPE is to review the hazard potential of ACBM's that are the most difficult to O&M throughout the City. An algorithm detailing material specifics is filled out to rate the worst condition to the best condition. A team of certified management planners, and City administrators review the algorithms to determine those conditions that require heightened response option development.

The worst conditions other than emergencies, are divided into response options detailing other work involved and cost estimates. The response options are reviewed for budget approval and implementation as resources are made available.

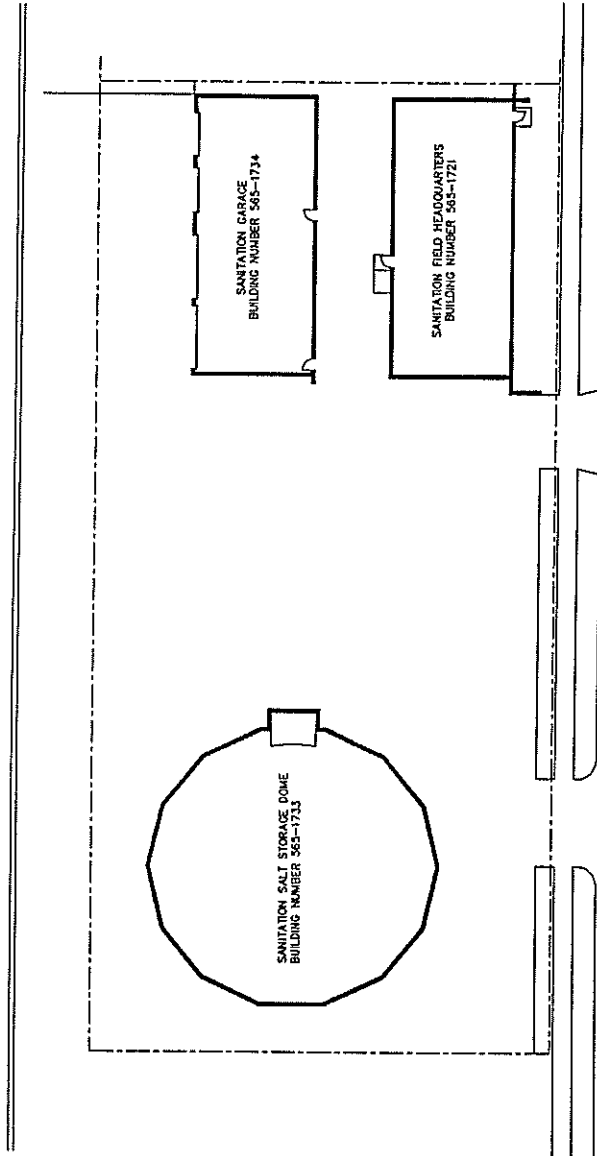
These scopes of work are not full fledge abatement project designs. They simply describe one or more options of work that may be done to correct a particular situation. A copy of the Management Planner's Worksheet is generally included with the Scope Report.

Note: If this report is not present, no ACBM required a response option beyond O&M or repairs.

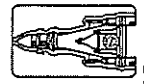
Emergency Response Actions:

Emergencies are handled on a case by case basis. If during inspection, the accredited inspector observes an especially hazardous or potentially hazardous situation, the details (areas affected, specific material, and nature of hazard) are written up on a special "hot sheet" memo form and are submitted to the appropriate authorities for immediate action. These situations are still reflected in the appropriate subsections of the management plan as original inspection conditions.

