

Purpose

This purpose of this document is to provide instructions to managers involved in working with or removing asbestos-containing materials (ACM).

Scope

This document is applicable to all managers of assets, property or projects who manage works involving ACM or who may disturb ACM as a result of work activities or remove ACM. This procedure and related documents constitutes Sydney Trains' Asbestos Management Plan (AMP) except where a specific localised management plan exists within ST.

Process flow

Process

6.18 Managing Asbestos Works

- 6.18.1 Identify the presence of ACM
- 6.18.2 Plan and conduct asbestos works
- 6.18.3 Emergency asbestos remediation
- 6.18.4 Asbestos Removal Control Plan/SWMS/SWIs
- 6.18.5 Elevated air monitoring results

Figure 1 Process flow for managing asbestos works

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Procedure

6.18: Managing asbestos works

The use of ACM was widespread in Sydney Trains equipment, buildings and structures. Considerable progress has been made to remove ACM from assets; however, significant quantities of ACM still remain in these assets which are now under the control of Sydney Trains.

The disturbance of ACM has potential to cause the release of airborne asbestos fibres resulting in significant risks.

The process to manage asbestos works involves:

- Identifying the presence of ACM;
- Plan and conducting the works;
- Emergency asbestos remediation;
- Asbestos Removal Control Plan/SWMS/SWIs; and
- managing unplanned asbestos disturbances.

6.18.1: Identify the presence of ACM

Project/Asset Managers are responsible for the following procedure.

Procedure

1. Use the Hazardous Site Management System (HSMS) to determine the existence of any ACM present that could be disturbed and to determine whether a hazardous materials register already exists.
2. Arrange for a competent person to identify the presence of asbestos in accordance with SMS-06-OP-3034 06.7 Manage Risks with Hazardous Materials if there is any uncertainty as to whether asbestos is present in any part of an asset;
 - For all refurbishment or demolition works an additional destructive survey is required, as most hazardous materials surveys do not inspect inaccessible areas such as under floor areas and in building cavities.
3. Make sure any samples collected by the competent person is analysed by a NATA accredited laboratory.



Note

Persons who may be considered to be competent in the identification of asbestos include:

- an Occupational Hygienist with experience in asbestos;
- a licensed asbestos assessor;
- Asbestos removal supervisors; and
- a person working for an organisation accredited by NATA under AS/NZS ISO/IEC 17020:2000 General criteria for the operation of various types of bodies performing inspection for

surveying asbestos.

6.18.2: Plan and conduct asbestos works

Construction or maintenance work must be undertaken to avoid disturbing ACM, if at all possible.

Minor maintenance works includes works involving bonded ACM that have lower potential to generate airborne asbestos fibres including:

- low-speed drilling through asbestos cement sheeting;
- painting or coating asbestos cement sheeting;
- removing small amounts (<10 m²) of bonded asbestos cement; and
- removing or working on electrical switchboards.



Note

The following work is prohibited:

- any maintenance or service work on friable asbestos;
 - use of high pressure or water spray or compressed air on any ACM; and
 - use of any tools or equipment which generate airborne asbestos dust.
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6.18.2: (continued) The Project or Line Manager is responsible for the following procedure when managing minor maintenance work or removal of ACM that Sydney Trains workers can undertake.

