

Halton District School Board

# **ASBESTOS MANAGEMENT PLAN**

December 2019

# HALTON DISTRICT SCHOOL BOARD ASBESTOS MANAGEMENT PLAN

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## 1.0 INTRODUCTION

### 1.1 Program Objectives

The Halton District School Board (HDSB) Asbestos Management Program is set out in the Administrative Procedure (AP) – Asbestos Management in Facilities and in this Asbestos Management Plan (AMP), which supplements the Administrative Procedure.

The objectives of the Asbestos Management Program are:

- to provide a safe and healthy operation of facilities;
- to comply with the requirements prescribed under O.Reg. 278/05 – *Designated Substance – Asbestos on Construction Project and in Buildings and Repair Operations* made under the Ontario *Occupational Health and Safety Act*; and
- to achieve compliance with this Program by all employees and contracted personnel.

### 1.2 Program Elements

The basic elements of the Asbestos Management Program are:

- maintaining and updating the asbestos register for all buildings;
- periodic inspections of asbestos-containing materials (ACM);
- written notification to workers, occupiers and employers of the information in the register;
- training; and
- management of construction projects and maintenance activities.

## **2.0 RESPONSIBILITIES**

### **2.1 Superintendent of Facilities Services**

The Superintendent of Facility Services has overall responsibility for implementation of the Asbestos Management Program.

### **2.2 Manager, Facility Maintenance and Renewal**

The Manager, Facility Maintenance and Renewal is responsible for the following:

1. maintaining and updating the Asbestos Registers for all buildings;
2. periodic (annual) inspections of asbestos-containing materials (ACM);
3. providing “occupiers” or “licensees” with a copy of the asbestos register for the area they occupy and notifying “occupiers” that they are responsible for providing this information to their workers who may do work that involves asbestos-containing material or is to be carried out in close proximity to such material and may disturb it;
4. arranging for repairs or other remedial actions, as required, in response to reports of damaged or deteriorated asbestos-containing material;
5. ensuring that documentation related to repair activities is maintained in the Asbestos Register; and
6. pre-qualifying abatement contractors.

### **2.3 Department Managers and Project Managers**

Departments which may contract construction projects or maintenance work include, but are not limited to the following:

- Plant Operations;
- Capital Projects;
- Facility Maintenance and Renewal;
- Information Technology;
- Procurement;
- Program Services; and
- School Administration.

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Department Managers and Project Supervisors in these departments who are managing a project are responsible for the following:

1. implementing and enforcing the requirements of the Asbestos Management Program for all work initiated by their department;
2. reviewing all work activities to determine if asbestos-containing materials are present and might be disturbed by such activities;
3. ensuring that specifications and drawings containing information on locations of asbestos-containing materials are issued at the time of tendering or requesting a proposal;
4. ensuring that contractors have been provided information on the locations of asbestos-containing material in the school and that they have signed and returned the *Asbestos Acknowledgement Form*;
5. ensuring that any entry into spaces above suspended ceilings in areas of schools which have asbestos sprayed fireproofing is only performed by an approved contractor following Type 2 enclosure procedures;
6. advising the Manager, Facility Maintenance and Renewal of any construction projects prior to tendering;
7. advising the school principal of any construction projects prior to tendering, through a Notice of Project letter and providing a copy of the ACM report at end of project for school records;
8. arranging for a qualified external consultant to conduct a designated substance and hazardous materials survey prior to tendering a construction project;
9. issuing the designated substances survey report as part of the tender documentation, request for proposal or work order;
10. issuing specific instructions regarding asbestos with any request for proposal or tender documents;
11. retaining an approved abatement contractor to perform Type 2 or Type 3 (and certain Type 1 as outlined) asbestos abatement work;
12. retaining a qualified consultant to oversee as required Type 2 and Type 3 asbestos abatement work;
13. obtaining reports from consultants throughout the course of a project outlining inspection findings, deficiencies and corrective actions and results of any air testing;
14. ensuring that consultant project reports are maintained in the Asbestos Register;
15. Prior to awarding work, obtaining proof of asbestos training for all contractor staff;
16. obtaining documentation confirming that the contractor has submitted a "Notice of Project" to the Ministry of Labour for Type 3 abatement work;
17. providing advance notice to the School – Site Joint Occupational Health and Safety Committee if the Board is seeking a variance in procedure as set out in O.Reg. 278/05;

18. advising the Manager, Facility Maintenance and Renewal of any activity involving the removal of asbestos-containing materials so that the Asbestos Register can be updated; and
19. obtaining final abatement closure reports from consultants and forwarding reports to the Manager, Facility Maintenance and Renewal, and the school principal.

## 2.4 Area Supervisors, Plant Operations

Area Supervisors are responsible for the following:

1. identifying any maintenance activities that could involve disturbance or removal of asbestos-containing material;
2. ensuring that maintenance staff who perform any asbestos-related work have received appropriate training and have been provided with required personal protective equipment;
3. arranging for an approved abatement contractor to perform repairs to damaged asbestos-containing material and providing a report to the school indicating that repairs have been made;
4. arranging for testing of any new discoveries of materials suspected of containing asbestos and adding the test results to the Asbestos Register;
5. advising the Ministry of Labour and the Manager, Facility Maintenance and Renewal of any unexpected discoveries of asbestos-containing materials during a project;
6. annually reviewing the *Asbestos Register* for completeness; and
7. advising new School Administrators of the contents of the *Asbestos Register*.