August 3, 1990



August 3, 1990

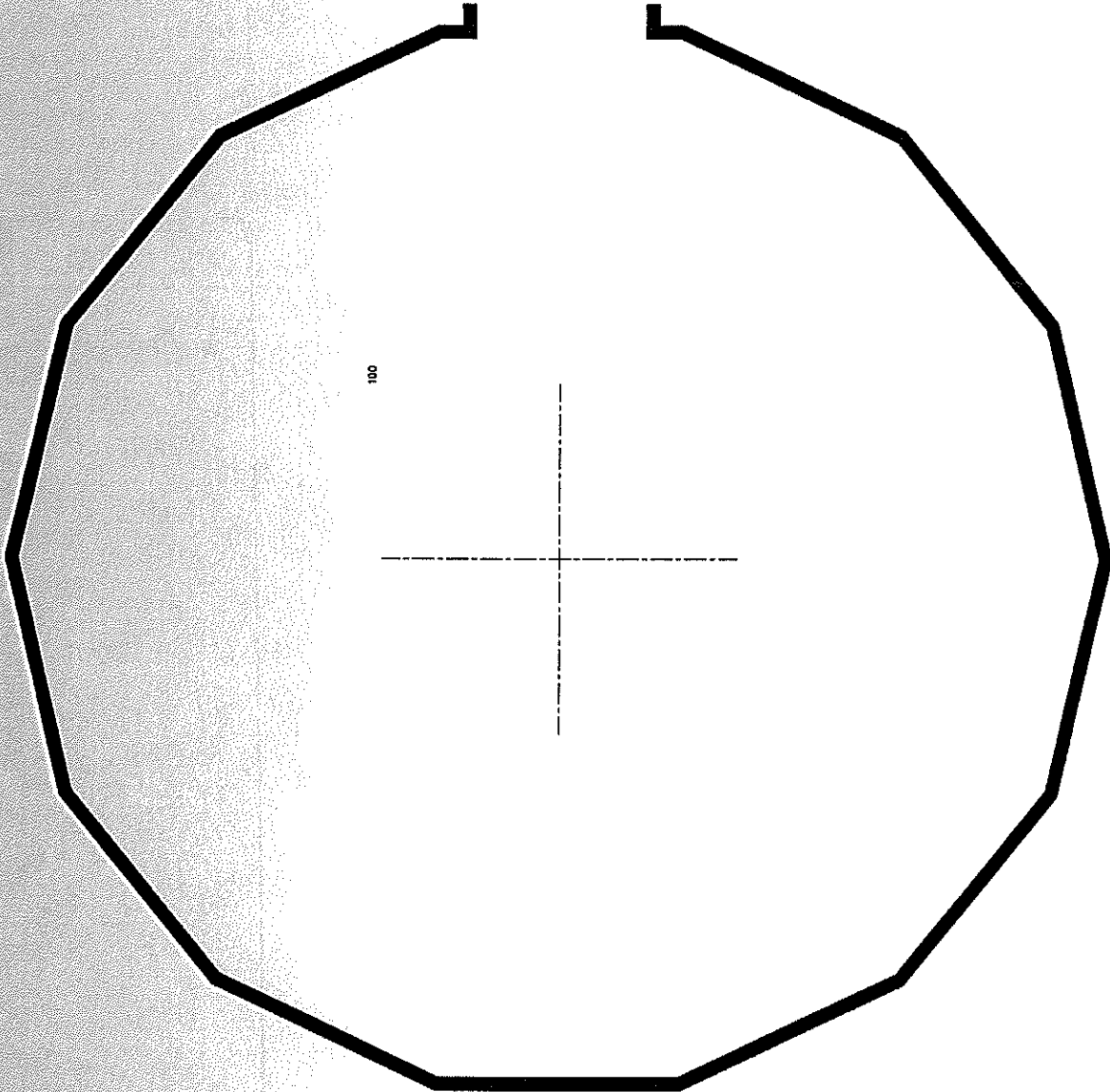


Milwaukee

SALT STORAGE DOME (565-1733)

FIRST FLOOR

JANUARY 1991



SALT STORAGE DOME - FIRST FLOOR

August 3, 1990

ALL INVENTORIED AREAS & HOMOGENEOUS ZONES REPORT
(Sorted By Area ID)

