

ASBESTOS MANAGEMENT PLAN



Northern Territory Parks and Wildlife Crocodile and Weeds Management 1979 Wallaby Holtze Rd. Yarrowonga NT 0830

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Contents

1.	SITE INSPECTION NOTES	3
2.	INTRODUCTION	3
2.1.	Aim	3
2.2.	Regulatory Requirements.....	4
3.	ASBESTOS AWARENESS.....	4
3.1.	Historical Context.....	4
3.2.	Applications	5
2.1.1.	General	5
3.3.	Health Effects.....	6
3.	MANAGEMENT OF ASBESTOS AND ASSOCIATED RISKS.....	6
3.1.	Roles and Responsibilities	6
3.1.1.	Person in Control of a business or undertaking (PCBU)	6
3.1.2.	Persons with management or control of a business or undertaking	7
3.1.3.	Asbestos Register	7
3.1.4.	Asbestos Surveys.....	7
3.1.5.	Presence and Location of Asbestos Register	8
3.1.6.	Labelling of Asbestos Containing Materials.....	8
3.1.7.	Maintenance and Review	10
3.1.8.	Risk Assessment	10
3.1.9.	Risk Management.....	11
4.	PRINCIPLES OF ASBESTOS MANAGEMENT.....	12
4.1.	General Principles	12
4.2.	Asbestos Management Plan	12
4.3.	Training and Awareness	12
4.4.	Prohibitions.....	13
4.5.	Control of Asbestos Hazards.....	13
4.5.1.	Removal	14
4.5.2.	Encapsulation or Sealing.....	14
4.5.3.	Enclosure.....	15

4.5.4.	In Situ Management	15
4.5.6.	Managing Asbestos Discovered During Renovations or Maintenance Works.....	15
5.	ASBESTOS REMOVAL	16
5.1.	Licensed Asbestos Removalists.....	16
5.2.	Planned Asbestos Removal.....	16
5.3.	Notifying the Regulator	17
5.4.	Emergency Asbestos Removal	17
5.5.	Safe Work Methods	17
5.6.	Consultation and Communication	17
5.7.	Documentation Requirements	18
5.8.	Air Monitoring and Clearance.....	18
5.9.	Close –Out Report	18
5.10.	Updating the Asbestos Register	19
6.	INCIDENT MANAGEMENT	19
6.1.	Incident Management Procedure	19
	APPENDIX A - ASBESTOS MANAGEMENT PLAN	21
	APPENDIX B - MANAGING ASBESTOS IN THE WORKPLACE	22
	APPENDIX C - MANAGING ASBESTOS DISCOVERED DURING WORK.....	23
	APPENDIX D – ASBESTOS REGISTER.....	24

1. SITE INSPECTION NOTES

Asbestos NT conducted an asbestos audit of the NT Parks and Wildlife Crocodile and Weeds Management Branch Site Depot at 1979 Wallaby Holtze Rd. Yarrowonga NT 0830 on 31 October 2017. During the inspection, all accessible walls, floor and ceiling materials were inspected. There were no inaccessible spaces detected.

Asbestos “Bulk” sampling was conducted within the area inspected in the area detailed in the Bulk samples were analysed at a NATA accredited laboratory in accordance with Australian Standard (AS4964-2004) Method of the qualitative Identification of Asbestos in Bulk samples. Results of the asbestos Bulk samples follows the asbestos register in Appendix D.

No asbestos was detected during the audit. While no asbestos was detected, the following asbestos management plan must be retained on site along with the asbestos register in Appendix D to manage any material(s) discovered on site suspected to contain asbestos.

This report has been prepared in accordance with the agreement between the client and Asbestos NT. Within the limitations of the agreed upon scope of services, this work has been performed in accordance with generally accepted practices, using a degree of skill and care ordinarily exercised by members of its profession and consulting practice. No other warranty, expressed or implied, is made.

This report is solely for the use of the client and Asbestos NT. Any reliance on this report by third parties shall be at such party's sole risk and may not contain sufficient information for purposes of other parties or for other uses. This report shall only be presented in full and may not be used to support any other objective than those set out in the report, except where written approval with comments are provided by Asbestos NT.

2. INTRODUCTION

The Northern Territory Parks and Wildlife Commission, as a part of its on-going commitment to workplace health and safety, have adopted a best practice approach to identify and manage in-situ asbestos containing materials (ACM) until removal. This document outlines the framework to be adopted by Management and Staff of the Crocodile and Weeds Management Branch for the management and control of asbestos and complies with the Northern Territory legislation, codes of practice and national standards.

2.1. Aim

A Crocodile and Weeds Management Branch asset specific Asbestos Management Plan (AMP) detailing initiatives to effectively manage the risks associated with asbestos has been developed with the purpose of:

- Aiding in the provision of a healthy and safe environment for all personnel, contractors and the public;

- Providing guidance on the management, identification and possible remediation/removal of asbestos from the assets; and
- Addressing the legal obligations under the Northern Territory *Work Health and Safety Act (2011)* relating to the presence of asbestos in the Crocodile and Weeds Management Branch assets.

This AMP is not intended to replace the approved codes of practice relating to asbestos; rather, it provides management, workers and other stakeholders of the Crocodile and Weeds Management Branch with a framework for the identification, evaluation and control of asbestos present in the assets.

This plan relates solely to the management of asbestos, is a live document and should be reviewed annually as and when changes to work practices occur.

Figure 2 illustrates the asbestos management plan and is designed to be placed on a workplace safety notice board to provide detailed information in an abbreviated and concise format.

Due to the technical nature of the subject matter and use of acronyms, a glossary of key terms is included in Section 7.0 for reference purposes.

2.2. Regulatory Requirements

The primary legislative and administrative requirements for the Crocodile and Weeds Management Branch asbestos obligations are defined in, but not limited to the following documents:

- Northern Territory Work Health and Safety Act and Regulations (2011)
- Northern Territory Waste Management and Pollution Control Act (2009)
- Safe Work Australia Code of Practice - How to Safely Remove Asbestos (2011)
- Safe Work Australia Code of Practice - How to manage and Control Asbestos in the Workplace (2011)
- AS1319-1994 Safety Signs for the Occupational Environment
- AS 60335.2.69: 2003 Household and similar electrical appliances – Safety – Particular requirements for wet and dry vacuum cleaners
- AS/NZS 1715: 1994 Selection Use and Maintenance of Respiratory Protective Devices
- AS/NZS 1716: 2003 Respiratory Protective Devices
- Adopted National Exposure Standards for Atmospheric Contaminants_NOHSC1003-1995

3. ASBESTOS AWARENESS

3.1. Historical Context

The term asbestos refers to a group of fibrous serpentinite and amphibole minerals including chrysotile (white asbestos), amosite (brown asbestos) and crocidolite (blue asbestos).

Asbestos exists in other forms such as anthophyllite, actinolite and tremolite which are less commonly used industrially but can still be found in a variety of construction materials and insulation materials, and have been reported in the past to occur in a few consumer products.

