

## **1 PURPOSE**

The purpose of this SOP is to ensure the health and safety of East Gippsland Water (EGW) employees and contractors who may come into contact with asbestos products and to ensure that EGW complies with legislative requirements of Part 4.3 of the Occupational Health and Safety Regulations 2007 and the B Class (Specific) non-friable asbestos removal licence issued pursuant to those Regulations, and EPA requirements for transport and disposal of waste asbestos.

## **2 APPROVAL**

Managing Director

## **3 SCOPE**

This SOP shall apply to any employee or contractor engaged by East Gippsland Water to repair, remove, or connect to, asbestos cement pipelines.

## **4 DEFINITIONS**

PPC&E: Personal Protective Clothing and Equipment

AC: Asbestos Cement

EPA: Environment Protection Authority

GIS: Geographic Information System

**IN AN EMERGENCY REFER TO SECTION 11 OF THIS SOP.**

## **5 RELATED ISSUES**

### **5.1 Guiding Principles**

5.1.1 In accordance with Part 4.3 of the Occupational Health and Safety (OHS) Regulations 2007, EGW will examine all its assets to locate and identify any asbestos containing materials. The location of AC pipes will be identified on the GIS; other in-situ asbestos is listed on a register maintained by the Occupational Health and Safety Officer (OHSO).

5.1.2 These documented listings form the basis of EGW's "Asbestos Register". Part A is the electronic register maintained by OHSO; Part B is the GIS. Relevant staff have access to both registers.

5.1.3 The Asbestos Register will be updated as asbestos materials are removed or identified.

5.1.4 The risk associated with any identified material will be assessed and appropriate control measures implemented to ensure the workplace is safe.

**The remainder of this SOP deals exclusively with the removal or repair of AC pipes. For the management of other in-situ asbestos, refer to SOP 090.**

5.1.5 Where practicable the whole section of AC pipe should be removed without cutting or breaking at joints.

- 5.1.6 Under the conditions of EGW's licence, no employee is permitted to remove or repair AC pipes unless they have completed the appropriate training and been duly authorised to conduct this work. Contractors are not to conduct asbestos removal work unless appropriately licensed.
- 5.1.7 Work practices must be used that will minimise dust generation and/or dispersal. Any asbestos products to be cut must be thoroughly wetted down and cut with a low speed hand tool (e.g. hand saw), or power demolition saw with water jet incorporated in the operating system. **(EGW WI 025 refers to the use of the power saw unit. Abrasive disc or other power saws must not be used.)** Upon completion, the entire work area of the task must be cleaned of all asbestos type waste. As many broken pieces as practicable shall be collected. Waste pieces are to be double bagged in heavy-duty plastic bags, which are to be labelled "ASBESTOS - FOR DISPOSAL". All disposable clothing, respirators, respirator cartridges must also be included in these bags.
- 5.1.8 BROOM SWEEPING OF ASBESTOS PRODUCTS, CUTTINGS OR ASSOCIATED DUST AND DIRT IS FORBIDDEN.**
- 5.1.9 EPA regulations recognise spoil, which contains less than 1% asbestos by weight/volume as an inert material. Where the asbestos content of predominantly earth spoil is less than 1%, then the total spoil is not regarded as asbestos. For example, following the excavation of a disused AC pipeline all spoil, including the very small fragments of broken pipe which were unable to be collected, does not require special treatment except that:
- The soil and very small pipe fragments or dust and saw shavings need not be segregated
  - Clean spoil may go to disposal or remain as fill material at the worksite
  - Spoil used as fill at the worksite must be laded by machine
  - Spoil to be disposed of at an EPA approved landfill should be immediately covered with uncontaminated spoil. If the spoil is 'clean' and the material goes to a landfill, there are concerns about possible asbestos fibres, especially if the soil dries out. Covering of the spoil immediately is a good precaution. However immediate cover would only be available at a site with suitable plant, contact with Council or landfill operator to ensure equipment was available at time of delivery will be required.
- 5.1.10 Requirements of EGW's licence issued by WorkSafe Victoria include the completion of documentation (including a control plan and record of removal) and the nomination of supervisors for the removal work.

#### **Control Plan and Record of Removal**

A Form No 032 Asbestos Control Plan and Record of Removal of Non-Friable Asbestos Cement Pipes is to be raised for all asbestos removals. The control plan abbreviates the safety controls listed in this SOP, while the record of removal section provides a record that is to be retained at the depot for 12 months, then forwarded to Records for archiving and permanent retention.

This document is to be completed for all AC pipe removals and is to be retained along with the accompanying Form 048 - Field Work hazard Identification and Control Checklist.