Bldg. No.	Building Name	Area ID	H-Zone Code & ACBM Disposition	Homogeneous Zone/ Building Material Description	Notes/ Comments
1733	SALTSHED /N AREA1	100	M-CBM (NON-ACBM)	CONCRETE BLOCK MORTAR	

REPORT10
ALL-AREA

Page 1

BULK SAMPLING INFORMATION

METHODOLOGY

Bulk sampling was conducted in accordance with AHERA, 40 CFR, part 763.86. General locations of samples were determined for each Homogeneous Zone on a random basis. Each functional space was assigned an Area ID number. Homogeneous Zones Codes were then assigned to each suspect material and listed with the Area ID's that contained that material. The actual field methods utilized to randomly select the Area ID's from which samples would be taken ranged from rolling a single dice to cutting cards. Samples were generally taken from inconspicuous locations.

AHERA does not precisely spell out the amount of samples that are required to be collected for non-friables, thermal fittings and miscellaneous ACBM. The regulations refer to the phrase "in a manner sufficient" when describing the required number of samples. Following is a chart which specifies basic bulk sampling guidelines.

Type of Material	AHERA Minimum
1. SURFACING	
a. Friable < 1000 SF	3
b. Friable > 1000, & < 5000 SF	5
c. Friable > 5000 SF	7
d. Non-friable < 1000 SF	Manner Sufficient
e. Non-Friable >1000, <5000	Manner Sufficient
f. Non-Friable > 5000 SF	Manner Sufficient
2. THERMAL SYSTEM INSULATION	3
a. Patched area < 6 SF or LF	add 1
b. Fittings (cement plaster)	Manner Sufficient
3. MISCELLANEOUS MATERIAL	
a. Friable	Manner Sufficient
b. Non-Friable	Manner Sufficient
c. Patched area < 6 SF or LF	Manner Sufficient

Determining ACBM Disposition:

PROVEN - If one or more samples of any of the samples collected for a specific Homogeneous Zone was analyzed positive (greater than 1% asbestos fibers by weight using PLM microscopy), that Homogeneous Zone, in all areas it is present, is considered to be proven ACBM.

NON-ACBM - If all samples of the samples collected for a specific Homogeneous Zone were analyzed negative, that Homogeneous Zone, in all areas it is present, is considered to be proven non-ACBM.

Although most miscellaneous materials may be broken down and listed as separate Homogeneous Zones based on color schemes and sizes, some non-friable types such as ceramic, mosaic, and quarry tile, terrazzo, and marble, may have been considered as one Homogeneous Zone for purposes of sampling.

For instance, the Homogeneous Zones Definitions Report may list six different Ceramic Tile H-Zones (i.e., MZ1-CR1, MZ1-CR2, etc.) based on different colors. A representative number of samples may have been taken of only three of these different colors. If they all were analyzed as non-asbestos containing a determination was made to consider the disposition of all six colors as Non-ACBM.

Appropriately, the H-Zone Codes that in appear on the Bulk Sample Summary Reports would be generic in nature, i.e., MZ1-CR with the specific code listed in parentheses.

Bulk Sample Summary Reports:

The reports that follow both list Sample Numbers, Area ID where the sample was collected, Date Collected, and Laboratory Results. Actual laboratory reports can be found in Appendix A.

The first report (HZONSAMP), has the data ordered by the H-Zone Code and also lists the Homogeneous Zone Descriptions.

The second report (ALFASAMP), has the data ordered by the Sample Number and also lists the Exact Sample Point Locations. These locations are a three-dimensional description listed in decimal feet. They are read as follows; a location of "2.00'N, 0.00'E, 0.50'AFF" means the sample point was taken on the east wall, two feet from ("from" always being implied) the north wall and six inches above the floor. The abbreviation "AFF" is an accepted construction term meaning "Above Finished Floor". A dimension of "0.00'" always means "on" the wall or floor.