Whilst Australia ceased mining asbestos in 1983, Australia continued to import and manufacture asbestos products. By the early 1980s the use of asbestos containing materials in building products was beginning to be phased out and its use in buildings was ceased in the mid-1980s. In remote areas such as the Northern Territory, the use of existing stocks of ACM for construction is likely to have continued until the late 1980s.

In 1993, the former National Occupational Health and Safety Commission (NOHSC, now Safe Work Australia) released the National Hazardous Substances Regulatory Framework, a suite of regulatory controls for hazardous substances in the workplace. On 31 December 2003, a national prohibition on all uses of chrysotile asbestos took effect. The national prohibition does not extend to the removal of asbestos products that were in situ when the prohibition took effect. While the use of asbestos is prohibited in Australia, it is currently in use in many countries around the world and is not always detected entering Australia. Vigilance is always required when using imported products.

In situ asbestos products must be managed to ensure that the risks of exposure to airborne asbestos fibres are minimised.

3.2. Applications

2.1.1. General

The use of asbestos has been widespread in Australia due to its physical characteristics, versatility and low cost and is most commonly found in wall and ceiling cladding (fibro), roof sheeting, electrical switchboards, vinyl floor tiles and as an additive in a variety of adhesives, sealants and paints. As a result of extensive use from the 1930's to the 1980's, there are also large stockpiles of waste material from dump sites and the demolition or renovation of buildings over that period.

In addition, due to the effects of bombing and military activity during World War 2, and the destruction of the urban areas of Darwin by Cyclone Tracy in 1974; damaged ACM has either remained in situ and was built over or dumped outside of the town in areas which are now urbanised. As a result, many properties in Darwin and the Crocodile and Weeds Management Branch assets have inherited a legacy of "historical" asbestos.

Asbestos products can have a wide range of asbestos concentrations and are classified as either friable or non-friable (bonded) as follows:

- Friable – asbestos containing material which, when dry, is or may become crumbled, pulverised or reduced to powder by hand pressure. Fibres loose and readily released e.g. pipe lagging; or,

- Non-friable – asbestos fibres are bound firmly into the product matrix and are not readily released unless acted upon with abrasive techniques. E.g. cement products and vinyl tiles.

Common asbestos applications include:

- Water and sewer pipes
- Air conditioning duct sealant mastics
- Roof sheeting and capping
- Guttering
- Gables, eaves/soffits, water pipes and flues
- Wall sheeting (flat or a weatherboard style)
- Vinyl sheet floor backing paper
- Vinyl floor tiles and black tile adhesive
- Carpet and tile underlays
- *Zelemite* or *Ausbestos* brand backing boards to electrical switchboards
- Flexible building boards
- Imitation brick cladding
- Fencing
- Carports and shed wall and ceiling linings
- Waterproof membrane (bituminised materials)
- Telecommunications pits
- Some window putty and fire proof caulking
- Expansion joint sealants
- Packing under beams (Cement sheet)
- Concrete formwork
- Sound deadener to kitchen sink drain boards and urinals
- Rope and fabric for heat insulation and fire proofing applications

The only way to determine whether a product contains asbestos is to collect a sample for analysis at a National Association of Testing Authorities (NATA) laboratory accredited to undertake chemical testing for asbestos in accordance with Australian Standard AS4964-2004.

3.3. Health Effects

Breathing in asbestos fibres can cause asbestosis, lung cancer and mesothelioma. The risk of contracting these diseases increases with the number of fibres inhaled. People who get health problems from inhaling asbestos have usually been exposed to high levels of asbestos for a long time. The symptoms of these diseases do not usually appear until about 20 to 30 years after the first exposure to asbestos.

- **Asbestosis** - Asbestosis is a type of pulmonary fibrosis (pneumoconiosis) in which lung tissue becomes scarred over time. It is not a type of cancer, but it has the same cause as mesothelioma and other asbestos-related cancers. The latency period of asbestosis is generally between 15 and 25 years.
- **Mesothelioma** - a cancer of the outer covering of the lung (the pleura) or the abdominal cavity (the peritoneum). It is usually fatal. Mesothelioma is caused by the inhalation of

needle-like asbestos fibres deep into the lungs where they can damage mesothelial cells, potentially resulting in cancer. The latency period is generally between 35 and 40 years, but it may be longer, and the disease is very difficult to detect prior to the onset of illness. Mesothelioma was once rare, but its incidence is increasing throughout the industrial world as a result of past exposures to asbestos. Australia has the highest incidence rate in the world.

- **Lung Cancer** – It has been shown that lung cancer is caused by all types of asbestos. The average latency period of the disease, from the first exposure to asbestos, ranges from 20 to 30 years. Lung cancer symptoms are rarely felt until the disease has developed to an advanced stage.
- **Pleural Plaques** - Inhalation of asbestos can also cause benign pleural plaques.

3. MANAGEMENT OF ASBESTOS AND ASSOCIATED RISKS

3.1. Roles and Responsibilities

This AMP is designed to be integrated into the existing NT Crocodile and Weeds Management Branch procedures, operations and safe work methods relating to the management of ACM within regular review of their effectiveness by monitoring and conducting regular audits.

Responsibility for the management of ACM locally, rests with the Duty Holder. The Duty Holder is the individual with responsibility for the maintenance of the asset or location containing asbestos.

3.1.1. Person in Control of a business or undertaking (PCBU)

Chapter 8 of the *Northern Territory Work Health and Safety Regulations (2011)* prohibits work involving asbestos — that is, the manufacture, supply, sale, transport, storage, removal, use, installation, handling, treatment, disposal or disturbance of asbestos - subject to specified exceptions. The Part requires PCBUs to eliminate workers' exposure to asbestos, and if elimination is not reasonably practicable, to minimise exposure so far as is reasonably practicable and to always ensure that workers are not exposed to asbestos above the exposure standard.

The Chapter also requires PCBUs with management or control of a workplace to manage in situ asbestos including naturally occurring asbestos at workplaces by:

- Identifying asbestos at the workplace
- Maintaining an asbestos register and asbestos management plan
- Conducting and reviewing risk assessments
- Informing persons at risk from asbestos exposure
- Ensuring relevant workers are trained about asbestos
- Ensuring that certain power tools and equipment are not used on asbestos

3.1.2. Persons with management or control of a business or undertaking

Responsible for ensuring that:

