



# Asbestos Management Plan

2024



# Bluegums Landfill - Asbestos Management Plan - Part 1

# **General Procedures and Equipment for Asbestos Disposal at Bluegums Landfill**

## Introduction

This document is the first of four documents describing how asbestos waste is received and disposed of at Bluegums Landfill. Collectively these documents form the Asbestos Management Plan required by the Health and Safety at Work (Asbestos) Regulations (2016).

The documents are:

- Part 1: General procedures and equipment for asbestos disposal at Bluegums Landfill (this document)
- Part 2: Requirements for asbestos waste delivered to Bluegums Landfill •
- Part 3: Safe Working Procedure for asbestos disposal at Bluegums Landfill •
- Part 4: Asbestos exposure monitoring

## General procedures relating to asbestos disposal

#### Scope of this Asbestos Management Plan

This document sets out the general procedures by which asbestos will be managed at Bluegums Landfill.

This document and Parts 2, 3 and 4 have been written to comply with the requirements of the Health and safety at Work Act (Asbestos) 2016 for 'asbestos-related work' and to follow the guidance provided in WorkSafe's 'Approved Code of Practice: Management and Removal of Asbestos (2016)' and WasteMinz guidance, 'Waste industry guidelines to manage the collection, receipt, transport and disposal of asbestos waste (2019)'. In respect of handling of asbestos contaminated soils, the guidance included in BRANZ's document 'New Zealand Guidelines for assessing and managing asbestos in soil, 2017, has been referred to.

Specifically, the procedures covered by these documents relate to the receipt of asbestos contaminated wastes and their disposal in the Bluegums Landfill.

Acceptance of all waste into Bluegums landfill is subject to compliance with the landfill's waste acceptance criteria.

Asbestos contaminated soil will be subject to compliance with waste acceptance criteria for other contaminants in addition to asbestos and may be subject to additional requirements relating to those contaminants.

The WorkSafe ACOP refers to the 'New Zealand Guidelines for assessing and managing asbestos in soil' for guidance on managing asbestos contaminated soil. These guidelines identify a category of "Unlicensed asbestos work". This category of work relates to work with soil contaminated with asbestos at levels less than those that have been determined to pose an unacceptable risk to health. Specifically it has been determined that soil containing less than the following concentrations of asbestos is unlikely to result in a level of airborne asbestos fibres above the Trace Level set out in the asbestos regulations.

≤0.001% w/w fibrous asbestos and asbestos fines and/or;

• ≤0.01% w/w bonded asbestos containing material

For Unlicensed asbestos work the guidelines do not require asbestos specific PPE or respiratory equipment if the level of airborne asbestos fibres is confirmed by a suitably qualified environmental professional to be unlikely to exceed the trace level.

Based upon this guidance asbestos contaminated soil from a source that has been fully characterised at source in accordance with the 'New Zealand Guidelines for assessing and managing asbestos in soil' as containing concentrations of asbestos corresponding with 'Unlicensed asbestos work' will be treated as a Controlled Special Waste subject to compliance with waste acceptance criteria for other contaminants and in accordance with the requirements for disposal of Controlled Special Wastes set out in the Bluegums Landfill Management Plan. This means that it does not require disposal in the asbestos disposal area and can be disposed of with general refuse. Soil containing low concentrations of asbestos corresponding to 'Unlicensed asbestos work' will be treated as contaminated soil subject to assessment of the waste via the waste acceptance process and conditions imposed through that process for this type of material. These conditions will include delivery of the soil in a damp condition (additional dampening on site if required), covering as soon as practical and use of PPE appropriate for disposal of contaminated soils. It is considered that verification of asbestos at a concentration below the threshold levels for 'Unlicensed asbestos work' through the waste acceptance process along with the measures described above will be adequate to ensure that there is no unacceptable risk to health. Additionally, in the unlikely event that this material is later exposed, it will not present an unacceptable risk to health noting that any work involving exposure of landfilled waste will be subject to safety measures appropriate to a material that may contain a range of materials hazardous to health that will address any residual risk from the presence of very low levels of asbestos. The following sections of this asbestos management plan therefore do not apply to this type of waste. They do however address the disposal of asbestos contaminated soil with asbestos concentrations above the threshold levels for 'Unlicenced asbestos work' for which additional requirements apply following the requirements of the WorkSafe ACOP and the BRANZ guidelines.

