ASBESTOS MANAGEMENT PLAN

GNWT BUILDINGS
(OPERATED AND MAINTAINED BY PUBLIC WORKS & SERVICES)

Revision #1
November, 2008

Northwest Territories Public Works and Services
ASBESTOS MANAGEMENT PLAN
for
GNWT BUILDINGS

(OPERATED AND MAINTAINED BY PUBLIC WORKS & SERVICES)

Prepared by:

Technical Support Services
Asset Management Division
Department of Public Works and Services

In Consultation with the
Workers’ Safety & Compensation Commission
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1. INTRODUCTION

Asbestos is a mineral fibre that is considered to be a toxic substance that affects human health. With prolonged exposure, it can destroy lung tissue and has been linked to some types of cancer. Until the late 1970s, asbestos–containing material (ACM) was commonly used for insulation and fire protection. Loose fill Vermiculite insulation, if installed prior to 1990 may contain asbestos. A variety of ACM products may be present in some buildings and facilities maintained or operated by Public Works & Services (PW&S), Government of the NWT.

In 2000, asbestos surveys and site investigations were conducted to identify the presence of ACM within the assets PW&S is directly responsible to maintain or operate. The intent, then and now is to manage ACM in place until such time as removal becomes practical or necessary. A detailed inventory of ACM was prepared for each asset and is to be maintained through periodic inspection reports. PW&S has developed Asbestos Removal and Disposal Guideline that detail the proper handling and disposal requirements for ACM.

The following management plan was developed to ensure that where PW&S is directly responsible to maintain or operate the asset, any ACM is adequately maintained, controlled and handled so as to protect workers and building occupants, and to ensure compliance with regulatory and policy requirements. It should be noted that destructive investigation was not done; therefore a full investigation should be done prior to any renovation or demolition.

This plan was created for and is applicable to GNWT assets maintained and operated directly by Public Works & Services. There is no intent that this plan apply to assets maintained by other GNWT departments or agencies including those which PW&S serves under a Memorandum of Understanding (MOU). PW&S will survey all assets maintained under the MOU at the client’s expense to ensure PW&S staff and contractors are aware of ACM. The client will be responsible to respond to any inquiries from the Workers’ Safety & Compensation Commission (WSCC) and to maintain their own asbestos inventory. Other than new construction, assets which clients are acquiring through program transfer or other acquisition will be subject to the requirements of this plan at the client’s expense prior to being accepted for maintenance by Public Works & Services.
2. REGULATORY REQUIREMENTS

The *Consolidation of General Safety Regulations R.R.N.W.T. 1990.c. S-1* deals with the safety and health of persons working in the NWT and in GNWT facilities. The *Consolidation of Asbestos Safety Regulations R-016-92* establishes the rules for working with asbestos-containing material. The Workers’ Safety & Compensation Board of the NWT enforces these regulations and sets exposure limits for asbestos. Currently the *Permissible Exposure Limit* is set at 0.2 Fibre/cc for chrysotile, however; the American Conference of Governmental Industrial Hygienist has set a *Threshold Limit Value* 8 hour exposure limit of 0.1 Fibre/cc. This lower limit will soon be adopted by most jurisdictions and is the limit PW&S will use.

Disposal of asbestos and ACM is regulated under the *Environmental Protection Act* (EPA) of the NWT. The Department of Energy and Natural Resources enforces these regulations.

Transportation of asbestos is regulated by federal, provincial and territorial *Transportation of Dangerous Goods* acts and regulations depending on the transportation route. The regulations specify signage, packing and manifesting requirements.

Waste asbestos is disposed of at a municipal landfill or specific site designed and capable of handling asbestos in an environmentally sound manner.