- Communication pathways are established and maintained between key personnel with responsibility for implementing requirements of the AMP
- The asbestos database is fully integrated into the organisation
- Developing and implementing asbestos processes, procedures and SWMS
- A training program is delivered across the organisation
- Compliance requirements are thoroughly understood and addressed in the AMP
- Appropriate levels of investigation and/or enquiry are conducted in response to any asbestos exposures, and providing a timely documented report
- Ensuring that ACMs are identified in all Crocodile and Weeds Management Branch assets, and subsequently assessed and regularly audited by a competent person, including updating of the Asbestos Registers
- Monitoring Asbestos Contractors to assess their compliance with statutory requirements, reporting and discussing deficiencies with the contracts group
- Notifying the relevant safety personnel of asbestos related incidents
- The site asbestos registers and AMP are reviewed periodically, and risk assessments are current
- Management actions are assessed and reviewed in terms of their effectiveness considering audit findings, changes in Regulations, and/or advances in industry 'Best Practice'
- Where necessary standards of works detailed in the general specification for works with ACMs and SWMSs are reviewed and amended
- Specification for asbestos removal, abatement, and remedial works are prepared and standardised across all NT Crocodile and Weeds Management Branch sites
- A panel of approved asbestos removal contractors is established under a specific and detailed tender brief
- Conduct monitoring and review activities on all aspects of the management of ACM and the removal of ACM

3.1.3. Asbestos Register

The presence of asbestos in the workplace must be assessed by a competent person to ensure all ACM is accurately identified and correctly labelled. It is the role of Duty Holder to procure the services of a competent person to test for ACM, correctly label ACM and produce an asbestos register.

A competent person is defined as a Licenced Asbestos Assessor with NT Worksafe or other regulatory authority within Australia.

3.1.4. Asbestos Surveys

The Administrator's Office is required to undertake regular asbestos surveys of all assets constructed prior to December 31, 2003 in accordance with the Northern

Territory Work Health and Safety Regulations (2011). Each suspected asbestos situation identified is given a risk rating and recommended control measure based on the extent, type, condition and accessibility of the asbestos at the time of the survey. Where applicable, laboratory analysis certificates, air monitoring certificates, photographs, and details of asbestos removal can be attached to the database and form part of the asbestos register for each individual property or asset.

3.1.5. Presence and Location of Asbestos Register

It is the role of the Duty Holder to ensure that an accurate and reliable asbestos register is produced and maintained for each building, physical asset and fixed plant and equipment acquired by the Administrator's Office prior to December 31, 2003.

The presence, location and availability of the asbestos register must be made available to all the Crocodile and Weeds Management Branch staff and contractors prior to commencing any form of work which may disturb asbestos. Any new asbestos discovered during works must be included in an updated asbestos register.

- Location
- ACM Situation (e.g. wall sheeting)
- Type of material (e.g. Fibre cement sheet, debris)
- Amount of material (e.g. Square or linear metres)
- Current condition (sealed, partially sealed, unsealed)
- Type of asbestos detected, or no asbestos detected (NAD)
- Friability (friable or non-friable)
- Risk rating (Moderate, High, Extreme)
- Details of the person conducting the survey
- Date of survey
- Age of building or asset
- NATA accredited analysis report
- Each ACM situation must be provided with a unique situation number which relates to the sample ID number
- Photos of each asbestos and NAD situation and photos of the exterior of the building
- Floor plans of each building indicating the location of each ACM situation using the unique situation ID may be required in certain circumstances

3.1.6. Labelling of Asbestos Containing Materials

Any areas of an abode or workplace which contain ACM, including plant, equipment and components, must be indicated with warning signs or stickers to ensure that the asbestos is not unknowingly disturbed without the correct precautions being taken.

These signs should be placed at all the main entrances to the work areas where asbestos is present. All warning signs and labels must comply with AS 1319 *Safety Signs for the Occupational Environment*.

3.1.7. Maintenance and Review

The Duty Holder is responsible for the maintenance and review of the asbestos register and must ensure that the register is updated when:

- Further asbestos or ACM is identified at the workplace
- There is a review of the asbestos register or a control measure for that ACM
- Asbestos is removed from, or disturbed, sealed or enclosed at, the workplace
- The Asbestos Management Plan is no longer adequate for managing asbestos or ACM at the workplace
- A review is requested e.g. by a WHS committee, external party such as NT Work Safe
- Once every 2-5 years depending on the condition of the material.

3.1.8. Risk Assessment

A risk assessment is to be conducted for each suspected asbestos situation by a licenced Asbestos Assessor or “competent person” as defined by the Northern Territory *Work Health and Safety Regulations (2011)*.

The risk assessment is to determine the level of risk and is to consider the location, overall work practices or uses of the site; the types of ACM discovered in the location and the condition of the ACM. ACM represents a risk to human health only when respirable asbestos fibres become airborne and are subsequently inhaled. The risk relates to the potential level of exposure; meaning the risk to human health increase as the level of airborne respirable fibres in an environment increases.

The potential level of exposure associated with an ACM is to be assessed using the tools below (*Table 1 – Consequence and Likelihood Ratings*). Where an uncontrolled item results in a high or extreme risk rating, control measures are required to be implemented to reduce the risk to moderate or to eliminate the risk. Once controls are implemented, all residual risk ratings should be no higher than moderate.

All risk assessments, including subsequent reviews or revisions, are to be prepared by a competent person indicating the following:

Table 1 - Consequences Vs Likelihood ratings

Likelihood	Consequences	
	4 - Major	5 - Severe
5 – Certain	9 – Very High	10 – Very High
4 - Likely	8 – Very High	9 – Very High
3 - Possible	7 – High	8 – Very High
2 - Unlikely	6 – High	7 – High
1 - Rare	5 – Medium	6 - High

3.1.9. Risk Management

All asbestos situations that have been given an exposure risk rating of **VERY HIGH** or **HIGH** must be remediated immediately or as soon as reasonably practicable. In each Extreme or High-risk situation, the asbestos incident management procedure must be enacted by the person responsible. *Table 2* Indicates the action time that is required for each level of risk.

Table 2 - Action time required for each level of risk

Risk Rating	Hazard Condition	Management Plan	Timeframe to remove
Very High	Friable asbestos material likely to pose a risk to health from exposure (e.g. accessible insulation and likely to be disturbed, or located in air conditioning ducts)	Exclude all persons from the area and engage a licenced asbestos assessor and asbestos removalist with an A Class asbestos removal licence to plan for immediate action. Conduct airborne fibre monitoring and clearance inspection at completion of removal	Immediate
High	ACM showing significant deterioration, that is only likely to be disturbed during routine maintenance activity	Exclude all persons from the area and engage a licenced asbestos assessor and asbestos removalist with an A or B Class asbestos removal licence to plan for action as soon as resources become available. Cover with plastic or wetting agent to prevent release of fibres until removal commences. Conduct airborne fibre monitoring and clearance inspection at completion of removal.	Immediate or as soon as practicable
Medium	ACM that is not friable and in a stable condition (sealed/encapsulated) and unlikely to be disturbed by regular access in normal operating conditions	Manage and review. Maintain in good condition	Manage and review at least every 5 years

4. PRINCIPLES OF ASBESTOS MANAGEMENT

4.1. General Principles

A person conducting a business or undertaking (PCBU) must ensure, so far as is reasonably practicable, that any exposure of a person at the workplace to airborne asbestos is eliminated. If this is not reasonably practicable, the exposure must be minimised so far as is reasonably practicable.

