

# THE TOWN OF FORT FRANCES

## Section: Operations & Facilities

### SOP: Working with Asbestos Cement (AC) Pipe

**Creation Date:** July 2013

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#### 1. **PURPOSE:**

This policy defines the use of appropriate work practices and PPE necessary to protect employees from hazards associated with working with Asbestos-Cement (AC) pipe.

#### 2. **RESPONSIBILITY:**

All individuals in the Operations & Facilities Division workforce, at all levels and functions, which are responsible for the success of this policy and are to follow the safe work procedures described herein.

#### 3. **SCOPE:**

Repair work involving disturbing and/or removal of AC pipe must follow the outlined safety procedures. This procedure applies to all Operations & Facilities Personnel and Contractors. No methods can be used that intentionally cause AC pipe to shatter, crumble, be pulverized or release asbestos fibers. This means that sanding, sawing, grinding, chipping or the use of power tools on AC pipe are not permitted.

#### 4. **TRAINING:**

All employees involved in AC work will receive Asbestos Awareness Training that meets the OH&S Act & Regulations, latest edition. On an annual basis or as needed training will be refreshed.

#### 5. **SAFETY PROCEDURES:**

A. **Wet methods** will be used to prevent release of airborne asbestos fibers. This requires use of a garden sprayer or similar type of equipment with water to be used prior and during all work on AC pipe. The pipe exterior will be sprayed down prior to and during removal or repair work.

B. **No power tools** will be used on AC pipe. Only various approved hand tools will be used.

#### C. **Approved tools:**

1. ***Snap cutters*** (“squeeze and pop” equipment) operate by means of cutting wheels mounted in a chair wrapper around the pipe barrel. Hydraulic pressure, applied by

means of a remote, pneumatically or manually operated pump squeezes the cutting wheel into the pipe wall until the cut is made. This type of cutting with water sprayed minimizes the release of asbestos fibers.

2. **Roll cutters** that cut the pipe as the cutting edge of the rollers are tightened down as pressure is applied manually to the cutters as they circle the pipe. This type of cutting with water sprayed on the pipe minimizes the release of any asbestos fibers. Cutting wheels are wiped before use to remove any lubricant that might bond with any fibers and wiped cleaned again after use.
3. **Wet Tapping AC Pressure Pipe** for services connections is performed in the trench while the pipe is under pressure. The equipment is affixed to the pipe by means of a chain yoke. A combination boring and inserting bar drills and taps the pipe wall and inserts a corporation stop. The pressure chamber, which protects against water leakage also catches the asbestos cement chips, so this essentially a dust free operation.
4. **Bristle brush** to smooth cutting surfaces may be used only with copious water spray to suppress and dust.
5. **Use of Cold Chisel and Hammer to remove coupling from AC pipe:** When possible, the intact section would be removed would be removed requiring a coupler to be removed but this is not always possible. AC coupling removal must be done by gradually splitting the coupling lengthwise using a chisel and hammer. After the coupler has been split a crowbar or similar tool is used as a lever to split the bottom of the coupling. The pieces must be bagged in asbestos disposal bag(s).
6. **Safety Equipment:** The AC pipe safety equipment shall be used at all times when working with AC pipe. The equipment must include a laminated copy of this Standard Operating Procedure (SOP), gloves, safety glasses, ear plugs, appropriate polypropylene suits, towels, hand cleaner, disposal bag(s), dust tape, flash light, warning signs and barrier tape.

D. **Required Personal Protective Equipment (PPE):**

1. Employee personal protective clothing: To further safeguard employees' the following PPE is required:
  - Polypropylene or disposable coveralls appropriate for the hazard
  - Rubber boots
  - Gloves with plastic cover hands and canvas back will be worn when working with AC pipe
  - Safety glasses
  - Employees have the option of wearing an approved N-95 disposable dust mask/respirators. Since exposure is primarily through inhalation, the use of respiratory protection is strongly recommended.
2. The rubber gloves will have the tops rolled out 1 – 1 ½” to form a cuff that catch drips, etc. that might normally land on a body part.