The asbestos waste disposal work addressed by this plan is carried out by the Landfill Operations contractor, Roading and Asphalt Ltd (R&A) – the 'workplace PCBU'. Because it is important that asbestos waste is delivered to the site in a safe condition these documents also cover the requirements to be met by companies delivering waste to the landfill. Other parties involved in these activities from an administrative point of view are Marlborough District Council (MDC), who own the landfill and employ Roading and Asphalt to operate it, and Tonkin & Taylor Ltd (T+T), also employed by MDC, who administer the operations contract on behalf of MDC as Engineer to the Contract.

The responsibilities of these parties and some general management procedures are set out below. Specific requirements relating to delivery of asbestos contaminated wastes, disposal of these wastes in the landfill and air monitoring requirements are set out in Parts 2, 3 and 4 respectively.

#### Responsibilities

Roading and Asphalt Ltd

- Ensuring that all people entering the landfill site are aware of the location of the asbestos disposal area and associated hazards and safety measures.
- Safe receipt and disposal of asbestos contaminated waste following the procedures set out in this asbestos management plan.

- Review and update of this plan as necessary.
- Ensuring asbestos deliveries are correctly recorded at the weighbridge.
- Recording any asbestos related incidents.

#### Asbestos delivery companies

- Delivery to the landfill of asbestos waste in a safe condition following the requirements of Part 2 of this plan.
- Unloading of asbestos contaminated waste following the instructions of R&A and their own safe working procedures.
- Dealing with any non-compliance with requirements for safe delivery of asbestos e.g. rewrapping damaged asbestos waste containment.

#### Marlborough District Council

- Overseeing the landfill operation and liaising regularly with R&A and T+T, including attending site meetings at which health and safety is discussed.
- Ensuring that records of the quantity of asbestos waste disposed of at the landfill and the location of its disposal are made and kept.
- Instigating H&S audits of the landfill operations, including asbestos disposal as necessary.
- Ensuring that MDC staff who visit the landfill are aware of the presence of asbestos at the site, are subject to R&A's H&S induction process and have appropriate safe working procedures for any activities that may overlap with R&A's asbestos disposal activities.
- Arranging and reporting the results of airborne asbestos fibre monitoring.

#### Tonkin & Taylor Ltd

- Administration of the operations contract including:
  - Liaising regularly with R&A and MDC, including attending site meetings at which health and safety is discussed.
  - Administering MDC's sub-contract with a surveying company to survey/record asbestos disposal locations.
- Carrying out audits of H&S procedures at the landfill, including procedures for asbestos disposal, as directed by MDC.
- Ensuring that T+T staff who visit the landfill are aware of the presence of asbestos at the site, are subject to R&A's H&S induction process and have appropriate safe working procedures for any activities that may overlap with R&A's asbestos disposal activities.

#### Identification of the asbestos disposal area

R&A will inform landfill staff, customers and visitors to the landfill site of the location of the asbestos disposal area and instructions on access – i.e. authorised and supervised access only. R&A will identify the asbestos disposal site with signs warning of the presence of asbestos and delineate the disposal area with hi-vis fencing.

MDC and T+T will brief their staff who visit the landfill site on the location of the asbestos disposal area.

#### Information on Health Risks

R&A will inform workers who work in the asbestos disposal area about the risks of exposure to asbestos and the need for, and details of, health monitoring to be carried out.

MDC and T+T will inform their staff who visit the landfill about the risks of exposure to asbestos and precautions to avoid exposure – MDC and T+T staff will not enter the asbestos disposal area unless

supervised by R&A staff who have checked and confirmed that there is no risk of escape of asbestos fibres.