The exposure standard for asbestos must not be exceeded at the workplace. The national exposure standards vary for different types of asbestos and are measured in fibres/mL (f/ml) of air as a time weighted average (TWA). The exposure standards for chrysotile (white asbestos) is 1 f/ml; amosite and crocidolite (brown and blue asbestos) are 0.1 f/ml per the *Adopted National Exposure Standards for Atmospheric Contaminants_NOHSC1003-1995*. Industry standards for removal of asbestos are set to 10% of the lower limit and are supported by the *NT Work Health and Safety Regulations (2011)*, and any exposure exceeding 0.01 fibres per millilitre of air (f/ml) will result in cessation of work to investigate the cause and implement controls to manage the airborne fibres.

4.2. Asbestos Management Plan

The asbestos management plan summarises the principles of asbestos management outlined in this section. **Appendix A - NT Crocodile and Weeds Management Branch Asbestos Management Plan** illustrates the enactment of the asbestos management plan and may be used as a guide for all staff and contractors to briefly identify the processes in place to manage asbestos within the organisation.

4.3. Training and Awareness

A person conducting a business or undertaking (PCBU) must ensure that information, training and instruction provided to a worker is suitable and adequate, having 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
- The control measures implemented.

The person must, so far as is reasonably practicable, ensure the information, training and instruction is provided in a way that is readily understandable by any person to whom it is provided; and ensure workers whom they reasonably believe may be involved in asbestos removal and/or asbestos-related work are trained in the identification, safe handling and suitable control measures for asbestos and ACM.

The training supplied must comply with the requirements of *How to safely Remove Asbestos (2011)* by providing information on:

- Purpose of the training

- Health risks of asbestos
- Types, uses and likely presence of asbestos in the workplace
- The roles and responsibilities of the persons conducting a business or undertaking and the worker under the asbestos management plan
- Where the asbestos register is located, how it can be accessed and how to understand the information contained in it
- Processes and safe work procedures to be followed to prevent exposure, including exposure from any accidental release of airborne asbestos.

4.4. Prohibitions

The Northern Territory *Work Health and Safety Regulations (2011)* prohibit a person conducting a business or undertaking from carrying out, directing or allowing a worker to carry out, work involving asbestos. The Regulation also prohibits the use or re-use of any type or amount of ACM; the use of power tools to cut or drill ACM; or cleaning ACM with a power tool, power appliance, high pressure water process, compressed air, or abrasion including brooms. Cleaning any surface where ACM is present by these methods is also prohibited.

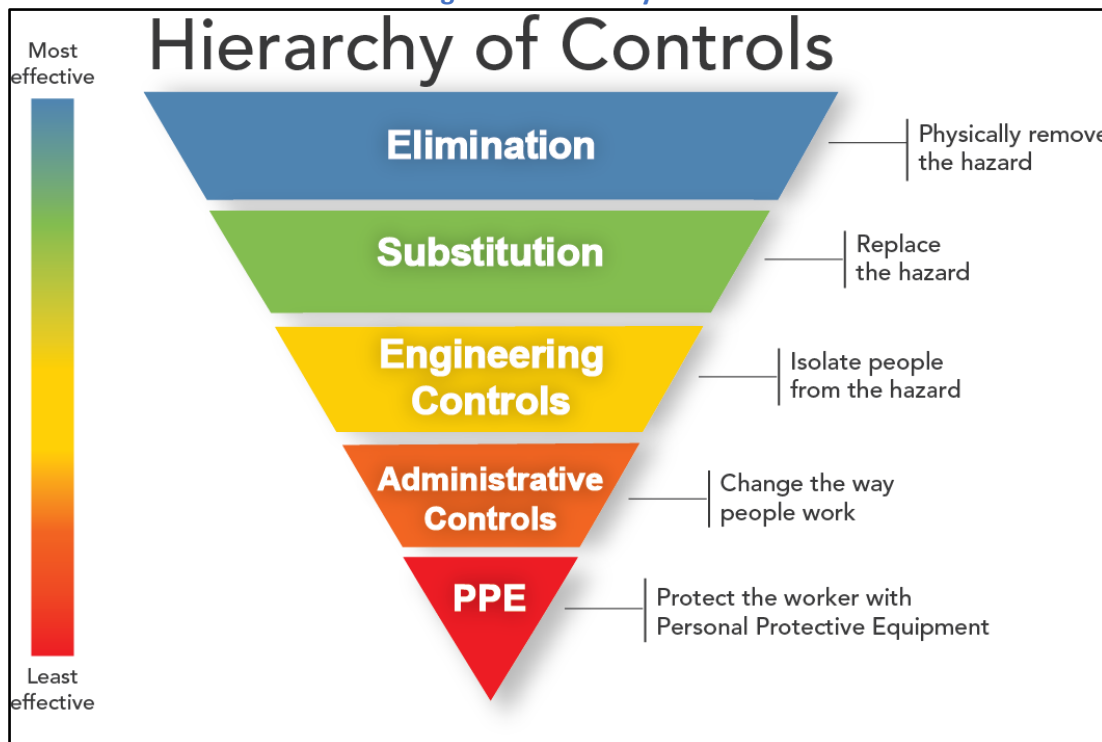
Maintenance and/or management of, or service work on non-friable asbestos or ACM fixed or installed before 31 December 2003, is allowed in accordance with the WHS Regulations.

4.5. Control of Asbestos Hazards

The management of asbestos in the workplace must eliminate the risk of exposure so far as reasonably practicable; and a risk management strategy must be implemented which follows the hierarchy of controls for work health and safety.

Figure 1 indicates the accepted *hierarchy of controls* which should be addressed at all times with regards to removal and the management and control of asbestos in the workplace.

Figure 1 - Hierarchy of Controls



4.5.1. Removal

The ultimate goal is to eliminate all asbestos from the workplace and public assets as soon as reasonably practicable. Removal is considered preferable to the other abatement options such as enclosure or encapsulation, as it eliminates the hazard from the workplace.

High risk asbestos situations which involve friable asbestos must be removed by an asbestos removal company with an 'A Class' licence. Non-friable (bonded) asbestos materials under 10m² are able to be removed by any person under the NT WHS Regulations; however for quantities exceeding 10 m², only a company which holds an 'A' or 'B' Class asbestos removalist licence may remove any amount of non-friable asbestos.

Prior to the removal of asbestos, a detailed assessment of the condition and quantity must be made. **Appendix B - Managing Asbestos in the Workplace During Maintenance and Demolition** illustrates the steps that must be followed to ensure the removal process complies with all relevant legislation and codes of practice.

4.5.2. Encapsulation or Sealing

Encapsulation refers to the coating of the outer surface of the ACM by the applying some form of sealant compound that penetrates to the substrate and hardens the product. Sealing is the process of covering the surface of the ACM with a protective

coating impermeable to asbestos. Encapsulation or sealing helps protect the ACM from mechanical damage, and is designed to reduce the risk of exposure by preventing the release of asbestos fibres into the airborne environment. This method increases the length of serviceability of the material.