**NOTE:** Not all designated landfills are willing to accept Asbestos material.
3. ASSET INVENTORY

3.1 Asset Listing

A central asset inventory listing will be kept up to date in each region for all assets directly maintained and/or operated by Public Works & Services. This inventory will include:

- Identification number (TCA)
- Building name or description
- Client department (Owner)
- Year of construction (investigation for ACM focused pre-1980 construction as use of most asbestos was restricted in the late 1970s)
  - Vermiculite loose fill insulation, often referred to as Zonolite, installed prior to 1990 may have ACM.
- A column to identify if ACM is present
- A column to record the date(s) of inspection(s)
- Place for the name of the person who conducted inspection(s)
- Place for the name and signature of the Regional Asbestos Coordinator

3.2 Asset ACM Detailed Inventory

An ACM detailed inventory will be created for each asset where ACM is suspected or has been positively identified through investigation, sampling and laboratory analysis. This is detailed in Section 4.4.
4. MANAGEMENT STRATEGY

4.1 Departmental Asbestos Management Coordinator

PW&S will designate an employee in the Asset Management Division to be the Departmental Asbestos Coordinator. This person will be responsible for the overall coordination of the Departments Asbestos Management Plan (AMP), serve as primary contact with regulatory authorities on asbestos related issues, monitor Regional AMP activities, provide reports to PW&S Directorate as required and provide information and technical support to staff as required.

The Departmental Coordinator will also be responsible for an annual review of this management plan. Review must include comments regarding:

- Effectiveness of this management plan
- Updating of the regional asbestos inventories
- Compliance with legislation and policies
- Training requirements
- Maintenance of all records and their availability

4.2 Regional Asbestos Coordinator

Each Regional Superintendent will designate an employee to be the Regional Asbestos Coordinator. This person will be responsible for the surveying of all assets for ACM, and for preparing and maintaining an inventory of ACM in regional assets in a Regional ACM file. This person will also be responsible to ensure that appropriate information on ACM in assets is provided to staff, occupants, contractors and other parties as necessary.

4.3 Inspections

The Regional Asbestos Coordinator, in order to determine the possibility of ACM in the assets, will examine all available asset construction and O&M documents and undertake the planning and co-ordination of asbestos surveys. The Coordinator and/or a trained designated person will inspect each asset to determine whether ACM is present or not. Any material that is suspected of containing asbestos will be handled as asbestos until its status is confirmed through laboratory analysis.

A regular inspection of the building areas with confirmed ACM must be carried out at least once each year, and more frequently if the potential for damage to
ACM is high. Periodic surveillance of all ACM in the asset will ensure that any damage or deterioration of the material is detected and corrective action taken before any material can pose a potential exposure issue. Maintenance staff shall be directed to report immediately upon becoming aware of any damage to ACM in the assets.

4.4 ACM Inventory

An inventory (by asset) of all known or suspected asbestos-containing materials and their locations in the asset will be maintained by the Regional Asbestos Coordinator, and a copy will be available at the facility through the building maintainer. The inventory will include the following:

- **Location** – where in the building is this material located. This should be indicated by description such as room number/name, spatial description *i.e.*, *above ceiling corridor B*, and by indication on a floor plan as described below.

- **A Floor Plan** indicating the location of all confirmed ACM. Enough detail should be included so the exact location is readily determined. Floor plans should be a minimum of 8.5" x 11" with separate pages for each floor.

- **Condition of Material** – an indication of how easily fibres can cause contamination by being released into the surrounding area.

- **Water Damage** – water (and other Liquids) can dislodge, delaminate, and disturb friable asbestos materials that are otherwise in good condition.

- **Exposed Surface Area** – an estimate of surface area of friable material.

- **Accessibility** – if the ACM can be reached, it is accessible and subject to contact and damage.

- **Activity and Movement** – the level of activity in the building area with ACM. Higher levels of activity and movement increase the chance of contact and the potential for future exposure.

- **Air Plenum or Direct Air Stream** – ACM should not be located in supply or return air plenums (including ceiling spaces). Immediate action is required if ACM is found in these areas.

- **Friability** – the more friable the material, the greater the potential for asbestos fibre release.

- **Asbestos Content** – a total of the percentage of all types of asbestos in a sample of the material involved.