## 2.5 Maintenance Staff

Maintenance Staff are responsible for the following:

1. reviewing the *Asbestos Register* prior to performing any work activities in a school;
2. advising the Area Supervisor if any planned work may disturb asbestos-containing material;
3. reporting any damaged or fallen asbestos-containing material to the Area Supervisor;
4. performing Type 1 removal of asbestos-containing vinyl floor tiles or Type 1 removal of asbestos-containing ceiling tiles, if requested by the Area Supervisor; and
5. consulting with the Area Supervisor prior to performing Type 1 work.

## 2.6 Head Caretakers

Head Caretakers are responsible for the following:

1. reviewing the Asbestos Register for their school annually with the School's Administrators and advising them of any activity related to asbestos management at the school or at J.W.Singleton Education Centre (JWS);
2. ensuring external contractors sign in to the Construction Log Book, which is kept at the school front office when the school is operational or in the Custodial office;
3. ensuring that caretakers avoid disturbances of asbestos-containing materials;
4. reporting any damaged or fallen asbestos-containing material to the Area Supervisor; and
5. ensuring that powered equipment is not used to strip floors to the original surface.

## 2.7 Manager - Health and Safety

The Manager - Health and Safety is responsible for:

1. conducting respiratory protection training and respirator fit-testing for Board employees who may conduct Type 1 asbestos abatement work.

## 2.8 School - Site Joint Occupational Health and Safety Committee

Members of the School - Site Joint Occupational Health and Safety Committee are responsible for:

1. reviewing the Asbestos Register for their individual school or building quarterly as part of the workplace inspections.

## 2.9 School Administrators

School administrators are responsible for:

1. maintaining the *Asbestos Register* and a copy of the *Asbestos Management Plan* in the office;
2. advising school staff and the School - Site Safety Committee of the existence of the Asbestos Register and of the locations of asbestos-containing material where staff may be in close proximity;
3. communicating information regarding a Notice of Project and a Project Completion report with staff.
4. sharing reports with staff regarding repairs made to asbestos-containing material;
5. providing the Asbestos Register to maintenance staff or external contractors whose work requires that they know the locations of asbestos-containing material; and
6. reporting any damaged or fallen asbestos-containing materials to the Area Supervisor.



## 2.10 Procurement Department

The Procurement Department is responsible for advising the Manager, Facility Maintenance and Renewal of any construction projects that may impact asbestos-containing materials and/or has an Asbestos Register, prior to tendering and for providing links and information related to the Board's Asbestos Administrative Procedure and AMP as required in procurement documents for any facility-related renovation or maintenance work. A link to the school or building's Asbestos Register, if applicable based on the age of the building, will be provided in the tender documents for any project that may impact the asbestos-containing materials.

## 2.11 All Staff

All HDSB staff are responsible for viewing the mandatory Asbestos Awareness Training annually, available on-line through the myHDSB website, under the module ESS. Tracking is monitored by staff in the Human Resources department. All other training records within the Board are maintained on file by the person coordinating (on a department by department basis) or delivering the training.

## 2.12 External Contractors and Subcontractors

External contractors and subcontractors who perform work in HDSB schools are responsible for:

1. providing written confirmation (see Asbestos Acknowledgement Form in Appendix C) that they have been provided information on the locations of asbestos-containing material in the school and that they will abide by the requirements of O.Reg. 278/05 and any other specific requirements instructed by the Board;
2. ensuring that all of their employees have been informed about the locations of asbestos-containing materials in the areas where they will be working;
3. contractors are responsible for ensuring that any subcontractors are aware of the locations of asbestos-containing material and will abide by the requirements of O.Reg. 278/05 and any other specific requirements of the Board;
4. ensuring that all of their employees have completed asbestos training, including asbestos training approved by the Ontario Ministry of Training, Colleges and Universities for workers who are involved in performing Type 3 abatement work;
5. providing proof of training to the HDSB Project Manager responsible for the project;
6. ensuring that any workers or sub-trade personnel planning to do work in the building, sign the Contractor Log Book upon arrival at the school – the Log Book is kept in the school's main admin. Office, when the school is operational or in the Custodial office.
7. submitting "Notice of Project" to the Ontario Ministry of Labour for Type 3 asbestos abatement projects and providing the HDSB Project Manager a copy of the Notice of Project; and
8. stopping work and immediately notifying the HDSB Project Manager in the event that any previously unidentified materials suspected of containing asbestos are identified during the course of the work.

## 3.0 ASBESTOS REGISTER, INVENTORY AND REASSESSMENT

### 3.1 Asbestos Register and Inventory

All schools and facilities which have asbestos-containing materials shall have an *Asbestos Register* maintained in the school office. The Asbestos Register shall be comprised of the asbestos inventory (also known as asbestos survey report), a copy of the ACM Maintenance Floor Plan (which is used for the annual reassessment) and documentation of all activities related to asbestos repairs, abatement and inspections, all maintained in chronological order in a binder. The Asbestos Register will also contain key contact information.

The asbestos inventory is a record of the locations and condition of asbestos-containing materials in the building. The inventory shall be updated at least annually and whenever new information becomes available (e.g., following an asbestos abatement project, when additional bulk sample analysis results become available, etc.).