Regulation 4.3.70 of the OHS Regulations 2007 requires that the control plan must be readily accessible for the duration of the removal job.

### **Asbestos Supervisors**

Supervisors have been nominated and trained to oversee AC removal work and provide additional guidance as required. The nominated supervisor for a particular removal job is to be accessible by phone, and able to attend the removal site within a reasonable time period if required.

## **5.2 PPC&E**

Personnel involved with the cutting and disposal of AC pipes must wear:

- A correctly fitted disposable Class P2 respirator, half face mask and cartridge, or other suitable respiratory protective device
- Disposable overalls
- Gloves
- Gumboots

## **5.3 Notification to WorkSafe**

The conditions of East EGW's licence provide the following conditions for notification to WorkSafe of individual removal works:

- a. Emergency works – notification not required
- b. Tappings – notification not required
- c. Planned removals less than 10m<sup>2</sup> (ie; cut ins or less than 4 lengths of pipe) – minimum 24 hours notice
- d. Planned removals greater than or equal to 10m<sup>2</sup> (4 lengths of pipe) – minimum 5 days notice

Notifications are to be made using EGW Form 034, and a copy provided to the OHSO.

Apart from the notification requirement, the procedure in this SOP is consistent regardless of the amount of AC pipe to be removed.

## **5.4 Information to Employers in Immediate and Adjacent Areas**

Regulation 4.3.90 of the OHS Regulations 2007 requires that employers in the immediate and adjacent areas be notified of the proposed removal work prior to that work commencing. This is to be achieved by providing an asbestos card to employers immediately adjacent to any proposed asbestos pipe removal worksite.

*Note that this requirement does not apply to domestic premises.*

## **5.5 Copy of Training Records to be Available on Site**

Regulation 4.3.67 of the OHS Regulations 2007 requires that a copy of staff training records be available on asbestos removal sites. This is to be achieved by staff to ensuring that copies of their asbestos removal training card are kept on their person, or within their green kit bags at all times.

# **6 PROCEDURE**

**Pipe cutting shall be performed using hand tools, compression cutters or the approved power saw with water jet incorporated into the operating system. For hand saws, use a Tungsten Hard Tipped Saw. Abrasive disc or other power saws must not be used.**

## 6.1 Pre-work

- 6.1.1 Complete notification to WorkSafe for planned removals (see 5.3). No notification is required for tappings or emergency response works.
- 6.1.2 Raise Forms 032 – Asbestos Control Plan and Record of Removal, and 048 - Field Work Hazard Identification and Control Checklist
- 6.1.3 If using the approved power saw with water jet incorporated into the operating system, ensure conformance with EGW Work Instruction 025.
- 6.1.4 Notify employers in the immediate and adjacent areas of the proposed removal work by providing an asbestos removal card.
- 6.1.5 Ensure adequate barricades and signage to protect the public from hazards associated with excavation work.
- 6.1.6 Ensure that there is an adequate water supply is on hand for entire operation to use to run over area to be cut and for decontamination of non-disposable clothing and equipment. For the approved power saw with water jet incorporated into the operating system, ensure that the 100 litre water tank is filled.
- 6.1.7 Ensure that there are adequate asbestos waste bags and/or plastic for the disposal of contaminated PPE and asbestos waste.

## 6.2 Excavation

- 6.2.1 Determine depth of pipe from drawings and/or manual excavation.
- 6.2.2 Carefully uncover pipe to remove or repair section. This is best done by combination of backhoe and manual excavation.

## 6.3 Cutting & Disposal

- 6.3.1 Put on PPE before commencing any works that may release asbestos fibres or create AC dust or AC pipe fragments. **No employee shall commence any such work unless they have achieved a satisfactory fit test with the respirator positioned on the face.**
- 6.3.2 Prepare asbestos waste bags and/or plastic for the disposal of contaminated PPC&E and asbestos waste.
- 6.3.3 From the water supply at 6.1.6, run water over area of pipe to be cut.
- 6.3.4 Remove section of pipe to side of trench.
- 6.3.5 Cut piece of heavy-duty plastic wrapping to a slightly longer length than the piece of pipe. Alternately a purpose made asbestos waste plastic bag can also be used.