The Alberta Department of Labour Asbestos Rating Scheme will be used for classifying Accessibility, Condition and Friability (Appendix 4).
The asset ACM inventory will be annotated and updated at least annually to identify changes in the condition or volume of ACM. Review must include comments regarding changes affecting:

- Condition of the ACM
- Updating of the asbestos inventory
- Action required for compliance with legislation and policies
- Need for general repairs or maintenance of ACM or abatement/removals
- Identification and labeling of ACM material or areas

Sampling Points to Check for ACM - Around Door
4.5 **Asset Asbestos Management Plan**

An Asset Asbestos Management Plan will be developed and maintained for every asset with confirmed ACM. This plan will be reviewed annually and will include the following:

- A copy of the ACM inventory for the asset as identified in 4.4
- A brief outline of the plans for managing ACM in the asset
- An emergency response plan for building emergencies that could involve ACM

4.6 **ACM Identification**

ACM materials in building public areas will not be directly labeled unless there is substantial potential for its damage and the release of friable asbestos. Material in public areas should be encapsulated in a manner that prevents damage. Labels should be placed on the material prior to encapsulation in a manner that makes the ACM obvious should the encapsulation be removed. Service areas where friable ACM is present will be labeled at or inside their entrance and warning labels will be placed on the ACM at appropriate intervals. These labels should be highly visible and permanent.

The Regional Coordinator will be responsible to ensure that the Computerized Maintenance Management System used by PW&S is updated to provide the necessary warnings that the asset has ACM and proper (documented) procedures must be followed. The Hazardous Material box will be "checked" on the Asset Inventory Screen, this will automatically force a "HAZARDOUS MATERIAL" warning to appear on every Work Order generated for the asset.

4.7 **Repairs and Maintenance**

Maintenance of ACM is essential to avoid exposure and contamination. The Regional Coordinator will ensure that regular inspection of the condition of all accessible ACM is completed. Maintenance or repairs will be undertaken as soon as the deterioration or damage is identified. Materials for minor repairs of ACM will be maintained at the facility.

Air sampling is to be carried out prior to starting any planned asbestos related work, during the work (including clean up and after the work is completed). The affected spaces must be sampled for residual asbestos following completion of removal work.
Operational staff, that is appropriately trained and provided with personal protective equipment, may perform minor repairs and maintenance involving small areas of ACM. Repairs and maintenance are included in what the WSCC Asbestos Safety Regulations, Section 1 identifies an “Asbestos Process”. Section 5 of the Regulations in subsection (1) clearly states the requirements for personal protective equipment and the procedures to be followed when conducting an Asbestos Process. The Regional Coordinator will ensure compliance with these regulations. The proposed procedures must be sent to the WSCC 72 hours prior to starting any work.

Any material that is suspected of containing asbestos must be handled as asbestos until its composition is confirmed through laboratory analysis. (Laboratory analysis reports shall be copied to the asset inventory and the Regional ACM file). If asbestos is likely to be affected by maintenance, repairs, modification to or demolition of the facility, applicable procedures must be implemented to protect the safety of all persons occupying or working in the affected area and to prevent contamination.

4.8 Abatement

ACM in service must be replaced with other more appropriate materials, on an opportunistic basis, such as when those materials become redundant due to renovations or alterations of affected systems. ACM must be removed as part of and prior to major renovations or demolitions.

Other than minor repairs or maintenance (covering sample points, repairing minor contact damage, facilitating piping repair, etc.), a contracted asbestos abatement company that is acceptable to the WSCC must undertake all asbestos work. The proposed procedures must be sent to the WSCC 72 hours prior to starting any work.

Air sampling as noted in 4.7 must be done during any abatement procedure.

Records of the work undertaken and the sampling results must be filed in the Regional ACM file and provided to the Regional Asbestos Coordinator in the form of a completion report. The report shall state the specifics of the work that was done, methods used, disposal information and laboratory results from air and bulk sampling.