### 3.2 Reassessment

Asbestos-containing materials shall be inspected at least annually to determine their condition. These annual inspections will be performed by the Area Supervisor and the findings will be recorded on an ACM Maintenance Floor Plan. Any deficiencies will be reported to the Manager, Facility Maintenance and Renewal.

A qualified consultant will perform above-ceiling inspections in facilities where friable asbestos-containing materials are present above suspended ceilings.

Copies of reassessment findings shall be made available to the School Administration and filed in the facility's Asbestos Register. Any deficiencies as well as corrective actions shall be reported and made available to the School Administrators so that they may advise their staff accordingly. The Facility Services department will also maintain digital copies of every Asbestos Register. A copy of the Asbestos Register for each building is posted on the Board's website, under *Board / Department / Facility Services*.

## 4.0 REPAIR AND MAINTENANCE

The Halton District School Board uses approved abatement contractors for asbestos abatement work. Therefore, unless otherwise specified, no Board staff are to knowingly affect asbestos-containing materials. The only exception is that trained maintenance staff may perform Type 1 removal of asbestos-containing vinyl floor tiles (and associated mastics) and Type 1 removal of asbestos-containing ceiling tiles. Maintenance staff must consult with the Area Supervisor prior to performing any such Type 1 work.

### **No asbestos work shall be permitted with occupants present.**

Any damaged or deteriorated asbestos-containing materials observed by Board staff (Caretaker, Maintenance Staff, School – Site Joint Health and Safety Committee members or others) shall be reported to the Facility Services Area Supervisor who will arrange for repairs to be made by an approved abatement contractor.

Where it is readily apparent that friable asbestos-containing fireproofing or acoustical or thermal insulation has fallen and will continue to fall because of its deterioration, the fallen material shall be cleaned up and removed and the fireproofing or insulation shall be repaired, sealed, removed or permanently enclosed.

## 5.0 CLASSIFICATION OF ASBESTOS WORK

Asbestos-related work is classified in O.Reg. 278/05 into three categories – Type 1, 2 and 3 operations. A summary of asbestos work classification is provided in Appendix A.

HDSB Maintenance Staff who have received appropriate training may perform Type 1 removal of asbestos-containing vinyl floor tiles or ceiling tiles.

For Type 2 and Type 3 asbestos abatement projects, the Department Manager and/or Project Manager responsible for the project will ensure that a scope of work and technical specifications are prepared for the project, that the tender documentation includes a project-specific designated substances survey report, that an approved asbestos abatement contractor is retained to perform the work and that a qualified consulting company has been retained to provide inspection and final clearance air testing in accordance with the requirements of O.Reg. 278/05.

## 6.0 STANDARD OPERATING PROCEDURES

Standard operating procedures for the following activities are provided in Appendix B:

1. Type 1 removal of asbestos-containing vinyl floor tiles;
2. Type 1 removal of asbestos-containing ceiling tiles;
3. Clean-up of fallen asbestos-containing material;
4. Personal Protective Equipment;
5. Above-ceiling entry in buildings with asbestos sprayed fireproofing.

HDSB maintenance staff who have received appropriate training, may perform Type 1 removal of asbestos-containing vinyl floor tiles or Type 1 removal of asbestos-containing ceiling tiles. Standard operating procedures for Type 1 removal of asbestos-containing vinyl floor tiles and ceiling tiles are presented in Appendix B. Any other asbestos-related work will be performed by an approved abatement contractor.

Any entry into spaces above suspended ceilings in areas of schools which have asbestos sprayed fireproofing (Robert Bateman High School and White Oakes Secondary School – North Campus) will only be performed by an approved contractor following Type 2 enclosure procedures. This requirement will be implemented and enforced by the Department Managers and Project Managers who are responsible for construction or maintenance work in schools which have sprayed asbestos fireproofing.

## 7.0 TRAINING AND EDUCATION

Different levels of training are required depending on the roles and responsibilities of the staff (and contractors) to be trained. A summary of the topics (minimum requirements) to be included in the training for each group is presented in Table 7.1. All personnel to be trained will receive basic asbestos awareness training at a minimum, which will cover the following topics:

- a) uses of asbestos;
- b) hazards of asbestos exposure;

- c) *Asbestos Register*; and
- d) HDSB Asbestos Management Plan and Administrative Procedure overview.

External contractors (and subcontractors) who will be performing Type 3 asbestos abatement work will be required to submit written proof of completion of asbestos training approved by the Ontario Ministry of Training, Colleges and Universities. Contractors who will be performing Type 2 asbestos abatement work will be required to provide proof of training prescribed in Section 19 of O. Reg. 278/05 which includes training in:

- a) the hazards of asbestos exposure;
- b) personal hygiene and work practices; and
- c) the use, cleaning and disposal of respirators and protective clothing.