Procedure – Minor maintenance and removal works disturbing ACM

1. Prepare a Safe Work Method Statement (SWMS) or Safe Work Instruction (SWI) in consultation with all workers involved in the process of removal as well as a competent person/hygienist (Occupational Hygienist with experience in asbestos or a licensed asbestos assessor).
2. Refer to Appendix F – *Recommended safe working practices* of the NSW Code of Practice: How to Manage and Control Asbestos in the Workplace 2016 and Section 2. *Duties for removal work that does not require a licence* of the NSW Code of Practice: How to Safely Remove Asbestos 2016.
3. Refer to section 6.18.4: Asbestos Removal Control Plan/SWMS/SWIs.
4. Make sure workers have the appropriate certification, training and instruction in the approved SWMS/SWIs with control measures to be implemented before commencing minor maintenance works. Refer to Appendix A Training requirements for managing, removal or maintenance of ACM;
5. Implement and monitor controls for any minor maintenance or removal work;
6. Engage a competent person (an Occupational Hygienist with experience in asbestos related work or a licensed asbestos assessor) to undertake personal/boundary air monitoring to ensure the effectiveness of controls. (Personal exposure standard of 0.1 f/ml and boundary levels of 0.01 f/ml). Air monitoring may not be required when repeating a task where air monitoring has already shown controls to be effective;
7. If the exposure standard was exceeded, implement the corrective actions and emergency procedures given in the SWMS/SWI and determine who was present in the workplace at the time of and after the exposure;
8. Make sure ACM is disposed of at a licensed facility as soon as practicable obtaining a copy of the waste receipt from the facility receiving the ACM. Waste should be stored at an appropriate location on-site with transport provided by a licensed waste removalist.
9. Following any removal works an updated HSMS hazardous materials register must be produced. This register must be sent to the register Custodian and updated to reflect any asbestos items remediated.

Major works on buildings, structures or plant with ACM

Sydney Trains must engage an appropriately qualified asbestos removalist

to undertake all major asbestos works.

Major works include:

1. removal of friable asbestos or asbestos contaminated dust or debris (known as Class A removal work);
 - removal of bonded ACM (>10 m²) or asbestos contaminated dust associated with >10 m² of bonded ACM (Class B removal work); and
 - refurbishment or demolition of buildings or structures containing bonded ACM.



Note

A Class A asbestos removal licence is not required for the removal of asbestos contaminated dust or debris that:

- is associated with the removal of bonded asbestos; and
 - is not associated with the removal of friable or bonded asbestos and is only minor contamination.
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- 6.18.2: (continued) Remove all ACM so far as is reasonably practicable before any refurbishment or demolition is undertaken. The Project or Asset Manager is responsible for the following procedure.

Procedure – Major works on buildings, structures, rolling stock or plant with ACM

1. Notify HSMS register custodian and all stakeholders regarding the works (to include Safety Professionals, Station Managers etc.).
2. Engage a competent person to undertake a destructive hazardous materials inspection to accurately describe ACM in the Hazardous Materials Register (SMS-06-TP-4109) for the workplace;
3. Assign a licensed asbestos removalist in accordance with SMS-13-SP-3073 Safety in Procurement. The removalist must notify SafeWork NSW of the works at least 5 days prior to undertaking the works;
4. Provide updated Hazardous Materials register to the appropriately licensed asbestos removalist. The removalist must provide an Asbestos Removal Control Plan (ARCP) prior to works which must be reviewed by a competent person (other than the removalist).
5. Engage independently of the removalist an Occupational Hygienist with experience in asbestos related work or a licensed asbestos assessor (hygienist) to undertake a review of the ARCP and safety documentation. The hygienist is to ensure controls are implemented by providing: removalist supervision, clearance inspections and air-monitoring as directed by the applicable codes of practice and as below **Specific Sydney Trains Requirements**.
6. Provide the results of the air monitoring to the workplace Line Manager, workers, safety representatives and any other persons present at the workplace where required.
7. All air-monitoring documentation and clearance certificates to be issued to relevant stakeholders. Where appropriate the hygienist must provide an updated HSMS hazardous materials register. This register must be sent to the register Custodian and updated to reflect any asbestos items remediated.
8. Make sure ACM is disposed of at a licensed facility as soon as practicable obtaining a copy of the waste receipt from the facility receiving the ACM.

Specific Sydney Trains Requirements

9. Air-monitoring to be conducted with all asbestos works (friable, non-friable and 10m^2) unless otherwise specified by Sydney Trains Hygienist or Safety Professional.
10. Clearance air-monitoring to be conducted following all asbestos removal works prior to removal of controls in areas where Sydney

Trains staff and members of the public will be re-entering.