Abatement of ACM will be funded as part of the O&M only when it is directly related to O&M work required. Where abatement is required as part of renovation, construction or disposal, the cost will be at the client’s expense. Similarly if the client requests or the WSCC directs ACM abatement for reasons other than previously stated such as concerns raised by users, this work will be undertaken at the clients’ (building owners) expense.
Assets declared surplus by clients must be surveyed for ACM prior to transfer to PW&S for disposal. Required abatement will be at the client’s expense.

### 4.9 Asbestos Waste

Asbestos waste generated at the facility must be handled as hazardous waste. Basic procedures for the containment and disposal of asbestos waste are provided in the ENR *Environmental Guideline for Waste Asbestos*. Requirements for handling and disposal of asbestos waste generated from contracted asbestos abatement projects are to be defined in the contract document.

### 4.10 Communications

Facility supervisors such as Principals, the Nurse in Charge, Warden or Program Manager must be aware of the provisions of the asset asbestos management plan for their facility, including being provided with a copy of the plan. Their signature must acknowledge the receipt of and understanding of the contents of the asset asbestos management plan.

All persons normally occupying the facility or occasionally working at the facility in areas where ACM is present and can be disturbed must have the ACM (known or suspected) in their work areas identified to them by the Regional Coordinator. Safety precautions to avoid exposure to the material and procedures to obtain assistance in the event of damage to the materials must be provided.

Prior to workers (maintenance, repair, construction) undertaking work in spaces containing ACM, they must be instructed on the presence of ACM and in the avoidance of damage to the ACM and procedures to follow if ACM is disturbed or likely to be disturbed. Formal notification and acknowledgement must be obtained from any contractor consistent with the *Contractor Notification and Acknowledgement*. Prohibition of disturbance of any friable or non-friable ACM by workers in the facility must be strictly enforced. The Facility Manager/ Maintenance Coordinator or Project Officer must ensure that such information is provided and must monitor the work being undertaken to ensure that ACM is not disturbed.

When work requiring the disturbance of ACM is planned and the level of work determined by the Facilities Manager or Project Officer, the Regional Coordinator must be notified prior to arranging for or undertaking removal or major repair of ACM. The Coordinator may be required to review or direct all asbestos maintenance work. Upon completion of any work involving ACM, the Regional Asbestos Coordinator must be provided with a completion report.
4.11 Emergency Response

Procedures must be documented in the asset asbestos management plan to protect responders and prevent client staff, facility occupants and the public from being exposed to asbestos when emergencies involving ACM arise. The PW&S Facilities Manager or Maintenance Coordinator shall notify the employees at the facility or of any other company/organization involved in emergency response where there is a threat of asbestos exposure.

4.12 Record Keeping

A Regional ACM file shall be created and maintained for all records generated relative to positive ACM results in a building. Complete and comprehensive records must be maintained for all inspections, re-assessments, evaluations, inventory and other work related to asbestos-containing materials.

The minimum information to keep on record for each asset is:

- Location – where in the building is this material located. This should be indicated by description such as room number/name, spatial description i.e., above ceiling corridor B, and by indication on a floor plan as described below.
- A Floor Plan indicating the location of all confirmed ACM. Enough detail should be included so the exact location is readily determined. Floor plans should be a minimum of 8.5" x 11" with separate pages for each floor.
Asbestos Management Plan

- Type of ACM
- % of asbestos in the material
- Abatement status
- Evidence of physical or water damage
- Evidence of Delamination or other deterioration
- Degree of accessibility to the material
- Degree of activity near the material
- Location of the air plume, air shaft or air stream

Other information that should be maintained in the Regional ACM file includes:

- Copies of initial and all subsequent inspection reports
- Procedures to be followed should an emergency in the asset involve ACM
- Asbestos training record of staff involved with the facility
- Completion reports of asbestos abatement work
- Manifests of waste asbestos shipping

Current copies of Assessment Reports and Reassessment Reports must be available to maintenance staff, contractors and Client Department Facility Supervisors on site. It is suggested that the building operator’s office or a cupboard in the boiler room be used. As well copies of all inventories and reports must be provided to Asset Management Division, PW&S Headquarters.