**Table 7.1 Asbestos Training Requirements**

	Employee Category	Training Agenda
1.	All Staff	<ul style="list-style-type: none"> <li>● Asbestos awareness</li> </ul>
2.	Maintenance Staff	<ul style="list-style-type: none"> <li>● Asbestos awareness</li> <li>● HDSB Asbestos Management Plan</li> <li>● Personal hygiene and work practices</li> <li>● Use, cleaning and disposal of respirators and protective clothing</li> <li>● Overview of Type 1, 2 and 3 operations</li> <li>● Work practices and procedures for Type 1 ceiling tile and floor tile removal</li> </ul>
3.	Head Caretakers	<ul style="list-style-type: none"> <li>● Asbestos awareness</li> <li>● HDSB Asbestos Management Plan</li> </ul>
4.	Area Supervisors, Plant Operations	<ul style="list-style-type: none"> <li>● Asbestos awareness</li> <li>● HDSB Asbestos Management Plan</li> <li>● Personal hygiene and work practices</li> <li>● Use, cleaning and disposal of respirators and protective clothing</li> <li>● Overview of Type 1, 2 and 3 operations</li> <li>● Work practices and procedures for Type 1 ceiling tile and floor tile removal</li> <li>● Procedures for repairs to damaged asbestos-containing materials</li> </ul>
5.	Department Managers and Project Managers	<ul style="list-style-type: none"> <li>● Asbestos awareness</li> <li>● HDSB Asbestos Management Plan</li> <li>● Overview of Type 1, 2 and 3 operations</li> <li>● Designated substances surveys</li> <li>● Responsibilities under the HDSB AMP</li> </ul>
6.	School Administration, Facility Services and Contract Cleaning staff at Robert Bateman HS and White Oaks SS – North Campus	<ul style="list-style-type: none"> <li>● Asbestos awareness</li> <li>● Asbestos sprayed fireproofing locations</li> <li>● Procedures for above-ceiling access</li> </ul>

## 8.0 EXTERNAL CONTRACT WORK

The Purchasing Department shall advise the Manager, Facility Maintenance and Renewal of any new construction projects or maintenance work prior to the tendering stage.

Department Managers and Project Managers shall ensure that only approved abatement contractors are invited to bid on construction projects or maintenance work which may or will involve disturbance or removal of asbestos-containing materials, which can be determined through review of the *Asbestos Register* or in consultation with Facility Services staff, Renewal and Maintenance.

All external contractors for Projects and Repair Maintenance shall be notified of ACM survey prior to undertaking any work.

Project Managers shall also ensure that a project-specific designated substance survey report has been issued as part of the tender documentation for the project and that a qualified consultant has been retained to prepare abatement specifications, perform inspections and oversight of the contractor's work and to conduct final air clearance sampling for Type 3 operations.

If a general contractor subcontracts part of the work, the Project Manager shall ensure that the general contractor provides the subcontractor with a copy of the DSS report.

Contractors shall be required to sign and return the *Asbestos Acknowledgement Form* and to provide written proof that their workers have received appropriate asbestos training. A copy of the Asbestos Acknowledgement Form is provided in Appendix C.

## Classification of Type 1, 2 and 3 Operations (Ont. Reg. 278/05)

# APPENDIX A CLASSIFICATION OF TYPE 1, 2 AND 3 OPERATIONS (O. REG. 278/05)

No asbestos work shall be permitted with occupants present in the room or space at the time of the work.

### Type 1 Operations

- removing less than 7.5 m<sup>2</sup> asbestos-containing ceiling tiles;
- removing non-friable asbestos-containing material other than ceiling tiles, if the material is removed without being broken, cut, drilled, abraded, ground, sanded or vibrated;
- breaking, cutting, drilling, abrading, grinding, sanding or vibrating non-friable asbestos-containing material if the material is wetted and the work is done only using non-powered, hand-held tools; and
- removing less than 1 m<sup>2</sup> of drywall in which asbestos-containing joint compounds have been used.

### Type 2 Operations

- removing all or part of a false ceiling to obtain access to a work area, if asbestos-containing material is likely to be lying on the surface of the false ceiling;
- removal of one square metre or less of friable asbestos-containing material;
- enclosing friable asbestos-containing material;
- applying tape or a sealant or other covering to asbestos-containing pipe or boiler insulation;
- removing 7.5 m<sup>2</sup> or more asbestos-containing ceiling tiles (if removed without being broken, cut, drilled, abraded, ground, sanded or vibrated);
- breaking, cutting, drilling, abrading, grinding, sanding or vibrating non-friable asbestos-containing material if the material is not wetted and the work is done only using non-powered, hand-held tools;
- removal of one square metre or more of drywall in which asbestos-containing joint compounds have been used;
- breaking, cutting, drilling, abrading, grinding, sanding or vibrating non-friable asbestos-containing

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material if the work is done using power tools that are attached to dust-collecting devices equipped with HEPA filters;

- removing insulation that is asbestos-containing material from a pipe, duct or similar structure using a glovebag; and
- cleaning or removing filters used in air-handling equipment in a building that has asbestos-containing sprayed fireproofing.

### **Type 3 Operations**

- removal of more than one square metre of friable asbestos-containing material;
- spray application of a sealant to friable asbestos-containing material;
- cleaning or removing air-handling equipment, including rigid ducting but not including filters, in a building that has sprayed asbestos-containing fireproofing;
- repairing or demolishing a kiln, metallurgical furnace or similar structure that is made in part of asbestos-containing refractory materials; and
- breaking, cutting, drilling, abrading, grinding, sanding or vibrating non-friable asbestos-containing materials, if the work is done using power tools that are not attached to dust-collecting devices equipped with HEPA filters.