The use of encapsulation or sealing may be of limited application. It is not considered to be an acceptable alternative to repairing or removing severely damaged ACM.

4.5.3. Enclosure

Enclosure involves installing a barrier between the ACM and adjacent areas. This is effective in preventing mechanical damage to the ACM where removal is not an option. For example, when other hazardous materials such as Chrome VI paint primer that cannot be disposed of in the landfill system co-exists with asbestos. The type of barrier installed may include plywood or sheet metal products, constructed as boxing around the ACM.

4.5.4. In Situ Management

ACM in a stable condition and not prone to mechanical damage can generally remain in situ. The ACM will need to be inspected on a regular basis to verify its integrity. If demolition or refurbishments will potentially disturb the asbestos, it must be removed under controlled conditions prior to the works being carried out. If on inspection, the condition of the ACM has changed, the risk must be reassessed, and the appropriate action taken. On the completion of every inspection, the asbestos database must be updated accordingly.

The use of warning signs and labels to indicate the presence of ACM are designed to alert personnel to the presence of asbestos, thereby reducing the risk of inadvertent damage to the ACM which may cause the release of asbestos fibres.

4.5.5. Warning Signs

A warning sign will be positioned in a prominent place so it can be easily viewed within each building or facility (i.e. on the front door, within the entrance lobby, at a reception desk or in the area where contractors report prior to commencing any building or maintenance works).

Asbestos warning labels must be attached to all instances of known ACM or areas which are presumed to contain ACM such as water valves that are of an age or model to contain asbestos gland packing. The label must conform to AS1319-1994 Safety Signs for the Occupational Environment and be appropriate for the local climatic conditions.

4.5.6. Managing Asbestos Discovered During Renovations or Maintenance Works

Works that uncover materials suspected to contain asbestos during renovations and maintenance must be managed in a similar manner to materials already known to contain asbestos. ***Appendix C – Managing asbestos Discovered During Renovations***

or Maintenance identifies the procedures required to effectively manage the discovery of materials suspected to contain asbestos.

5. ASBESTOS REMOVAL

5.1. Licenced Asbestos Removalists

The removal of non-friable asbestos containing materials (ACM) exceeding 10 m² must only be removed from the Crocodile and Weeds Management Branch assets by a licenced asbestos removalist holding a B Class asbestos removal licence, however it is recommended that only licenced asbestos removalists undertake *any* form of work involving asbestos. The removal of friable asbestos must only be undertaken by a licenced asbestos removalist with an A Class asbestos removal licence. The licence must be current and have been issued by a state or territory regulatory body such as NT WorkSafe. Insurances and health screening information for staff must be up to date prior to any work commencing on site.

Table 3 - Asbestos Licence Conditions

Type of Licence	Type of Asbestos that can be Removed
Class A	Any amount of friable asbestos or ACM Any amount of asbestos contaminated dusts (ACD) Any amount of non-friable asbestos or ACM
Class B	Any amount of non-friable asbestos or ACM ACD associated with the removal of ACM

5.2. Planned Asbestos Removal

Prior to the commencement of any planned maintenance on any Crocodile and Weeds Management Branch asset, it is the duty of the person planning the works to consult the asbestos register for each asset. As established in the flow chart in **Appendix B - Managing Asbestos in the Workplace During Maintenance and Demolition**, when undertaking maintenance or installation which is likely to affect the fabric fittings of a structure, the presence or absence of asbestos must be proven prior to the commencement of works. If asbestos is present, then the actions indicated in the management plan must be undertaken to ensure the health and safety of those working on the assets, other employees, contractors and the general public:

When suspected asbestos material is discovered during planned or emergency maintenance of buildings and other assets that have not been recorded in the asbestos register, the person whom discovers the suspect material must cease work immediately and follow the asbestos management procedure indicated in **Appendix C – Managing asbestos Discovered During Renovations or Maintenance** to ensure that the material is identified, recorded on the register and managed appropriately.

5.3. Notifying the Regulator

A licensed asbestos removalist must notify the regulator (NT WorkSafe) in writing at least five working days before the licensed asbestos removal work commences. A written authority to proceed from the regulator must be received prior to work commencing and a copy must be provided to the Crocodile and Weeds Management Branch and kept on site with the job safety documentation at all times.

5.4. Emergency Asbestos Removal

Asbestos removal may be required at any time of the day or night if or when the Crocodile and Weeds Management Branch assesses fail; and the necessity to remove and remediate an area potentially contaminated by asbestos will outweigh the requirement to obtain the relevant approvals. Wherever possible, the site needs to be secured and inspected prior to any remedial action being undertaken and any water or sewer leaks must be contained. The code of Practice *How to Safely Remove Asbestos* acknowledges in Section 3.6, that unexpected breakdowns of essential services such as water and sewerage occur and the licenced asbestos removalist must notify the regulator immediately by telephone and in writing within 24 hours of the initial notice being provided.

5.5. Safe Work Methods

All licenced asbestos removalists engaged to work on the Crocodile and Weeds Management Branch assesses must provide detailed Safe Work Method Statements (SWMS) for procedures to be used in the removal of asbestos prior to commencement on site. A SWMS must comply with the Code of Practice *How to Safely Remove Asbestos*.

If a procedure has not been developed in the instance in which a novel situation has arisen, a SWMS may be developed in consultation with the Crocodile and Weeds Management Branch Personnel and external consultants as necessary prior to commencement.

5.6. Consultation and Communication

Prior to the commencement of any planned asbestos removal work, all persons likely to be affected by the work are to be informed. This includes, but is not limited to:

- All Crocodile and Weeds Management Branch Personell
- All contractors and their sub-contractors involved in the removal work
- Persons occupying neighbouring buildings, body corporates and leaseholders affected by or within close proximity of the work

Consultation for all works involving the removal of asbestos require individual assessment depending on the size and scope of the planned works. At least 1 week prior to planned asbestos removal work commencing, the Asbestos removalist will provide the Duty Holder at the Crocodile and Weeds Management Branch a written brief detailing:

- The nature of the work
- The processes to prevent exposure to asbestos

- Safety processes designed to minimise any risk to health such as barriers, Personal Protective Equipment (PPE) and air monitoring devices

5.7. Documentation Requirements

Documentation to support the removal of asbestos must comply with the regulatory requirements stated in *Section 1.2.*, and must include the following:

- An Asbestos Removal Control Plan (ARCP) (in compliance with the Code of Practice *How to Safely Remove Asbestos (2011) Appendix A*)
- A waste disposal and transport plan
- Safe Work Method Statements (SWMS) for each task
- A Job Safety and Environmental Analysis (JSEA) and risk assessment for each contractor working on site
- A copy of an approval to commence work from the regulatory authority (NT Worksafe) for friable asbestos or a quantity of non-friable asbestos equal to or greater than 10m²
- A Communication Plan advising all relevant persons of intended asbestos removal work
- Details of notices issued to neighbouring properties advising of disruption to services
- Emergency procedures to be supplied by all contractors before entering the site
- Details of signage and barricades for asbestos removal work
- A dig permit (dial before you dig) if holes to be dug or stakes to be driven
- A heritage management plan (HMP) if historical and/or cultural sites are to be remediated must be supplied by the asbestos removalist prior to commencing work on site
- Details of any clearance investigation or airborne fibre monitoring required.