#### Health Monitoring

R&A has a programme of health monitoring of its staff.

#### Personal Protective Equipment (PPE)

The following PPE is required to be worn in the asbestos disposal area.

When no work is taking place and all waste is securely covered:

- Safety footwear
- Hi-vis vest

When work is being undertaken (e.g. unloading and covering waste):

- Safety footwear
- Hi-vis vest
- Hard hat
- Eye protection
- Disposable overalls
- Half face-piece respirator with replaceable particulate filter (minimum class P2) or disposable half-face (minimum class P2) respiratory mask. Personnel will need to be clean shaven to allow close fit of the mask.
- Disposable gloves

#### Training

R&A's Kiosk operator will be trained in the requirements for asbestos delivery to the landfill site and the procedures to be followed should any asbestos waste be identified at the weighbridge to be non-compliant with those requirements (Refer to Part 2).

R&A's staff who supervise unloading of asbestos at the asbestos disposal area and undertake work such as covering of asbestos waste will be trained in the procedures to be followed (Refer to Part 3).

### Equipment

R&A will use the following plant in the asbestos disposal area:

- Excavator to be used to cover asbestos waste with soil and to lift and move asbestos waste that can be moved without damage to wrapping/containment using suitable lifting strops or by careful pushing.
- Loader to push asbestos contaminated soil and to scrape the ground of any asbestos contamination.
- Water cart with hose and spray attachment to dampen down asbestos waste.
- All plant potentially contaminated with asbestos (to be determined by R&A site personnel) will be decontaminated before leaving the asbestos disposal area.
- All plant that works in the asbestos disposal area will be fitted with HEPA filters on cabin air intakes or the air conditioning turned off while work is carried out.

#### Incidents

Incidents involving asbestos are not anticipated if the controls set out in this plan are followed – specifically, requirements for asbestos waste to be delivered in a safe condition (Part 2) and procedures for the handling of asbestos waste in the disposal area (Part 3). Part 2 includes controls for asbestos waste identified at the weighbridge to be inadequately wrapped. Other unforeseen incidents will be dealt with by isolating the area and then formulating safe remedial actions taking advice and using a registered asbestos removalist if required.

R&A will record all asbestos related incidents following their standard procedures as set out in their Site Safety Plan.

#### Decontamination facilities including disposal of contaminated PPE

Procedures for decontamination of plant and personnel at the asbestos disposal area are described in Part 3. There are washing facilities and a shower in the site office at the site entrance that may be used if required. These facilities are only to be used following the on-site decontamination procedures described in Part 3. Plastic will be available in which to place any contaminated clothing for disposal.

#### Review and Update of the Plan

As the disposal of asbestos at the landfill is an ongoing operation, R&A will continually monitor the effectiveness of the procedures set out in this plan. Should there be any concerns, R&A will raise these with MDC and T+T for discussion and consideration of improvements to the procedures. If improvements are identified the plan will be updated accordingly.

# **Bluegums Landfill – Asbestos Management Plan – Part 2**

# **Requirements for Safe Delivery of Asbestos Waste to Bluegums Landfill**

## Introduction

This document is the second of four documents describing how asbestos waste is received and disposed of at Bluegums Landfill. Collectively these documents form the Asbestos Management Plan required by the Health and Safety at Work (Asbestos) Regulations (2016). The documents are:

- Part 1: General procedures and equipment for asbestos disposal at Bluegums Landfill
- Part 2: Requirements for asbestos waste delivered to Bluegums Landfill (this document)
- Part 3: Safe Working Procedure for asbestos disposal at Bluegums Landfill
- Part 4: Asbestos exposure monitoring