3. The coveralls will be secure and sealed to the ankles and wrists by applying duct tape at the cuffs.

E. **Establish a “Controlled Zone”**:

1. A “Controlled Zone” will be established for all work involving AC pipe. The following are guidelines for establishing and maintaining a “Control Zone”.
  - b) Establish a perimeter 5 – 10 feet back from the leading edge of any excavation, hole or trench.
  - c) Set cones or barricades strategically around the perimeter.
  - d) Thread “Danger Tape” around the perimeter and attached to the cones or barricades.
  - e) Set the “Authorized Personnel Only” signs around the outside of the “Controlled Zone”.
  - f) Only authorized and properly outfitted personnel may enter the “Controlled Zone”.
  - g) Any person and any equipment leaving the “Controlled Zone” must be subject to decontamination as defined further in this document.

F. **Disposal and Decontamination procedures:**

1. The Snap or Roll Cutter tool should be cleaned prior to use to reduce asbestos cement debris which could build-up on the blades during cutting
2. All removed AC pipe and debris will be wetted down, collected and placed in asbestos disposal bags. They will be taken to the landfill site and buried immediately.
3. All tools that have been used to remove AC pipe must be wiped clean of debris with disposable cloths while still inside the “Controlled Zone”. The cloths will be placed in the asbestos disposal bags and the bags will be sealed as defined above.
4. The disposal coveralls and rubber gloves will be placed in the asbestos disposal bag while still inside the “Controlled Zone”.
5. Rubber boots must be washed off removing dirt and debris while in the excavation.
6. Proper bagging will consist of placing the AC pipe and debris in the asbestos bag and duct taping the top of the bag to seal it. The bag will then be placed inside a second clear disposal bag to ensure double-bagging. The second bag must also have the top sealed with duct tape.
7. Waterless hand cleaners and water will be available for employee’s hands and face cleaning after removing the personal protective equipment.
8. Once wiped clean, clean Snap or Roll Cutter and all other tools used at the shop.

G. **Safe Work Procedure Checklist:**

The Supervisor and competent crew leader will use, follow and document safe work procedures on a checklist.

- a) Identifying potential AC pipe works needs prior attending to job site. This allows crew to ensure they have the right equipment and procedures for working on AC pipe.
- b) Ensuring that crew has been asbestos awareness trained
- c) Assembling basic personal protective equipment and tools, which is in good repair and clean:
  - Disposable coveralls
  - Rubber boots
  - Rubber gloves
  - Safety glasses
  - Proper working order and clean tools including Snap or Roll cutters wiped before and after use to reduce and remove any fibers that may be on the cutters
  - Ensure all clean tools are available
- d) Assembling control equipment
  - Garden sprayer or similar with adequate supply of water
  - Large wipes for cleaning tools and equipment
  - Asbestos disposal bags and tape
  - Waterless hand cleaners
  - Warning tape/signs

6. **ATTACHMENT:**

Safe Work Procedure Checklist

# SAFE WORK PROCEDURE CHECKLIST

The crew leader or supervisor will ensure this checklist is reviewed and completed before any work involving AC pipe commences. This checklist must be fully completed, signed and dated. The completed checklist will be forwarded to the supervisor upon completion of the work.

## Training

- All crew members have been trained to the SOP for AC pipe work  Yes  No

## Equipment

- |   |  |
|---|--|
| <input type="checkbox"/> Roll cutters or similar tool                                 | <input type="checkbox"/> Waterless hand cleaners                                     |
| <input type="checkbox"/> Garden sprayer with adequate supply of water                 | <input type="checkbox"/> Large wipes for cleaning tools and equipment                |
| <input type="checkbox"/> Asbestos Disposal Bags and duct tape (yellow and clear bags) | <input type="checkbox"/> Asbestos warning signs                                      |
| <input type="checkbox"/> Asbestos barrier tape  | <input type="checkbox"/> Hooded Tyvek disposable coveralls                           |
| <input type="checkbox"/> Rubber boots   | <input type="checkbox"/> Laminated SOP   |
| <input type="checkbox"/> Rubber gloves  | <input type="checkbox"/> Safety glasses  |
| <input type="checkbox"/> N 100 filtering face pieces                                  | <input type="checkbox"/> Pipe, collars, specific tools etc. required for the repair. |

By my signature, I verify that all the items above are on site or have been reviewed or verified.

**Crew leader or supervisor** \_\_\_\_\_  
Print Name

Address or site of work: \_\_\_\_\_

Date work conducted: \_\_\_\_\_