## Standard Operating Procedures

### **APPENDIX B STANDARD OPERATING PROCEDURES (SOPs)**

B1: TYPE 1 REMOVAL/HANDLING OF ASBESTOS-CONTAINING CEILING TILES – MINOR OPERATION

B2: TYPE 1 REMOVAL OF ASBESTOS-CONTAINING VINYL FLOOR TILES

B3: CLEANUP OF FALLEN ASBESTOS-CONTAINING MATERIAL

B4: PERSONAL PROTECTIVE EQUIPMENT



**APPENDIX B1**

PROCEDURES FOR TYPE 1

REMOVAL/HANDLING OF ASBESTOS-CONTAINING CEILING TILES

(MINOR OPERATION – LESS THAN 7.5 SQUARE METRES)

## APPENDIX B1

### PROCEDURES FOR TYPE 1

#### REMOVAL OR HANDLING OF ASBESTOS-CONTAINING

#### CEILING TILES (MINOR OPERATION)

The removal of a limited number of asbestos-containing ceiling tiles above which there is no sprayed, asbestos-containing fireproofing is classified as a Type 1 operation. In accordance with Ontario Regulation 278/05, *Designated Substance - Asbestos on Construction Projects and in Buildings and Repair Operations*, removal or handling (e.g. removal and re-installation) of asbestos-containing ceiling tiles as a Type 1 operation will be limited to <7.5 square metres of tiles where the tiles can be removed/handled without being broken, cut, drilled, abraded, ground, sanded or vibrated. If more than 7.5 square metres of tiles are to be removed/handled, or the tiles will be disturbed as described above, or if asbestos-containing material is likely to be lying on the surface of the false ceiling, the work must be undertaken as a Type 2 enclosure operation (typically by an approved asbestos abatement contractor).

#### 1.0 APPLICATION

These procedures apply to the removal/handling of <7.5 square meters of tiles where the tiles can be removed/handled without being broken, cut, drilled, abraded, ground, sanded or vibrated above which there is no sprayed asbestos-containing fireproofing on steel beams or deck and there is no asbestos-containing material likely to be lying on the surface of the false ceiling.

**No asbestos work shall be permitted with occupants present.**

#### 2.0 DEFINITIONS

.1 *HEPA Vacuum*

Vacuum cleaner equipped with a High Efficiency Particulate Air Filter, fitted with appropriate tools. The vacuum equipment shall have a filtering system capable of collecting and retaining fibres greater than 0.3 microns in diameter at 99.97% efficiency.

.2 *Damp Wiping*

A cleaning process for removing residual asbestos contamination using damp cloths, sponges or mops.

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### .3 *Work Areas*

Where actual work activity involving asbestos takes place.

### .4 *Drop Sheet*

Polyethylene sheeting of thickness specified to control the generation of secondary dust.

## 3.0 MATERIALS AND EQUIPMENT

### .1 *HEPA Vacuum*

As per definition 2.1.

### .2 *Drop Sheet*

Polyethylene sheeting of minimum 6 mil. thickness.

### .3 *Asbestos Waste Container*

Typically a purpose-made yellow polyethylene bag labelled as “Asbestos Waste”.

### .4 *Small Tools*

Sponge(s), bucket(s), ladder, etc.

### .5 *Tape*

Reinforced duct tape or double-sided tape suitable for sealing polyethylene bags.

### .6 *Respirator*

Air-purifying respirator equipped with high efficiency (i.e., P100) particulate filters.

## 4.0 PERSONAL PROTECTION

### .1 Workers shall wear respirators when removing or handling asbestos-containing ceiling tiles.

The following requirements shall apply:

1. all respiratory equipment shall be individually assigned and identified;
2. each worker must be instructed on and tested with his/her respirator;
3. workers shall wear half or full-facepiece respirators fitted with HEPA filters;

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4. disposable single-use type respirators are not permitted;
  5. all respirators shall be approved and labelled for protection against asbestos fibres, and shall meet the design and usage requirements of the United States National Institute for Occupational Safety & Health (minimum NIOSH APF = 10);
  6. replace filter cartridges as appropriate;
  7. no person who performs asbestos remedial work shall have facial hair which affects respirator-to-face seal.
- .2 Use of protective clothing is optional at the request of the worker.
1. protective clothing shall be provided by the Board and shall be made of a material that does not readily retain nor permit penetration of asbestos fibres,
  2. shall consist of head covering and full body covering that fits snugly at the ankles, wrists and neck, in order to prevent asbestos fibres from reaching the garments and skin under the protective clothing,
  3. shall be repaired or replaced if torn.
- .3 Facilities for washing hands and face must be provided and shall be used by every worker when leaving asbestos work areas.
- .4 Smoking, eating, drinking or chewing in asbestos work areas is prohibited.

### **5.0 PREPARATION - WORK AREAS**

- .1 Post warning sign(s) to prevent others from entering the immediate vicinity of the work area.
- .2 Where practical, isolate or turn off the ventilation system serving the work area;
- .3 Before beginning work, remove any visible dust from any surfaces in the work area (including surfaces directly under the area where tiles will be removed) by HEPA vacuuming or damp wiping. Note: Compressed air must never be used to clean up and remove dust from any surface.
- .4 Before beginning work, wherever practicable, cover carpeted floors and other surfaces below the work with polyethylene drop sheets to catch debris.