## Asbestos waste delivery requirements

- Marlborough District Council (MDC) pre-approval for disposing asbestos waste must be gained prior to any contractor/company/individual being allowed to dispose of asbestos at Bluegums Landfill. This will take the form of a 'Waste Acceptance Evaluation' approval. The following steps must be followed:
  - a. Contact MDC's Solid Waste Manager to apply for approval and to complete this process. Provide information on the source, nature and quantity of asbestos contaminated waste requiring disposal.
  - b. The "Waste Acceptance Evaluation approval document" will advise of any conditions of acceptance of asbestos waste at Bluegums Landfill which will include those set out in this document and any additional requirements specific to the waste to be disposed of.
  - c. A 'Waste Acceptance Evaluation' approval will usually relate to a defined quantity and type of asbestos waste from a specific source.
  - d. Council may (at its discretion) provide an ongoing Waste Acceptance Evaluation approval to any contractor/company/individual for particular types of asbestos waste. This type of approval is dependent on the consistency of the waste over time and compliance of the haulier with disposal procedures.
- 2. Asbestos waste will be accepted on Tuesdays and Thursdays only (unless by prior arrangement with MDC/the landfill operator). No asbestos waste deliveries will be accepted after 3pm, to allow landfill personnel sufficient time to cover the waste. Any asbestos delivery on other days or after 3.00pm will be refused entry.
- 3. Deliveries of asbestos waste must be arranged with the landfill site kiosk operator (phone 03 5796343) a minimum of 24 hours before delivery to ensure landfill personnel are available to oversee the disposal process. Any deliveries of asbestos waste arriving without 24 hour prior notice will be refused entry.
- 4. Personnel delivering asbestos waste to Bluegums Landfill shall be suitably educated and trained in the health risks and health effects associated with exposure to asbestos and in the safe handling and control measures for asbestos as appropriate to the disposal of asbestos waste at Bluegums Landfill. This shall include familiarity with the requirements of this

document. Education and training of personnel delivering waste to the landfill is the responsibility of their employer.

- 5. Asbestos waste delivered to Bluegums landfill shall be delivered in a safe condition in accordance with Worksafe's Approved Code of Practice, Management and Removal of Asbestos, November 2016 (ACOP) such that escape of asbestos fibres is prevented. Asbestos waste delivered to Bluegums Landfill shall meet the containment requirements of the ACOP and the requirements set out below:
  - Dampened and double bagged in new heavy duty (200µm minimum thickness) polythene bags with a maximum size of 1200mm long and 900mm wide closed with gooseneck ties. Bags to be no more than half filled depending upon weight (maximum weight 15kg) to allow easy and safe manual handling and marked clearly 'Caution Asbestos Do not open or damage bag. Do not inhale dust', or
  - Dampened and double wrapped in heavy duty (200µm minimum thickness) polythene sheeting and adhesive tape in bundles as appropriate to the waste if the waste cannot be bagged. If possible bundles should not be too large or too heavy to handle easily and safely manually. If they cannot be handled manually they shall be delivered to site in such a way that they can be unloaded without damage to the wrapping (e.g on a pallet or contained in 'bulk bags' with suitable strops to enable unloading by hiab - see 9 below). Bundles shall be clearly marked to indicate the presence of asbestos, or
  - Dampened and contained within bulk bags specially designed for transporting asbestos with linings compliant with the WorkSafe ACOP and lifting straps (e.g. 'Hazi Bags' by ARENZ or 'Asbestos bags' by Bulk Bag Co. Ltd) filled and sealed in accordance with the manufacturer's instructions and clearly marked to indicate the presence of asbestos, or
  - Dampened and contained in drums or bins (in good condition) lined internally with heavy duty (200µm minimum thickness) polythene sheeting with their rims sealed. Drums and bins shall be clearly marked to indicate the presence of asbestos. Drums and bins shall be delivered to site in such a way that they can be unloaded without damage (see 9 below). Drums and bins shall be clearly marked to indicate the presence of asbestos, or
  - Bulk quantities of asbestos contaminated soil waste may be delivered in a vehicle tray or waste skip. Vehicle trays or skips shall be double-lined with heavy duty (200µm minimum thickness) polythene sheeting and the waste wetted down and fully double wrapped with polythene and sealed with adhesive tape. Loads shall be covered with a conventional tarpaulin cover during transport to protect the polythene wrapping.