Bulk Sample Point Location Plans:

The plans (IF PRESENT) following the reports explained above are the same as the Area ID Location Plans which appear in an earlier subsection, but also have the bulk sample numbers and points indicated with dimensions. (Dimensions on the plans are listed in feet and inches as opposed to decimal feet on the Bulk Sample Summary Report. If these plans are not present, refer to "ALFASAMP" report for sample point locations.)

Note: If both the Bulk Sample Summary Reports and Location Plans are not present, no samples were collected.

August 3, 1990

BULK SAMPLE SUMMARY REPORT w/ HOMOGENEOUS ZONE DESCRIPTIONS
(Sorted By H-Zone Codes)

Bldg. No. & Name	Homogeneous Zone Code & Material Description				
	Sample Number	Area ID	Date Collected	Positive ACBM?	Results/ Laboratory Analysis
1733 SALTSHED/N AREA1	M-CBM		CONCRETE BLOCK MORTAR		
	EG33	100	05/03/90	No	NEGATIVE (Non-Fibrous)
	PN49	100	05/03/90	No	NEGATIVE (Non-Fibrous)
	Count 2				

Count 2

August 3, 1990

BULK SAMPLE SUMMARY REPORT w/ EXACT SAMPLE POINT LOCATIONS
(Sorted By Sample Numbers)

Bldg. No.	Building Name	Sample Number	Homogeneous Zone Code	Area ID & Exact Location	Date Collected	Positive ACBM?	Results/ Laboratory Analysis
1733	SALTSHED /N AREA1	EG33	M-CBM	100	05/03/90	No	NEGATIVE (Non-Fibrous)
				0.00'S, 4.00'E, 5.42'AFF			
		PN49	M-CBM	100	05/03/90	No	NEGATIVE (Non-Fibrous)
				0.00'N, 0.42'E, 6.00'AFF			

Count 2

Report14
ALFASAMP

Page 1

APPENDIX A

BULK SAMPLES

CHAIN OF CUSTODY,
LABORATORY ANALYSIS REPORT,
LABORATORY ACCREDITATION



MILWAUKEE PUBLIC SCHOOLS

ENVIRONMENTAL HEALTH & SAFETY DEPT.

LOWER LAYER - YELLOW LOT

E 54-99041124 North 11th Street
L 904624 P.O. Box 05259
Milwaukee, WI 53205-0529
Phone: 283-4626 Fax: 283-4682

PHYSICAL PLANT DIVISION

BULK ASBESTOS SAMPLES
CHAIN OF CUSTODY RECORD / ANALYSIS WORKSHEET
for
SALT SHED - NORTH AREA I
7222 WEST FOND DU LAC AVENUE
MILWAUKEE, WISCONSIN 53218

BATCH NO.: C-090
TOTAL SAMPLES: 2
TOTAL PAGES: 1
SITE NO.: 1733
REQUISITION NO.: 05052

Relinquished By: CHAIN OF CUSTODY

Received By:

<u>Rosemary Bick</u>	<u>5-14-90</u>	<u>[Signature]</u>	<u>5-14-90</u>
(MPS)	(Date)	(Lab)	(Date)
<u>Allan Bullock</u>	<u>6 July 90</u>	<u>[Signature]</u>	<u>7/25/90</u>
(Lab)	(Date)	(MPS)	(Date)

WORKSHEET KEY

ASBESTOS FORM MATERIALS

CHR = CHRYSOTILE
AMO = AMOSITE
CRO = CROCIDOLITE
OTHER = (Specify Type)

NON-ASBESTOS FORM MATERIALS

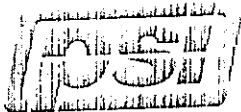
CEL = CELLULOSE
FIB = FIBROUS-GLASS
OTHER = (Specify Type)

LAB NOTES: _____

SAMPLE NUMBER	DATE TAKEN	LAB ID.	ASBESTOS FIBERS				NON-ASBESTOS FIBERS			NON-FIBROUS MATERIALS TYPE
			% CHR	% AMO	% CRO	% OTHER	% CEL	% FIB	% OTHER	
EG33	05/03/90									
PN49	05/03/90									