5.8. Air Monitoring and Clearance

Airborne fibre monitoring (AFM) is generally undertaken as a precautionary measure to determine whether the controls put in place during asbestos removal have been effective. All indoor work will require AFM to protect the health of workers returning to the area and require a clearance to reoccupy before the area is handed back.

A Licenced Asbestos Assessor with NT Worksafe or other interstate regulator is qualified to monitor and clear the removal of friable asbestos. Non-friable removal may be supervised and cleared by a competent person as described in the *WHS Regulations*, and should be a person working under the supervision of a Licenced Asbestos Assessor.

5.9. Close –Out Report

At the completion of every asbestos removal task, a close out report must be supplied to the Duty Holder which includes:

- The full location of the asbestos removal works including relevant dates;
- Company name, address, ABN and contact details for the asbestos removalist and Asbestos Assessor as required;
- Details of the asbestos removal company's Asbestos Removal Licence and class of licence;
- Details of the asbestos removal work including type and quantity of material removed;

- Copies of all documentation required to commence the asbestos removal work (*See Section 5.3*);
- Details of any issues encountered during the work;
- Details of replacement materials used and any relevant warranty information;
- Details of any additional asbestos situations discovered on site;
- Drawings or photos of the work with before and after shots;
- Copies of all daily air monitoring reports supplied by the Asbestos Assessor;
- A log of all persons entering the work zone;
- Clearance certificate(s) supplied by the Asbestos Assessor;
- Evidence of the disposal of contaminated waste at a registered landfill site or storage at a registered site in compliance with a Northern Territory Environment Protection Licence for the storage of asbestos waste.

It is the role of the Duty Holder to maintain both a hard copy and electronic record of all close out reports for asbestos removal works provided by the person managing the asbestos removal.

5.10. Updating the Asbestos Register

It is the responsibility of the Duty Holder to update or arrange for the update of the asbestos register at the completion of asbestos removal works and ensure that a current copy of the register is available in for future reference.

In the case where all asbestos has been removed from a building/site, a Clearance Certificate must be made available in the building/site where the asbestos has been removed.

6. INCIDENT MANAGEMENT

6.1. Incident Management Procedure

In the event of damage to known or suspected asbestos containing material(s), the following incident management procedure is to be followed by all persons employed by the Crocodile and Weeds Management Branch as staff or contractors:

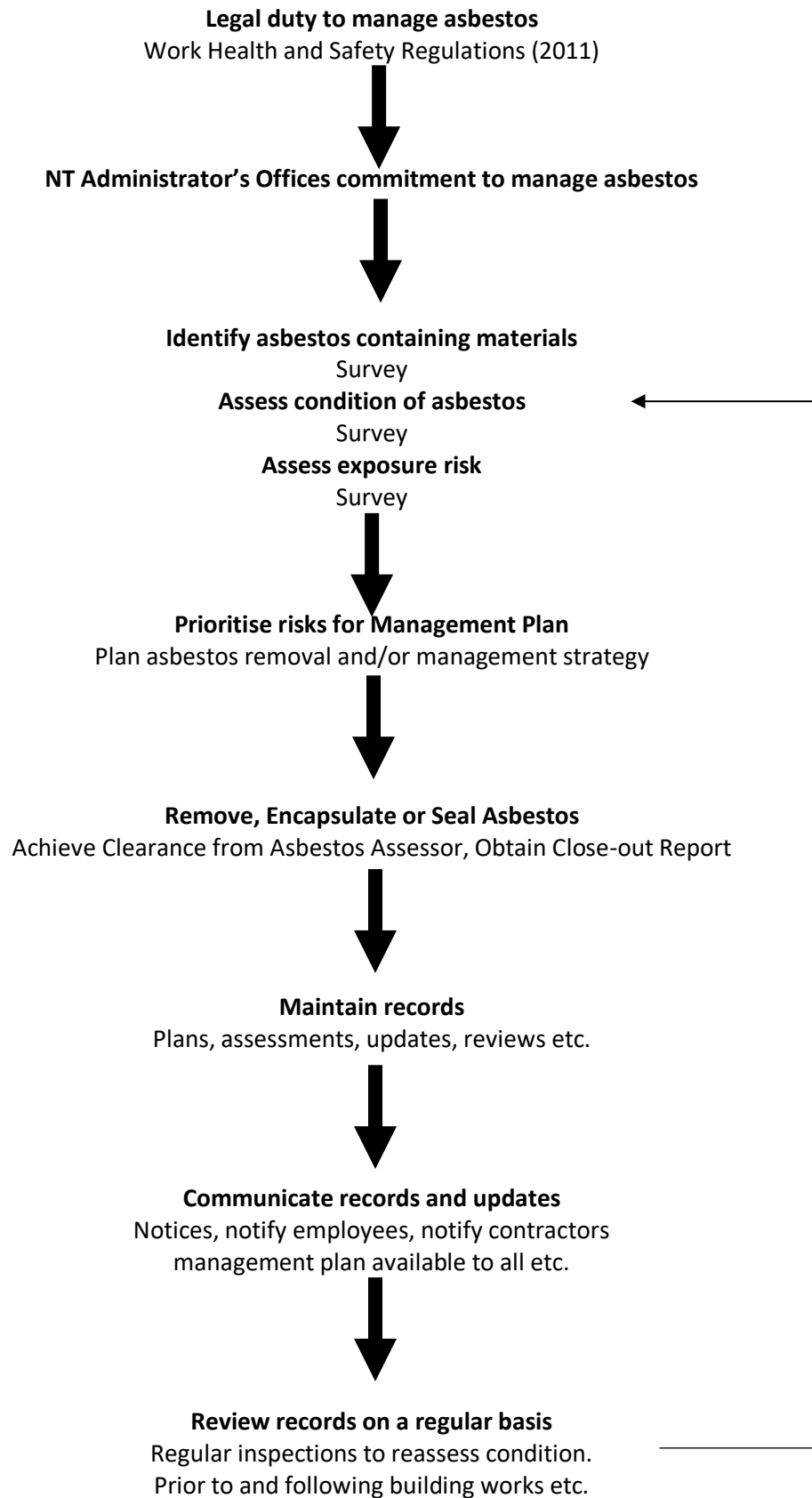
- Stop work immediately;
- If first aid is required, administer first aid and respond to immediate risks first;
- Isolate the area of contamination and prevent entry to the area using bunting or barrier mesh;
- Place warning signs at entry points to the area or if none available, place a person on duty to maintain security of the perimeter if possible until signs become available;
- Advise a line manager of a potential asbestos related incident and this must be communicated upwards until a nominated Responsible Person for the incident can be reached;
- Provide a communication plan to any nearby residents and affected personnel within 24 hours of the incident notification, including details of any remedial works that are required to be undertaken;

- The Responsible Person must implement the Incident Response Procedure as soon as possible;
- Where an asbestos incident occurs involving other hazardous materials, the Responsible Person has control of the site and will provide direction on the immediate incident response.