Asbestos waste deliveries will be inspected on arrival at the weighbridge by removal of sheeting to make visible the wrapped/contained asbestos.

6. Asbestos contaminated waste shall not be delivered mixed with other non-asbestos contaminated waste. Any deliveries with mixed waste will be refused entry. If non-asbestos waste is found to be mixed with asbestos waste this will result in a contamination charge (double the current asbestos tonnage rate) for the disposal of the waste.

- Personnel delivering asbestos waste shall have appropriate PPE with them in their vehicles. PPE shall be in good working order and consist of the following as a minimum: To be worn at all times:
  - Hi-vis vest
  - Protective footwear

Any personnel who exit their vehicle within the asbestos disposal area must additionally have available and wear:

- Hard hat
- Eye protection
- Disposable overalls
- Half face-piece respirator with replaceable particulate filter (minimum class P2) or disposable half-face (minimum class P2) respiratory mask
- Disposable gloves
- All asbestos waste deliveries are to be supervised by a member of the landfill staff no unsupervised unloading is permitted. The instructions of landfill staff shall be followed at all times.
- Bagged, bundled and drummed asbestos waste shall be delivered to the site in such a way that it can be unloaded in the asbestos disposal area without damage to the wrapping.
  Tipping of bagged, bundled and drummed asbestos waste shall not be permitted.
  Suitable unloading methods are:
  - a. Bagged/bundled/drummed asbestos waste delivered on pallets and unloaded using a hiab/crane mounted on the delivery vehicle.
  - b. Bagged/bundled asbestos waste contained in 'bulk bags' unloaded using a hiab/crane or similar equipment mounted on the delivery vehicle.
  - c. Small bagged and small bundled asbestos waste unloaded carefully by hand.
  - d. Unloaded by the landfill operator using an excavator fitted with suitable lifting chains. If this option is adopted the landfill operator must be advised in advance, waste must be delivered with suitable lifting straps to facilitate safe lifting from the delivery vehicle and an additional charge will be payable.
  - e. Large asbestos contaminated items or other asbestos contaminated waste material requiring special wrapping and/or handling/unloading procedures will be subject to specific requirements and procedures to be agreed through the preapproval/acceptance process
- 10. Bulk asbestos contaminated soil waste delivered in a lined and wrapped vehicle tray or skip may be tipped under the instruction and supervision of landfill staff.
- 11. If the containment to bagged, wrapped or drummed asbestos waste is damaged during unloading further unloading shall be stopped until the waste is made safe and landfill staff indicate that unloading may resume. Decontamination of vehicles and personnel may be required before leaving the asbestos disposal area at the direction of the landfill staff. Note that this procedure does not apply to bulk contaminated soil for which specific control measures will be applied.

# **Bluegums Landfill – Asbestos Management Plan – Part 3**

# Safe Working Procedure for Asbestos Disposal at Bluegums Landfill

## Introduction

This document is the third of four documents describing how asbestos waste is received and disposed of at Bluegums Landfill. Collectively these documents form the Asbestos Management Plan required by the Health and Safety at Work (Asbestos) Regulations (2016). The documents are:

- Part 1: General procedures and equipment for asbestos disposal at Bluegums Landfill
- Part 2: Requirements for asbestos waste delivered to Bluegums Landfill
- Part 3: Safe Working Procedure for asbestos disposal at Bluegums Landfill (this document)
- Part 4: Asbestos exposure monitoring

## Asbestos waste disposal procedure

The following procedure will be followed for the acceptance and disposal of asbestos waste at Bluegums Landfill.