11. HSMS Hazardous Materials Register to be updated by hygienist on-site as part of the clearance process. This register along with photographs must be provided to the custodian for update to HSMS.
12. Asbestos removal works should not be undertaken adjacent to public areas unless otherwise specified by Sydney Trains Hygienist or Safety Professional.



Note

The requirements for an ARCP are detailed in the NSW Code of Practice: How to Safely Remove Asbestos 2016. The hygienist must review the ARCP against these requirements.

6.18.3: Emergency
asbestos
remediation

The Project, Line or Asset Manager or any employee who may discover asbestos is responsible for the following procedure when managing unplanned removal of ACM within plant/buildings/installations and infrastructure.

Procedure – Emergency ACM removal

Along with Steps 1-12 there are additional requirements when asbestos has been accidentally disturbed or uncovered and requires immediate removal or further investigation. This can include asbestos discovered in soils, Refer to EMS-09-PR-0158 Assessment and Remediation of Asbestos Contamination.

1. Isolate the work area and prevent potential exposure to airborne asbestos;
2. Report the incident in accordance with SMS-17-SP-3077 Incident Reporting and Investigation;
3. Instigate corrective actions in Steps 1-11 Non-emergency ACM removal as above following confirmation that the material contains asbestos;
4. Asbestos removal works should only start once a licensed asbestos removalist has notified SafeWork NSW by telephone and in writing (within 24 hours);
5. Any suspected asbestos exposure should be investigated by a hygienist to establish whether personal exposures were potentially at levels which require SafeWork NSW notification or the implementation of Health Monitoring via FP.

6.18.4: Asbestos
Removal Control
Plan/SWMS/SWIs

The Project or Asset Manager is responsible ensuring that an ARCP is created by the removalist and reviewed by a hygienist to the requirements of Appendix A of the NSW Code of Practice: How to Safely Remove Asbestos 2016. The ARCP should also be reviewed by the Project or Asset Manager for any Sydney Trains or project specific requirements. The ARCP must include allowance for the following (including but not limited to):

- ensuring an asbestos removalist supervisor is readily available or present when the work is being carried out;
- providing appropriate training and ensuring the asbestos removal worker has undertaken the relevant units of competencies associated with the asbestos removal;
- telling various parties about the asbestos removal and providing them with appropriate information (air monitoring results);
- obtaining the workplace's asbestos register;
- notification of SafeWork NSW about the work before it starts;
- displaying signs and labels in the asbestos work area;

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- limiting access to the asbestos work area;
 - ensuring appropriate decontamination facilities are in place;
 - emergency plans and procedures including for exceedance for air monitoring action levels including Notification of SafeWork NSW when levels exceed 0.02 f/ml of air. This should also be reported in accordance with SMS-17-SP-3077 Incident Reporting and Investigation;
 - ensuring waste containment and disposal procedures are in place;
 - ensuring clearance inspections are conducted and issuing clearance certificates; and
 - ensuring air monitoring is conducted, where appropriate.

SWMS/SWIs must also be reviewed a hygienist but can be created by all stakeholders for minor works as previously outlined. The above may also be referenced in a SWMS or SWIs.



Note

Communication of air monitoring results must be given to:

- workers at the workplace;
 - health and safety representatives for the workplace;
 - persons conducting businesses or undertakings at the workplace; and
 - other persons at the workplace.
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6.18.5: Elevated
Air Monitoring
Results

During works where air monitoring is undertaken the Project or Asset Manager should ensure that upon receipt of air monitoring results the following must be implemented. Table 1 below outlines specific requirements when air-monitoring has been undertaken by a hygienist. This information must be included in any ARCP or SWMS/SWIs where air-monitoring is included.