When notified, the Responsible Person must follow the Crocodile and Weeds Management Branch internal hazard/incident recording reporting and investigation procedure.

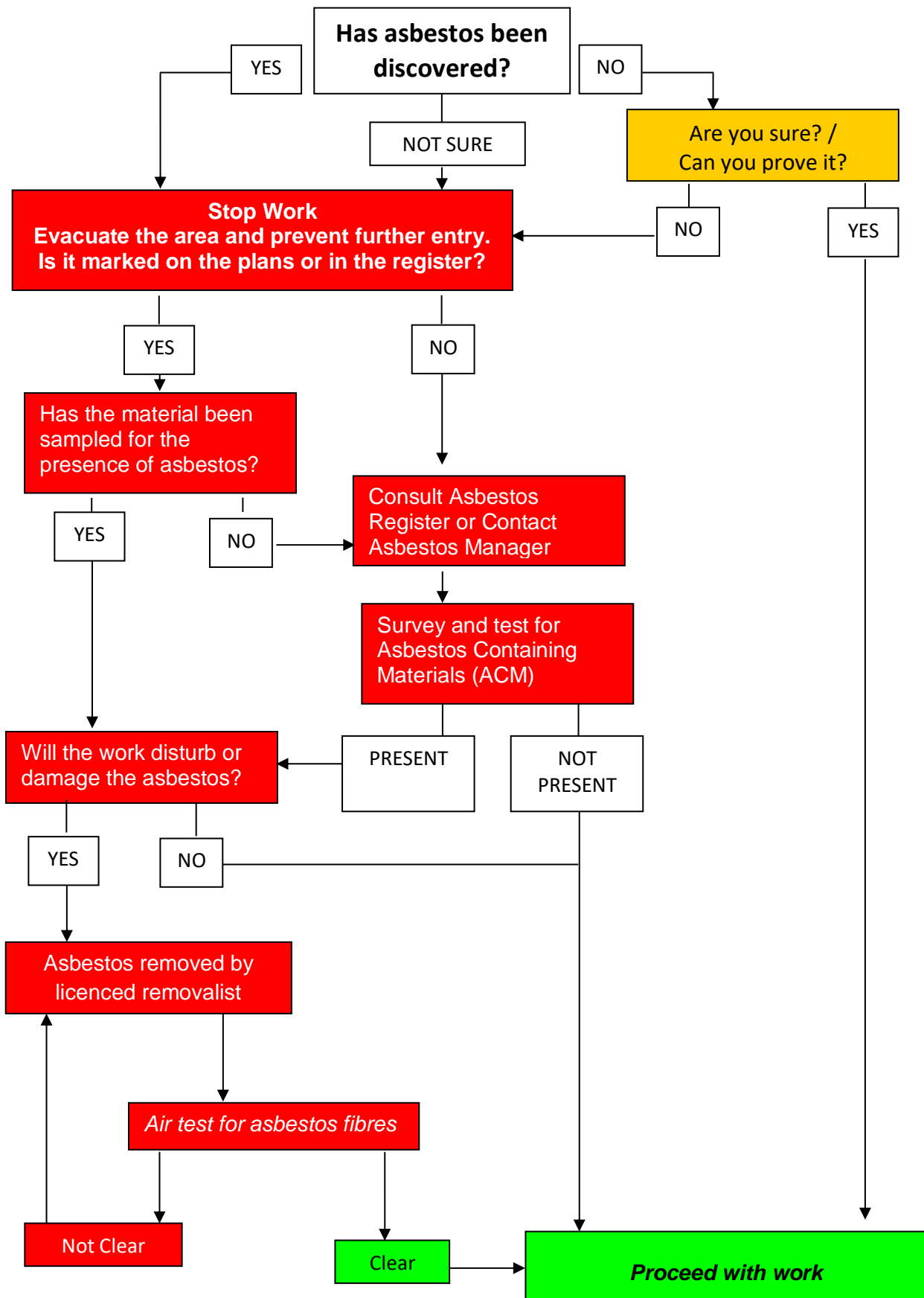
APPENDIX A - NT ADMINISTRATOR'S OFFICES ASBESTOS MANAGEMENT PLAN

NT Administrator's Offices Asbestos Management Plan



APPENDIX C - MANAGING ASBESTOS DISCOVERED DURING WORK

Managing Asbestos Discovered During Property Maintenance or Installations Work



APPENDIX D – ASBESTOS REGISTER



PO Box 1689
Humpty Doo NT 0836
ABN: 11 114 254 732
P: 0438 713 833
E: paul@asbestosnt.com.au

Asbestos Register

NT Parks and Wildlife Crocodile Management and Weed Control

No. 40 Lot 1979 Wallaby Holtze Rd. Yarrowonga NT 0830

Client Name:	NT Parks and Wildlife
Assessor Name:	Paul Felvus
Asbestos Assesor Lic:	NTWS-AA-43370
Inspection Dates:	31-Oct-17
Report Date:	7-Oct-17
Reinspection Date:	N/A
Version:	1.0





Client:	NT Parks & Wildlife	Register No:	1.0
Site:	Crocodile & Weed Management	Audit Date:	31 Oct. 2017
Address:	1979 Wallaby Holtze Rd. Yarrowonga	Review Date:	N/A

Building ID:	Shed		
Sequence:	001	Friability	
Location:	Other (refer to comments)	Condition:	
Position	Site ID Image	Sealed:	
Material Type:		Traffic:	
Quantity:		Risk Likelihood:	
Sample No:		Risk Consequence:	
Result:		Risk Rating:	

Comments:
Site ID photo



Building ID:	Shed		
Sequence:	002	Friability	
Location:	Internal/External	Condition:	
Position	Walls	Sealed:	
Material Type:	Corrugated steel sheeting	Traffic:	
Quantity:	N/A	Risk Likelihood:	
Sample No:	N/A	Risk Consequence:	
Result:	No Asbestos Detected (NAD)	Risk Rating:	

Comments:
No suspect materials detected





Client:	NT Parks & Wildlife	Register No:	1.0
Site:	Crocodile & Weed Management	Audit Date:	31 Oct. 2017
Address:	1979 Wallaby Holtze Rd. Yarrowonga	Review Date:	N/A

Building ID:	Shed		
Sequence:	003	Friability	
Location:	Internal/External	Condition:	
Position	Roof sheeting	Sealed:	
Material Type:	Corrugated steel sheeting	Traffic:	
Quantity:	N/A	Risk Likelihood:	
Sample No:	N/A	Risk Consequence:	
Result:	No Asbestos Detected (NAD)	Risk Rating:	