- 1. Asbestos waste will be inspected by the kiosk operator when it arrives at the weighbridge via the weighbridge camera and external visual examination of the delivery vehicle. Sheeting will be removed at the weighbridge to make the wrapped/contained asbestos visible and the vehicle driver will be asked to confirm that it is properly and safely contained to prevent release of asbestos fibres. If it does not appear to be contained properly it will not be accepted into the landfill site until it has been made safe. The waste must not be disturbed or handled. If it is presenting an immediate risk i.e. dust blowing, it should be damped down with a dispersed water spray. The vehicle will be parked up in the designated parking area before the weighbridge and the company responsible for its delivery will be advised and requested to attend and address the problem safely.
- 2. The asbestos disposal area will be segregated from and located a sufficient distance away from other activities at the landfill and away from the edge of the landfill to minimise the risk of human exposure. If activity is occurring near to the asbestos disposal area this will be temporarily stopped when work is occurring in the asbestos disposal area to maintain a suitable separation of people from the disposal area. All asbestos disposal locations will be recorded by survey.
- 3. The asbestos disposal area will consist of a pre-formed cell bunded on three sides. This cell will be filled and encapsulated progressively with clean soil cover material.
- 4. The asbestos disposal area will be clearly identified with signs warning of the presence of asbestos and that asbestos-related work is being carried out.
- 5. The asbestos disposal area will be delineated by a hi-vis netting fence or similar (removable as required to allow access etc.).
- 6. A water cart with a hose and spray attachment will be available at the asbestos disposal area to damp down asbestos waste when asbestos waste is being received or other work is being carried out in the disposal area.
- 7. The asbestos disposal area will be arranged to avoid vehicles delivering waste needing to track over asbestos waste.

- 8. Entry to the asbestos disposal area and unloading of asbestos waste in the disposal area will be supervised by a trained member of the landfill staff. Only vehicles delivering asbestos waste and operational plant will be allowed within the asbestos disposal area.
- 9. Bagged or bundled wrapped asbestos waste will be unloaded carefully to avoid damage to wrapping and prevent release of asbestos fibres and placed in a location instructed by landfill staff.

Acceptable unloading methods are:

- a. Bagged/bundled/drummed asbestos waste delivered on pallets and unloaded using a hiab/crane mounted on the delivery vehicle.
- b. Bagged/bundled asbestos waste contained in 'bulk bags' with suitable strops and unloaded using a hiab/crane or similar equipment mounted on the delivery vehicle.
- c. Small bagged and small bundled asbestos waste unloaded carefully by hand.
- d. Unloading by the landfill operator using an excavator fitted with suitable lifting chains.
- e. Large asbestos contaminated items or other asbestos contaminated waste material requiring special wrapping and/or handling/unloading procedures will be subject to specific requirements and procedures to be agreed through the pre-approval/acceptance process (Refer Document 2).

#### Tipping of bagged, bundled or drummed asbestos waste will not be allowed.

- 10. Non-asbestos waste must not be disposed of with asbestos waste.
- 11. If asbestos waste is stacked it will be done carefully to avoid damage to wrapping/containment and to ensure adequate stability.
- 12. If wrapping or containment of any bagged, bundled or drummed asbestos waste is damaged and asbestos waste exposed when the waste is unloaded, further unloading will be stopped immediately and the area isolated. The waste will then be damped down with a dispersed water spray to avoid raising dust (hose operator to wear appropriate PPE refer to Part 1) before unloading is resumed. The exposed waste will be covered with an adequate depth of soil cover, such that the risk of airborne asbestos is removed, immediately on completion of unloading.
- 13. If any plant becomes contaminated (or is suspected of being contaminated) with asbestos it will be washed down within the asbestos disposal area and washings scraped to the waste pile where the loader/excavator bucket will be washed down and clean soil placed over the washings.
- 14. PPE including disposable coveralls, disposable gloves and respirator will be worn by any personnel in the asbestos disposal area when disposal work is taking place as a precaution against the possible release of airborne asbestos fibres. Under normal circumstances when the procedures set out in this document are followed there will be no reason to believe that any contamination with asbestos fibres has occurred and consequently no decontamination of personnel will be required. If any personnel become contaminated (or are suspected of being contaminated) with asbestos, if for example they are in close proximity to a bag that is broken open during unloading and asbestos waste is released, they will be decontaminated. Decontamination will be by standing on a sheet of plastic within the asbestos disposal area while removing PPE. Boots will be carefully wiped down with a wet disposable cloth. If there is visible dust on gloves, overalls etc. this will be misted with a water spray before removing PPE. Overalls will be peeled off, turning them inside out as they are removed. The respirator should be the last item of PPE removed. Re-usable respirators will be thoroughly cleaned. Disposable PPE and cleaning cloths will be placed on the plastic which will then be carefully wrapped around the PPE and placed into a plastic bag with a gooseneck tie and the bag