### 4.13 Training

All personnel (trades staff and others) that may be working in areas where asbestos is contained, or that are involved in managing projects, property, staff or contractors that work in these buildings are required to take "Occupational Health and Safety for the Asbestos Worker" training. Employees are required to show proof that they have taken and passed the exam.

Taking Sample from Pipe Elbow
5 RESPONSIBILITIES

Levels of responsibility associated with asbestos management are described below:

<table>
<thead>
<tr>
<th>Position</th>
<th>Responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Departmental Asbestos Coordinator</strong></td>
<td>• Serves as primary contact with regulatory authorities on asbestos related issues</td>
</tr>
<tr>
<td></td>
<td>• Monitors regional Asbestos Management Plan (AMP) activities</td>
</tr>
<tr>
<td></td>
<td>• Provides reports to PW&amp;S Directorate as required</td>
</tr>
<tr>
<td></td>
<td>• Provides information and technical support as required</td>
</tr>
<tr>
<td><strong>Regional Superintendent</strong></td>
<td>• Appoints Regional/Area Asbestos Coordinator</td>
</tr>
<tr>
<td></td>
<td>• Monitors regional compliance with the PW&amp;S Asbestos Management Plan</td>
</tr>
<tr>
<td></td>
<td>• Reports to department directorate as required</td>
</tr>
<tr>
<td><strong>Regional/Area Asbestos Coordinator</strong></td>
<td>• Ensures that asbestos inventories and assessments are undertaken</td>
</tr>
<tr>
<td></td>
<td>• Develops asset AMP for each asset with confirmed ACM</td>
</tr>
<tr>
<td></td>
<td>• Ensures projects affecting ACM are coordinated and completed</td>
</tr>
<tr>
<td></td>
<td>• Reviews plans for asbestos work and reports</td>
</tr>
<tr>
<td></td>
<td>• Ensures facility supervisors and staff are informed of ACM in facilities as appropriate</td>
</tr>
<tr>
<td></td>
<td>• Ensures that records are prepared and maintained in the Regional ACM file</td>
</tr>
<tr>
<td><strong>Facilities Manager or Maintenance Coordinator</strong></td>
<td>• Reports asbestos disturbance to Regional Asbestos Coordinator</td>
</tr>
<tr>
<td></td>
<td>• Ensures that asbestos abatement is undertaken as necessary</td>
</tr>
<tr>
<td></td>
<td>• Monitors implementation of the AMP</td>
</tr>
<tr>
<td></td>
<td>• Ensures occupants are adequately informed of ACM if there is a potential for its disturbance</td>
</tr>
<tr>
<td></td>
<td>• Ensures persons working with ACM are trained to an acceptable level</td>
</tr>
<tr>
<td></td>
<td>• Ensures through direct observation that work is done correctly and is performed in appropriate manner.</td>
</tr>
<tr>
<td><strong>Building Operator</strong></td>
<td>• Maintains and updates an on-site copy of the asbestos inventory</td>
</tr>
<tr>
<td></td>
<td>• Informs maintenance and repair workers of ACM prior to work</td>
</tr>
<tr>
<td></td>
<td>• Monitors condition of ACM and reports to Facilities Manager</td>
</tr>
<tr>
<td></td>
<td>• Undertakes maintenance and minor repairs to ACM</td>
</tr>
<tr>
<td></td>
<td>• Provides initial response to asbestos incidents</td>
</tr>
</tbody>
</table>
6 REFERENCES


  Environmental Protection Act (EPA) of the NWT, and the Department of Environment and Natural Resources, Environmental Guideline for Waste Asbestos.

- *Transportation of Dangerous Goods* acts and regulations.