Comments:
No suspect materials detected



Building ID:	Shed		
Sequence:	004	Friability	
Location:	External	Condition:	
Position	Electrical component box	Sealed:	
Material Type:	Electrical backing board	Traffic:	
Quantity:	N/A	Risk Likelihood:	
Sample No:	N/A	Risk Consequence:	
Result:	No Asbestos Detected (NAD)	Risk Rating:	

Comments:
No suspect materials detected





Client:	NT Parks & Wildlife	Register No:	1.0
Site:	Crocodile & Weed Management	Audit Date:	31 Oct. 2017
Address:	1979 Wallaby Holtze Rd. Yarrowonga	Review Date:	N/A

Building ID:	Offices	
Sequence:	005	Friability
Location:	External	Condition:
Position	Eaves/soffit	Sealed:
Material Type:	Fibre cement sheet	Traffic:
Quantity:	12	m2
Sample No:	1	Risk Likelihood:
Result:	No Asbestos Detected (NAD)	Risk Consequence:
		Risk Rating:

Comments:



Building ID:	Offices	
Sequence:	006	Friability
Location:	External	Condition:
Position	Walls	Sealed:
Material Type:	Steel sheeting	Traffic:
Quantity:	N/A	Risk Likelihood:
Sample No:	N/A	Risk Consequence:
Result:	No Asbestos Detected (NAD)	Risk Rating:

Comments:

No suspect materials detected





Client:	NT Parks & Wildlife	Register No:	1.0
Site:	Crocodile & Weed Management	Audit Date:	31 Oct. 2017
Address:	1979 Wallaby Holtze Rd. Yarrowonga	Review Date:	N/A

Building ID:	Ablutions	
Sequence:	007	Friability
Location:	External	Condition:
Position	Eaves linings	Sealed:
Material Type:	Fibre cement sheet	Traffic:
Quantity:	10	m2
Sample No:	6	Risk Likelihood:
Result:	No Asbestos Detected (NAD)	Risk Consequence:
		Risk Rating:

Comments:



Building ID:	Ablutions	
Sequence:	008	Friability
Location:	Internal/External	Condition:
Position	Laundry ceiling lining	Sealed:
Material Type:	Fibre cement sheet	Traffic:
Quantity:	10	m2
Sample No:	4	Risk Likelihood:
Result:	No Asbestos Detected (NAD)	Risk Consequence:
		Risk Rating:

Comments:





Client:	NT Parks & Wildlife	Register No:	1.0
Site:	Crocodile & Weed Management	Audit Date:	31 Oct. 2017
Address:	1979 Wallaby Holtze Rd. Yarrowonga	Review Date:	N/A

Building ID:	Ablutions	
Sequence:	009	Friability
Location:	Internal	Condition:
Position	Male ablutions ceiling lining	Sealed:
Material Type:	Fibre cement sheeting	Traffic:
Quantity:	2.5	m2
Sample No:	Similar to sample 5	Risk Likelihood:
Result:	No Asbestos Detected (NAD)	Risk Consequence:
		Risk Rating:

Comments:



Building ID:	Ablutions	
Sequence:	010	Friability
Location:	Internal	Condition:
Position	Female ablutions ceiling lining	Sealed:
Material Type:	Fibre cement sheeting	Traffic:
Quantity:	2.5	m2
Sample No:	5	Risk Likelihood:
Result:	No Asbestos Detected (NAD)	Risk Consequence:
		Risk Rating:

Comments:

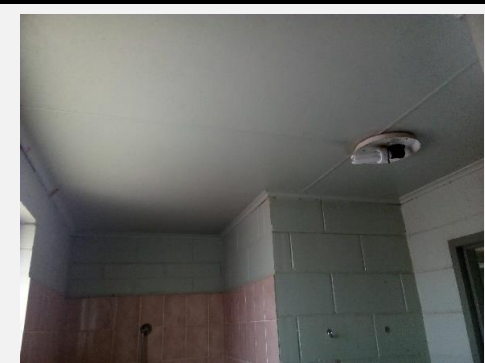




Client:	NT Parks & Wildlife	Register No:	1.0
Site:	Crocodile & Weed Management	Audit Date:	31 Oct. 2017
Address:	1979 Wallaby Holtze Rd. Yarrowonga	Review Date:	N/A

Building ID:	Ablutions	
Sequence:	011	Friability
Location:	Internal	Condition:
Position	Showers ceiling lining	Sealed:
Material Type:	Fibre cement sheeting	Traffic:
Quantity:	8	m2
Sample No:	3	Risk Likelihood:
Result:	No Asbestos Detected (NAD)	Risk Consequence:
		Risk Rating:

Comments:



Building ID:	Ablutions	
Sequence:	012	Friability
Location:	Internal/External	Condition:
Position	Wall lining	Sealed:
Material Type:	Fibre cement sheeting	Traffic:
Quantity:	5	m2
Sample No:	2	Risk Likelihood:
Result:	No Asbestos Detected (NAD)	Risk Consequence:
		Risk Rating:

Comments:





Client:	NT Parks & Wildlife	Register No:	1.0
Site:	Crocodile & Weed Management	Audit Date:	31 Oct. 2017
Address:	1979 Wallaby Holtze Rd. Yarrowonga	Review Date:	N/A

Building ID:	External recreation area		
Sequence:	013	Friability	
Location:	Internal/External	Condition:	
Position	Throughout	Sealed:	
Material Type:	Timber, steel and concrete block	Traffic:	
Quantity:	N/A	Risk Likelihood:	
Sample No:	N/A	Risk Consequence:	
Result:	No Asbestos Detected (NAD)	Risk Rating:	

Comments:

No suspect materials detected



ASBESTOS IDENTIFICATION REPORT No. 84267

CLIENT: Asbestos NT RECEIVED IN LAB: 1 November 2017
ATTENTION: Paul Felvus DATE ANALYSED: 2 November 2017
LOCALITY: NT Parks and Wildlife – Crocodile Management SAMPLED BY: As-received

Test Method: Qualitative identification in bulk samples, analysis by Polarised Light Microscopy (including dispersion staining) techniques by the method of- AS 4964 and supplementary work instruction in-house method LOP002

Client ID	Sample Size	Description	Asbestos	Organic Fibre
1 – office eaves	10x5x2mm	Pale brown cement sheet, painted off-white	No	Yes
2 – ablutions wall	15x10x2mm	Pale brown cement sheet, painted off-white	No	Yes
3 – shower ceiling	15x10x2mm	Pale brown cement sheet, painted pale green	No	Yes
4 – laundry area ceiling	15x10x2mm	Pale brown cement sheet, painted white	No	Yes
5 – female toilet ceiling	10x10x2mm	Pale brown cement sheet, painted pale green	No	Yes
6 – ablutions eaves	10x5x2mm	Pale brown cement sheet, painted white	No	Yes

Approved Identifier and Signatory



Naciye Haliloff