## **6.0 EXECUTION**

- .1 Removal: Carefully remove the ceiling tile(s) and bag as asbestos waste. Tiles shall be removed intact, shall not be broken and shall be placed directly into waste disposal bags (which are large enough to hold the intact tiles).
- .2 At completion of work, clean all equipment, drop sheets and work boots with HEPA vacuum or by damp wiping. Drop sheets and used cleaning cloths must be wetted and disposed of as asbestos waste. Place all waste into waste container (i.e. yellow bag) as described in 7.1 and HEPA vacuum and damp wipe the bag before removing from the work area.
- .3 Before leaving the work area, decontaminate protective clothing by using a HEPA vacuum cleaner or by damp wiping. If the protective clothing will not be reused, place it in a waste disposal bag.

## **7.0 WASTE TRANSPORT AND DISPOSAL**

- .1 Place waste into asbestos waste receptor. Seal the container with duct tape. HEPA vacuum or damp wipe the container to remove any surface contamination.
- .2 Transport the sealed container to the designated waste storage location (locked mechanical room) for temporary storage.
- .3 Transport and disposal of asbestos waste will be arranged through the Area Supervisor, Plant Operations and in accordance with Ontario Regulation 347 under the *Environmental Protection Act*.

### **NOTE:**

- \* External contractors/consultants must provide their workers with appropriate personal protective equipment and other equipment to undertake the work as specified above.

External contractors/consultants must arrange their own transport and disposal of asbestos waste which must be done in accordance with applicable municipal and provincial by-laws and/or regulations.

Asbestos waste shall not be stored on site for a period longer than three months.

**APPENDIX B2**

PROCEDURES FOR TYPE 1

REMOVAL OF ASBESTOS-CONTAINING VINYL FLOOR TILES

## APPENDIX B2

### PROCEDURES FOR TYPE 1 REMOVAL OF ASBESTOS-CONTAINING VINYL FLOOR TILES

The removal of asbestos-containing vinyl floor tiles is classified as a Type 1 operation in Ontario Regulation 278/05, *Designated Substance - Asbestos on Construction Projects and in Buildings and Repair Operations*, provided the tiles are wetted to control the spread of dust or fibres and if the work is done only by means of non-powered hand-held tools.

#### 1.0 APPLICATION

These procedures apply to the removal of vinyl floor tiles. Note that mastics used to adhere the tiles to the substrate may also contain asbestos. If any asbestos-containing mastic is to be removed, the work would be classified as Type 1 provided the mastic is wetted and the work is done only using non-powered hand-held tools.

**No asbestos work shall be permitted with occupants present.**

#### 2.0 DEFINITIONS

.1 *HEPA Vacuum*

Vacuum cleaner equipped with a High Efficiency Particulate Air Filter, fitted with appropriate tools. The vacuum equipment shall have a filtering system capable of collecting and retaining fibres greater than 0.3 microns in diameter at 99.97% efficiency.

.2 *Damp Wiping*

A cleaning process for removing residual asbestos contamination using damp cloths, sponges or mops.

.3 *Work Areas*

Where actual work activity involving asbestos takes place.

.4 *Drop Sheet*

Polyethylene sheeting of thickness specified to control the generation of secondary dust.

### **3.0 MATERIALS AND EQUIPMENT**

- .1 *HEPA Vacuum*  
As per definition 2.1
- .2 *Drop-Sheet*  
Polyethylene sheeting of minimum 6 mil. thickness.
- .3 *Asbestos Waste Container*  
Typically a purpose-made yellow polyethylene bag labelled as “Asbestos Waste”.
- .4 *Small Tools*  
Sponge(s), bucket(s), ladder, etc.
- .5 *Tape*  
Reinforced duct tape or double-sided tape suitable for sealing polyethylene bags.
- .6 *Respirator*  
Air-purifying respirator equipped with high efficiency (i.e., P100) particulate filters.

### **4.0 PERSONAL PROTECTION**

- .1 Workers shall wear respirators when removing or handling asbestos-containing vinyl floor tiles or vinyl floor sheeting.  
  
The following requirements shall apply:
  - .1 all respiratory equipment shall be individually assigned and identified;
  - .2 each worker must be instructed and tested with his/her respirator;
  - .3 workers shall wear half or full-facepiece respirators fitted with HEPA filters;
  - .4 disposable single-use type respirators are not permitted;
  - .5 all respirators shall be approved and labelled for protection against asbestos fibres, and shall meet the design and usage requirements of the United States National Institute for Occupational Safety & Health (minimum NIOSH APF = 10);
  - .6 replace filter cartridges as appropriate;



## Halton District School Board – Asbestos Management Plan

- .7 no supervisor or worker who performs asbestos remedial work shall have facial hair which affects respirator-to-face seal.
- .2 Use of protective clothing is optional at the request of the worker.
  - .1 protective clothing shall be provided by the Board and shall be made of a material that does not readily retain nor permit penetration of asbestos fibres,
  - .2 shall consist of head covering and full body covering that fits snugly at the ankles, wrists and neck, in order to prevent asbestos fibres from reaching the garments and skin under the protective clothing,
  - .3 shall be repaired or replaced if torn.
- .3 Facilities for washing hands and face must be provided and shall be used by every worker when leaving asbestos work areas.
- .4 Smoking, eating, drinking or chewing in asbestos work areas is prohibited.