- Alberta Department of Labour *Asbestos Abatement Manual*
# APPENDICES

## Appendix 1: Management Strategy Summary

### A1.1 Inspections
- The Regional Asbestos Coordinator or Facilities Manager must examine all available asbestos survey reports prior to construction, renovation or maintenance work
- All assets constructed prior to 1980 will be inspected for ACM
- All material suspected of containing ACM must be handled as asbestos until confirmed by a laboratory

### A1.2 Inventory Management
- Inventory must be maintained on site
- Inventory must be annotated and updated at least annually by the Regional Asbestos Coordinator
- Inventory must include floor plan map of asbestos in the building

### A1.3 Labeling
- Labeling is to be permanent, easily identified
- Identify areas with ACM at non-public entry points
- Warning labels on building components containing ACM in non-public areas at appropriate intervals
- Label non-friable ACM if there is potential for its damage and release of friable asbestos
- Label ACM prior to encapsulation by covering
- Identification in departmental CMMS.

### A1.4 Repairs and Maintenance
- The designated building operator must regularly inspect the condition of ACM
- Maintain or repair the encapsulation or containment as soon as deterioration or damage is identified
- The Facilities Manager/Maintenance Coordinator may assign minor repairs and maintenance to operational staff with the appropriate training
- Materials and personal protective equipment for the minor repairs of ACM shall be provided to staff
- File an asbestos-related work record for work involving repairs to larger areas
- Affected spaces are sampled for residual asbestos following completion of repairs (if necessary)

### A1.5 Abatement
- Replace in service ACM when those materials become redundant
- Remove redundant ACM in a timely and appropriate manner
- Follow PW&S Asbestos Removal Guidelines

### A1.6 Waste Asbestos
- Waste Asbestos generated at the facility must be handled as hazardous waste consistent with hazardous materials and waste management regulatory requirements
- Contract documents will require that asbestos waste generated from contracted asbestos abatement projects will be handled and disposed of by the contractor
| A1.7 Emergency Response | • Procedures identified to protect emergency responders and prevent tenants and visitors from being exposed to asbestos when emergencies arise  
• Employees are responsible for wearing, utilizing and maintaining personal protective equipment  |
| A1.8 Communications | ▪ Regional Asbestos Coordinator provides written notice to the Facilities Manager and Facility Supervisor concerning the presence of friable ACM, as per the findings of surveys and assessments  
▪ Occupants working in areas where ACM are known or suspected must have the materials identified to them if there is a danger of damage to the ACM releasing friable asbestos  
▪ Ensure trades staff acknowledge the receipt of and understanding of the contents of the asset plan by their signature  
▪ Maintenance Coordinators ensures that persons undertaking work in spaces containing ACM are briefed on the presence of ACM and provided direction and procedures on the avoidance of damage to the ACM  
▪ The Facilities Manager and the PW&S Regional Asbestos Coordinator must be informed prior to arranging for or undertaking removal or major repair of ACM  
▪ WSCC must be provided work procedures 72 hours before work is started  |
| A1.9 Record Keeping | • Records maintained in a Regional ACM file for all inspections, reassessments, evaluations, inventory and work related to ACM  
• Current copies of Assessment Reports and Reassessment Reports available on site to maintenance staff, contractors at the office of the Building Operator or in the Boiler room  |
| A1.10 Training | • Personnel trained in procedures for safe handling of ACM if they may be working in areas where asbestos is contained or involved in the removal of asbestos or performing asbestos surveys of buildings  
• Workers involved with asbestos abatement or major repairs at the facility must be trained as required by the Asbestos Safety Regulations  
• Contractors will be responsible for providing the Facilities Manager or Project Manager with proof of employee training acceptable to the WSCC  |
| A1.11 Follow-up | • Inspect area containing ACM at least once each year  
• Annual review of Asset Asbestos Management Plan  |
Appendix 2: Asbestos Waste