Table 1 Action required if control limits are exceeded during removal

Control Limit	Action Required by Asbestos Removalist/Assessor
<0.01 f/ml	Continue to monitor existing controls
0.01-0.02 f/ml	Investigate cause of asbestos fibre level Implement controls to prevent exposure Prevent the release of further respirable fibres
>0.02 f/ml	Order asbestos removal work to stop immediately Carry out actions listed above Arrange for SafeWork NSW to be notified in accordance with <u>SMS-17-SP-3077 Incident Reporting and Investigation</u> Do not recommence work until fibre level is 0.01 f/ml

f/ml = fibres per millilitre of air. Unit of measurement for airborne fibre levels.

Although Sydney Trains does not carry out licensed asbestos work, where a worker undertakes ongoing asbestos removal work or asbestos-related work and is at risk of exposure to asbestos when carrying out the work then health monitoring must be provided to that worker. Any suspected asbestos exposure should be investigated by a hygienist to establish whether personal exposures were potentially at levels which require the implementation of Health Monitoring via FP as described in SMS-16-OP-3109 - Manage Health Monitoring Requirements.



Communication of air monitoring results must be given to:

- workers at the workplace;
- health and safety representatives for the workplace;
- persons conducting businesses or undertakings at the workplace; and
- other persons at the workplace.

References

SMS-06-TP-4109 Hazardous Materials Register

SMS-06-OP-3034 06.7 Manage Risks with Hazardous Materials

SMS-16-OP-3109 - Manage Health Monitoring Requirements

NSW Code of Practice: How to Safely Remove Asbestos 2016

NSW Code of Practice: How to Manage and Control Asbestos in the Workplace 2016

Version Control

Version	Change from previous	Date	Comment
1.0	First release of Sydney Trains SMS	01/07/2013	Launch of Sydney Trains SMS documents
1.1	Minor grammatical changes have been made to the document. 6.18.1 Reference and hyperlink to Hazardous Rail Corridor Locations. 6.18.2 Subsection 4. A notification form must be used by the removalist to notify all persons within the vicinity of asbestos works.	25/11/2013	Grammatical changes have been completed. Hyperlink inserted Reference to the notification form by WorkCover has been included.
1.2	Amended the wording in Appendix A Controls for Asbestos Related Minor Works	06/01/2014	Controls for Amended
1.3	Hop Logo and Approver updated	28/08/2014	
1.4	Custodian and approver titles updated. Hyperlinks to SMS documents updated. The word "WorkCover" changed to "SafeWork".	13/08/2017	
1.5	Major changes including removal of Appendix A Minor Works and references to re-inspection form – Changes to training courses	14/08/2018	

Appendix A - Training Requirements for Managing, Removing and Working with ACM

The following is a list of task/role specific training course that ensure education and training for workers on hazards and safe work practices to minimise airborne dust exposure. Workers that it is reasonably believed may be involved in asbestos removal work in the workplace or the carrying out of asbestos-related work must be trained in the identification, safe handling and suitable control measures for asbestos and ACM. The training must have regard to the nature of the work carried out by the worker, the nature of the risks associated with the work at the time the information, training or instruction is provided, and the control measures implemented.

Table 2 Training requirements for managing, removing and working with ACM

Type of Asbestos Removal or Asbestos Maintenance Work/Role	Training Requirements
Asset Manager	10559NAT - Course in Working Safely with Asbestos Containing Materials or 10314NAT - Course in Asbestos Awareness
Class A Removal Workers	CPCCE3015A – Remove friable asbestos (class A)
Class B Removal Workers	CPCCE3014A – Remove non-friable asbestos (class B)
Non-licensed removal work and maintenance workers	10559NAT - Course in Working Safely with Asbestos Containing Materials or 10314NAT - Course in Asbestos Awareness
Supervisor Class A and B removal work	CPCBC4051A – Supervise asbestos removal (class supervisor)
Air Monitoring – Clearance inspections and clearance certification	Unit of Competency CPCBC5014A - 'Conduct asbestos assessment associated with removal', or Evidence of completion of tertiary qualification in OHS; industrial hygiene; science; building construction or environmental health.