Count 2

Allan Bullock, 6 July 1990
Laboratory Analyst(s)'s Signature(s) Date



Professional Service Industries, Inc.
Pittsburgh Testing Laboratory Division

REPORT

Report To: PSI - Milwaukee

Attn: Jeff Grzeca

Report For: City of Milwaukee
c/o Milwaukee Public Schools

Project: City of Milwaukee Buildings
Batch #C 090

Dear Jeff:

Job No: 054-99096

Lab No: 904624

Client No:

Report Date: 7/17/90

Attached is the report of the bulk sample analysis for asbestos for the above referenced project. Analysis was done according to the EPA recommended method of Polarized light microscopy with dispersion staining. Results relate only to items tested. No part of this report may be reproduced except in full and only with the approval of PSI. The report may not be used to claim product endorsement by NVLAP or any government agency.

Respectfully Submitted,

PROFESSIONAL SERVICE INDUSTRIES, INC.
Pittsburgh Testing Laboratory Division

Joseph L. Kuchnicki
Joseph L. Kuchnicki
Laboratory Manager

JK/jam

Distribution: 2 Branch

CLIENT: City of Milwaukee c/o Milwaukee Public Schools
PROJECT: City of Milwaukee Buildings Batch #C-090

JOB NUMBER: 054-99096
LAB NUMBER: 904624
ANALYSIS DATE: 7/6/90
REPORT DATE: 7/17/90

REPORT OF BULK SAMPLE ANALYSIS

[illegible]ANALYTICAL ANALYSIS METHOD: EPA recommended PLM
with dispersion staining

Other Fibers:

- A. Fibrous glass
- B. Cellulose
- C. Synthetic
- D. Other

N/D - None Detected

N/A - Not Analyzed

NAD - No Asbestos Detected

Asbestos Type:

1. Chrysotile
2. Amosite
3. Crocidolite
4. Tremolite/
Actinolite
5. Anthophyllite

ANALYZED BY: Allan Bullock
Allan Bullock

United States Department of Commerce
National Institute of Standards and Technology

NVLAP

Certificate of Accreditation

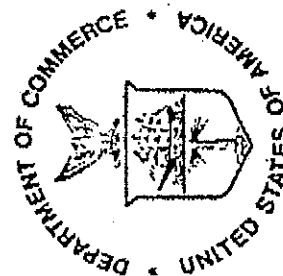
PROFESSIONAL SERVICE INDUSTRIES, INC.
PITTSBURGH TESTING LABORATORY DIVISION
PITTSBURGH, PA

is recognized under the National Voluntary Laboratory Accreditation Program
for satisfactory compliance with criteria established in Title 15, Part 7 Code of Federal Regulations.
Accreditation is awarded for specific services, listed on the Scope of Accreditation, for:

ASBESTOS FIBER ANALYSIS

April 1, 1990

Effective until



For the National Institute of Standards and Technology

National Institute
of Standards and Technology



National Voluntary
Laboratory Accreditation Program

SCOPE OF ACCREDITATION

ASBESTOS FIBER ANALYSIS

NVLAP LAB CODE 1750 00

Professional Service Industries, Inc.
Pittsburgh Testing Laboratory Division
850 Poplar Street
Pittsburgh, PA 15220
Mr. Bruce Erdner Phone: 412-922-4000

Accreditation Renewal Date: April 1, 1990

NVLAP Test
Method Code

Test Method Designation

18/A01

40 Code of Federal Regulations Chapter I (1-1-87 edition)
Part 763, Subpart F, Appendix A, pages 293-299 or the current
U.S. Environmental Protection Agency method for the analysis
of asbestos in building materials by polarized light
microscopy.



A handwritten signature in dark ink, appearing to read "B. I. Weisbach". The signature is written in a cursive, flowing style.

For the National Institute of Standards and Technology