Asbestos waste is subject to Federal and Territorial regulations and guidelines. Friable asbestos waste is to be disposed of using double-bagged or double-wrapped polyethylene containers, while non-friable waste is disposed of using a single layer polyethylene container. Both types of containers must be labeled as asbestos waste. The polyethylene bags must be placed inside a stiff-walled carton or suitable rigid container to prevent any sharp or hard pieces of asbestos waste from piercing the bags and providing a possible route for asbestos exposure. The Project Manager or Facilities Manager is responsible for identifying and providing a secure storage area until such time as the waste can be transported off site by the contractor. The Project Officer or Facilities Manager shall ensure the collection and disposal of the waste at an approved landfill site willing to accept this material.
Appendix 3: Implementation Strategy

A strategy for the renewing the Asbestos Management Plan is outlined below

- Review revised management Plan with regional PW&S maintenance and project staff and clients.
- Review regional asset lists of directly maintained facilities constructed prior to 1980.
- Identify all assets with Vermiculite insulation.
- Confirm ACM inventory (type, quantity, location and condition).
- Confirm a detailed asbestos management plan exists for each asset with confirmed ACM.
Appendix 4: Asbestos Rating Scheme (Alberta)

The Alberta asbestos rating scheme can be used for evaluation of Accessibility, Condition and Friability

<table>
<thead>
<tr>
<th>FACTOR</th>
<th>RATING</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accessibility</td>
<td>High (H)</td>
<td>Accessible in high activity areas</td>
</tr>
<tr>
<td></td>
<td>Medium (M)</td>
<td>Accessible in low activity areas or beyond</td>
</tr>
<tr>
<td></td>
<td></td>
<td>the reach of area occupants</td>
</tr>
<tr>
<td></td>
<td>Low (L)</td>
<td>Enclosed</td>
</tr>
<tr>
<td>Condition</td>
<td>High (H)</td>
<td>Severe damage</td>
</tr>
<tr>
<td></td>
<td>Medium (M)</td>
<td>Mild – moderate damage</td>
</tr>
<tr>
<td></td>
<td>Low (L)</td>
<td>Good Condition</td>
</tr>
<tr>
<td>Friability</td>
<td>High (H)</td>
<td>Easily breaks apart</td>
</tr>
<tr>
<td></td>
<td>Medium (M)</td>
<td>Mild – moderate friability</td>
</tr>
<tr>
<td></td>
<td>Low (L)</td>
<td>Non-friable, firmly bound</td>
</tr>
</tbody>
</table>

Decision Table

<table>
<thead>
<tr>
<th>Not in Return Air Plenum</th>
<th>Less than 20% Asbestos</th>
<th>Greater than 20% Asbestos</th>
<th>Asbestos Present in Return Air Plenum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Immediate Control</td>
<td>2 H’s or 3 M’s</td>
<td>1H or 2 M’s</td>
<td>Control required unless 3 L’s and</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>less than 20% Asbestos</td>
</tr>
<tr>
<td>Control Required</td>
<td>1H or 2 M’s</td>
<td>1M</td>
<td></td>
</tr>
<tr>
<td>No Control</td>
<td>1 M or 3 L’s</td>
<td>3 L’s</td>
<td></td>
</tr>
</tbody>
</table>
Appendix 5: Contractor Notification and Acknowledgement

CONTRACTOR NOTIFICATION AND ACKNOWLEDGEMENT OF HAZARDOUS MATERIAL

I hereby acknowledge that I have been notified of and am aware that GNWT Asset #
known as ___________________________________________ in the community of
__________________________________________________ contains Hazardous Material, specifically:

____________________________________________________________________________________
____________________________________________________________________________________
____________________________________________________________________________________

Located in (Room(s) and/or Area(s) of the asset):

____________________________________________________________________________________
____________________________________________________________________________________
____________________________________________________________________________________

and that proper procedures must be followed while working with this material or in this
area. Specialized safety equipment and training of workers may be required depending
on the scope of work identified.