- 6.3.6 Wrap the pipe, fold the overlapping plastic back over the pipe at both ends and secure with tape.
- 6.3.7 Place wrapped pipe in Asbestos labelled plastic bags, tie or tape end. Note all waste must be effectively “double wrapped”.
- 6.3.8 Non-disposable protective clothing eg gumboots and waterproof gloves should be rinsed clean preferably with the person still in the trench to prevent runoff.
- 6.3.9 All disposable clothing, respirators, cartridges, gloves etc must rinsed and removed while in trench if possible and the disposable clothing placed in the labelled asbestos waste bags. The used disposable clothing shall be regarded as asbestos waste. Cartridges shall be used once and disposed of after use.
- 6.3.10 The double wrapped asbestos waste shall be securely and safety loaded onto an EGW vehicle and transported from work site to depot. The material must go directly from work site to the depot or work centre and not to another location except in accordance with EPA requirements for transport and disposal of Asbestos. EPA guidelines allow for no more than 50 kilograms to be transported at any time without a permit.
- 6.3.11 At the depot the waste shall be stored in secure skip bin for disposal.
- 6.3.12 Each depot shall contain a weatherproof, dedicated, secure and locked skip bin or container that shall hold the appropriately wrapped bundles of waste. Each skip or container shall be boldly labelled or stencilled “Asbestos Waste”, no other material is to be deposited in the container.
- 6.3.13 Upon the completion of the task staff are to immediately wash to maintain an appropriate state of personal hygiene relative to the activity undertaken. It is also recommended staff use nailbrushes paying particular attention to fingernails.
- 6.3.14 Stored material is disposed of by transferring to an EPA approved Waste Disposal Site by an approved and permitted waste disposal contractor. The waste will be removed from the storage containers at each depot on as needs basis but not less than once every six months.
- 6.3.15 Complete Form 032 – Asbestos Control Plan and Record of Removal - attach to the relevant Form 048 and retain in depot for period of at least 12 months. After 12 months, the completed forms may be forwarded to records for archiving and permanent retention.
- 6.3.16 Where lengths of pipe of two lineal metres or more are replaced with another material, forward copy of page one of Form 032 to the GIS Coordinator to enable GIS to be updated to reflect removal of section of AC pipe.

## **7 TRAINING**

All Depot field staff will undergo formal asbestos training as soon as possible after commencement of employment. Depot Superintendents are to ensure that only employees who have completed this training and possess a certificate of competency are to undertake asbestos removal work. Only staff that have been trained and are competent in the use of the power saw may operate the power saw unit.

## **8 SAFETY**

Operator safety must be given the highest priority. All operators must be familiar with this SOP and EGW Work Instruction 025.

## **9 VALIDATION OF WORKS AGAINST THIS SOP**

Asbestos supervisors are to conduct site inspections of 10% of asbestos cement pipe removal works to validate that the work is being carried out in accordance with this SOP. Control plans and Records of Removal for those works are to be annotated accordingly. Depot superintendents are to facilitate this action and allocate inspections evenly to ensure that asbestos supervisors maintain their skills.

## **10 MEDICAL EXAMINATIONS**

As required by Part 4.3 of the OHS Regulations 2007, all staff who undertake work included in this SOP will be subject to regular medical examinations, details of which may be found in SOP 097, Health Monitoring.

## **11 EMERGENCY RESPONSE**

- 11.1 In an emergency apply first aid (if qualified) and get help if required.
- 11.2 Contact the nominated Supervisor listed on the *Control Plan and Record of Removal*.
- 11.3 Identify the type of emergency.
- 11.4 If pollution has occurred or is likely to occur, refer to the Environmental Emergency Response Plan SOP 004.
- 11.5 Complete an accident / incident investigation form as soon as possible (refer to SOP 104 – OHS Incident Reporting and Investigation).

### **CONTACT PHONE NUMBERS:**

**24-hour emergency number: 000**

Supervisor: As listed on the *Control Plan and Record of Removal*.

Contact the Network Manager or Executive Manager Operations on 03 5150 4400 (during business hours).

Or mobile: Network Manager - 0429 931 410

Executive Manager Operations – 0429 404 280

## **12 REFERENCES**

- Victorian Occupational Health and Safety Act 2004
- Environment Protection Act 1970
- Occupational Health and Safety Regulations 2007, Part 4.3
- Environment Protection (Prescribed Waste) Regulations 1998
- EGW SOPs 097 and 104
- EGW Work Instruction 025
- Environmental Emergency Response Plan SOP 4.
- EPA Information Bulletin, “The Transport and Disposal of Waste Asbestos, (November 2004).”
- EPA Industrial Waste Resource Guidelines (Waste Transport Certificates) of the Environment Protection (Industrial Waste Resource) Regulations 2009

## **13 REFERENCED FORMS**

- Form 032 - Asbestos Control Plan and Record of Removal of Non-Friable Asbestos Cement Pipes
- Form 034 - Notification of Asbestos Removal
- Form 048 - Field Work Hazard Identification and Control Checklist