### **5.0 PREPARATION - WORK AREAS**

- .1 Post warning sign(s) to prevent others from entering the immediate vicinity of the work area.
- .2 Where practical, isolate or turn off the ventilation system serving the work area;
- .3 Before beginning work, remove any visible dust from any surfaces in the work area by HEPA vacuuming or damp wiping. Note: Compressed air must never be used to clean up and remove dust from any surface.
- .4 Before beginning work, disconnect all floor-mounted electrical fixtures and outlets in the area where tiles will be removed and seal with duct tape. Seal other floor penetrations as required.

### **6.0 EXECUTION**

- .1 Removal: Spray amended water (i.e. water with a wetting agent added) on tiles to be removed to reduce dust. Carefully remove the floor tile(s) using non-powered hand-held tools and bag as asbestos waste.
- .2 At completion of work, clean all equipment and work boots with HEPA vacuum or by damp wiping. Place all waste into waste container (i.e. yellow bag) as described in 7.1 and HEPA vacuum and damp-wipe the bag before removing from the work area.

- .3 Before leaving the work area, decontaminate protective clothing by using a HEPA vacuum cleaner or by damp wiping. If the protective clothing will not be reused, place it into a waste disposal bag.

## **7.0 WASTE TRANSPORT AND DISPOSAL**

- .1 Place waste into asbestos waste receptor. Seal the container with duct tape. HEPA vacuum or damp wipe the container to remove any surface contamination.
- .2 Transport the sealed container to the designated waste storage location (locked mechanical room) for temporary storage.
- .3 Transport and disposal of asbestos waste will be arranged through the Area Supervisor, Plant Operations and in accordance with Ontario Regulation 347 under the *Environmental Protection Act*.

### **NOTE:**

- \* External contractors/consultants must provide their workers with appropriate personal protective equipment and other equipment to undertake the work as specified above.

External contractors/consultants must arrange their own transport and disposal of asbestos waste which must be done in accordance with applicable municipal and provincial by-laws and/or regulations. Asbestos waste shall not be stored on site for a period longer than three months.

**APPENDIX B3**

PROCEDURES FOR THE CLEANUP  
OF FALLEN ASBESTOS-CONTAINING MATERIAL

## APPENDIX B3

### PROCEDURES FOR THE CLEANUP OF FALLEN ASBESTOS-CONTAINING MATERIAL

Cleanup of fallen friable asbestos-containing material is classified in Ontario Regulation 278/05, *Designated Substance - Asbestos on Construction Projects and in Buildings and Repair Operations* as a Type 2 operation.

#### 1.0 APPLICATION

These procedures apply to the cleanup of a minor amount (less than one square metre) of asbestos-containing material.

**No asbestos work shall be permitted with occupants present.**

#### 2.0 DEFINITIONS

.1 *HEPA Vacuum*

Vacuum cleaner equipped with a High Efficiency Particulate Air Filter, fitted with appropriate tools. The vacuum equipment shall have a filtering system capable of collecting and retaining fibres greater than 0.3 microns in diameter at 99.97% efficiency.

.2 *Damp Wiping*

A cleaning process for removing residual asbestos contamination using damp cloths, sponges or mops.

.3 *Work Areas*

Where actual work activity involving asbestos takes place.

#### 3.0 MATERIALS AND EQUIPMENT

.1 *HEPA Vacuum*

As per definition 2.1

.2 *Asbestos Waste Container*

Typically a purpose-made yellow polyethylene bag labelled as “Asbestos Waste”.

.3 *Small Tools*

Sponge(s), bucket(s), ladder, etc.

.4 *Respirator*

Air-purifying respirator equipped with high efficiency (i.e., P100) particulate filters.

#### 4.0 PERSONAL PROTECTION

.1 Workers shall wear respirators when performing cleanup of fallen asbestos-containing material.

The following requirements shall apply:

.1 all respiratory equipment shall be individually assigned and identified;

.2 each worker must be instructed and tested with his/her respirator;

.3 workers shall wear half or full-facepiece respirators fitted with HEPA filters;

.4 disposable single-use type respirators are not permitted;

.5 all respirators shall be approved and labelled for protection against asbestos fibres, and shall meet the design and usage requirements of the United States National Institute for Occupational Safety & Health (minimum NIOSH APF = 10);

.6 replace filter cartridges as appropriate;

.7 no supervisor or worker who performs asbestos remedial work shall have facial hair which affects respirator-to-face seal.

.2 Workers shall wear protective clothing, as follows:

.1 protective clothing shall be provided by the Board and shall be made of a material that does not readily retain nor permit penetration of asbestos fibres,

.2 shall consist of head covering and full body covering that fits snugly at the ankles, wrists and neck, in order to prevent asbestos fibres from reaching the garments and skin under the protective clothing,

.3 shall be repaired or replaced if torn.

- .3 Facilities for washing hands and face must be provided and shall be used by every worker when leaving asbestos work areas.
- .4 Smoking, eating, drinking or chewing in asbestos work areas is prohibited.

## **5.0 PREPARATION - WORK AREAS**

- .1 Separate the work area from the rest of the building using rope barriers, signage and other appropriate means. The extent of the work area will depend on the amount of work to be done, potential for fibre release and the height of the work above floor level.
- .2 Identify the work area with clearly visible warning signs.
- .3 Disable the ventilation system servicing the work area, if practical.
- .4 Do not use compressed air.
- .5 Do not eat, drink smoke or chew in the work area.