Date: ______________________________ Contract # ______________________________

Contractor Signature __________________________ Title ___________________________

PW&S Signature __________________________ Title ___________________________
CONTRACTOR NOTIFICATION and ACKNOWLEDGEMENT
Of HAZARDOUS MATERIAL

I hereby acknowledge that I have been notified of and am aware that the GNWT buildings on the attached list contain Hazardous Material, specifically:

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

and that proper procedures must be followed while working with this material or in these buildings. Specialized safety equipment and training of workers may be required depending on the scope of work identified.

Date: ___________________________ Contract #: ___________________________

Contractor Signature ______________________ Title ___________________________

PW&S Signature ______________________ Title ___________________________
# Appendix 6: Completion Report

## ACM Process Completion

<table>
<thead>
<tr>
<th>Asset #</th>
<th>Building name</th>
<th>Community</th>
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Immediately upon completion of an “Asbestos Process” as described in Section 1 of the Asbestos Safety Regulations, the Maintenance Coordinator or Facilities Manager shall prepare a report and forward it to the Regional Asbestos Coordinator for inclusion in the asset and regional ACM files and distribution as appropriate.

### Scope of work:
- Explain in detail the work that was done affecting ACM. Why was this work required?

### Methods utilized:
- List the procedures followed to complete the work affecting ACM.

### Supervisor:
- Who supervised this work?

### Workers:
- Who did the work?

### Disposal information:
- How did you contain the waste? Where did disposal occur?
Sample results: If bulk or air samples were required as part of the process what were the lab results? Give sample numbers and laboratory results. Give date samples were taken and date results were recorded.

<table>
<thead>
<tr>
<th>Sample #</th>
<th>Date of Sample</th>
<th>Date of Analysis</th>
<th>Laboratory</th>
<th>Results ACM +/- &amp;%</th>
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</thead>
<tbody>
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</table>

Comments: Does this change the area of, or eliminate, the ACM from this area/room? Does the inventory need updating?
### Appendix 7: Reporting Forms

(Templates)

#### 7.1 ACM Survey Report Form

#### 7.2 Codes for Asbestos Materials Survey

#### 7.3 Asbestos-Containing Material Inventory for Assets

#### 7.4 Asset Listing for Asbestos-Containing Material Management

#### 7.5 Asset ACM Management Plan

### Completion Procedures For Reports

<table>
<thead>
<tr>
<th>Step</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Generate a working list of assets to be surveyed for ACM from CAMS. Construction prior to 1980 will be the primary focus.</td>
</tr>
<tr>
<td>2</td>
<td>Acquire required personal protective and sampling equipment and supplies.</td>
</tr>
<tr>
<td>3</td>
<td>Survey each asset on the working list from Step 1.</td>
</tr>
<tr>
<td>4</td>
<td>Document all samples Complete Survey Form(s), Appendix 7.1 for each room and area of the building. Use the coding from the list provided, Appendix 7.2.</td>
</tr>
<tr>
<td>5</td>
<td>Upon receipt of laboratory analysis of samples, complete the Asbestos–Containing Material Inventory, Appendix 7.3. A separate entry is required for each room or building area with confirmed ACM. Use multiple sheets as required and indicate the total number of pages for each asset.</td>
</tr>
<tr>
<td>6</td>
<td>Complete the Asset Listing, Appendix 7.4, for the region (by community) for all assets constructed prior to 1980 (or 1990 for Vermiculite) indicating if ACM was confirmed.</td>
</tr>
<tr>
<td>7</td>
<td>Prepare an Asset ACM Management Plan, Appendix 7.5, for each asset with confirmed ACM. Ensure Maintenance and Client Facility Managers are aware of these plans.</td>
</tr>
<tr>
<td>8</td>
<td>Ensure all ACM is labelled as required by this Management Plan.</td>
</tr>
<tr>
<td>9</td>
<td>Schedule follow-up inspections as required to ensure ACM condition is monitored.</td>
</tr>
<tr>
<td>10</td>
<td>Ensure documentation is completed and updated as required.</td>
</tr>
</tbody>
</table>