## **6.0 ASBESTOS CLEANUP WORK**

- .1 Spray a mist of amended water on the fallen asbestos-containing material using a garden sprayer.
- .2 Cleanup the fallen asbestos-containing material using a HEPA vacuum cleaner or by damp wiping. Pieces of asbestos-containing material can be placed directly into an appropriate waste container after the material has been sprayed with a mist of amended water.
- .3 Immediately after completion of cleanup work, clean all surfaces and equipment within the work area using a HEPA vacuum or by damp wiping.
- .4 After satisfactory completion of cleaning and before leaving the work area, decontaminate protective clothing (including boots) and equipment, etc., using a HEPA vacuum or by damp wiping.
- .5 Dispose of protective clothing as asbestos waste.
- .6 Wash hands and face at the completion of the work (before leaving the work area); damp wipe the respirator and store in a proper place.
- .7 Make arrangements for disposal of all asbestos-containing waste material.

## 7.0 WASTE TRANSPORT AND DISPOSAL

- .1 Place waste into asbestos waste receptor. Seal the container with duct tape. HEPA vacuum or damp wipe the container to remove any surface contamination.
- .2 Transport the sealed container to the designated waste storage location (locked mechanical room) for temporary storage.
- .3 Transport and disposal of asbestos waste will be arranged through the Area Supervisor, and in accordance with Ontario Regulation 347 under the *Environmental Protection Act*.

### **NOTE:**

- \* External contractors/consultants must provide their workers with appropriate Personal Protective Equipment and other equipment to undertake the work as specified above.

External contractors/consultants must arrange their own transport and disposal which must be done in accordance with applicable municipal and provincial by-laws and/or regulations.

Asbestos waste shall not be stored on site for a period longer than three months.

**APPENDIX B4**

PERSONAL PROTECTIVE EQUIPMENT



## APPENDIX B4

### PERSONAL PROTECTIVE EQUIPMENT

Respiratory protective devices and protective clothing will be provided for Board Maintenance Staff who may perform Type 1 removal of asbestos-containing vinyl floor tiles or asbestos-containing ceiling tiles.

Information on equipment suppliers, equipment type and use, care and disposal of personal protective equipment are outlined below:

#### 1.0 RESPIRATORS

##### .1 Supplier

Acklands Grainger – via Purchasing, Facility Department or Health and Safety Department

##### .2 Respirator Type

3M 6200/ Small/Medium or Large – Must be Fit-Tested for appropriate size.

Cartridges 3M 2091/07000 - P100.

##### .3 Use, Care and Maintenance

Instructions are provided with the respirator package – they must not be used for oxygen deficient atmospheres (i.e. confined spaces) – nor are they suitable for spray painting or organic vapours (i.e. paint fumes – which requires a “Chemical Organic Vapour Filter”). Each employee requesting a respirator will be issued one for his or her personal use. The employee must be fit-tested by qualified personnel. They are only to be used for dust and particulate. **Do not wear if you have a beard or long facial hair as you will not get a good seal on the face.**

Inspection:

1. Check face piece for cracks, tears and dirt – be sure the face piece is not distorted.
2. Examine the exhalation valves for signs of distortion.
3. Make sure the elastic straps have good elasticity.
4. Examine all plastic parts for signs of cracking or fatiguing.
5. Remove exhalation valve cover and examine inhalation valve and valve seat for signs of dirt, distortion, cracking – reinstate the valve cover.

Cleaning:

1. Remove the cartridges.
2. After each use – using a mild detergent – dish liquid – rinse and dry.
3. Do not use solvents to clean the respirator.

Storage:

In the zip lock bag provided or a new zip lock bag – to avoid contamination – dirt etc.

## **2.0 PROTECTIVE CLOTHING**

.1 Supplier

Acklands Grainger – Via Purchasing or Health and Safety Department.

.2 Type

Tyvek Coverall with hood and boots.

3 Use, Care and Disposal

As per O.Reg. 278/05 the clothing must be cleaned (continue to wear your respirator) using a vacuum equipped with a HEPA filter or wet wiping. The coveralls are to be subsequently disposed (mark them or rip them) of as asbestos waste – they are not to be reused.

## **APPENDIX C ASBESTOS ACKNOWLEDGEMENT FORM**

**HALTON DISTRICT SCHOOL BOARD**  
**ASBESTOS ACKNOWLEDGEMENT FORM**

I/We hereby acknowledge that the Halton District School Board has provided us with information on the locations of asbestos-containing material in \_\_\_\_\_

\_\_\_\_\_

(name of building)

and that I have read and understand this information.

If asbestos-containing materials may be disturbed during the course of our work, we will ensure that the Board is advised of the proposed schedule and procedures for performing the work, that any and all of our workers who will perform the work have received training as required by Ontario Regulation 278/05 (*Regulation respecting Asbestos on Construction Projects and in Buildings and Repair Operations*) and that the work will be conducted in accordance with the measures and procedures prescribed in O.Reg. 278/05.

Furthermore, if any work is subcontracted, we will ensure that all of the above requirements are complied with by our subcontractor.

Name (Print): \_\_\_\_\_

Company: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_