disposed of in the asbestos disposal area. Personnel will wash face and hands. A shower is available on site if required after the on-site decontamination described.

15. Bulk asbestos contaminated soil delivered in lined/wrapped trucks or skips (Refer to Part 2 for details) may be tipped as directed by landfill staff. As the plastic wrapping is likely to tear, the waste will be sprayed as required with a dispersed water spray while it is tipped to prevent any dust being created (note that the soil is required to be delivered in a dampened condition so that generation of dust should not occur). The waste will then be covered immediately with an adequate depth of soil cover.

Large deliveries of bulk asbestos contaminated soil may require a disposal area separate from that for bagged and bundled waste to be set up. This is to comply with the requirements set out above and the location will be surveyed.

- 16. If any wrapped bagged or bundled asbestos waste is required to be moved this will be done in such a way as to not damage the plastic wrapping. Small bagged or bundled waste may be moved manually by trained personnel wearing appropriate PPE. Larger bundled waste that can be lifted by crane/excavator arm without damage to the wrapping may be moved by careful lifting and replacing. Bagged and bundled asbestos waste may also be moved by pushing carefully with an excavator bucket if this can be done without damaging wrapping. Bagged and bundled asbestos waste should not be moved if damage to wrapping is likely to occur. If any damage to wrapping occurs during movement of asbestos waste, work will be stopped and the procedure set out in point 12 above will be followed.
- 17. If any asbestos contaminated soil is required to be moved it must be dampened down as required to avoid creation of any dust and to prevent asbestos fibres being released to the atmosphere. A loader/excavator may be used to push the waste and scrape the ground to ensure all asbestos contaminated waste is pushed forward. The waste will be sprayed. On completion the loader blade/bucket will be washed down with the hose at the edge of the asbestos waste pile before the plant leaves the asbestos disposal area. The waste and washdown will then be covered immediately with an adequate depth of soil cover.
- 18. All asbestos waste with its plastic wrapping intact will be covered with an adequate depth of soil cover at the end of each day. Bulk asbestos wastes and any bagged or bundled asbestos waste with damaged plastic wrapping must be dampened down and covered immediately as described above.
- 19. Where asbestos waste is to be covered with additional asbestos waste within the next month an adequate depth of soil cover is a <u>minimum</u> of 200mm. Where no further filling is to take place within the next month a <u>minimum</u> soil cover of 400mm is required to ensure that the asbestos waste remains covered. Soil cover will be placed in such a way that it is stable and will not fall or slide off the waste it is covering.
- 20. When filling with asbestos waste in a particular area is complete, and further filling is to consist of non-asbestos contaminated waste, a <u>minimum</u> soil cover of 400mm is required. The first layer of non-asbestos waste placed over the soil cover will be a minimum of 500mm thick and consist of soft waste before the compactor is run over it to ensure that the asbestos waste is not disturbed and exposed.

# **Bluegums Landfill – Asbestos Management Plan - Part 4**

## **Asbestos Exposure Monitoring**

## Introduction

This document is the fourth of four documents describing how asbestos waste is received and disposed of at Bluegums Landfill. Collectively these documents form the Asbestos Management Plan required by the Health and Safety at Work (Asbestos) Regulations (2016). The documents are:

- Part 1: General procedures and equipment for asbestos disposal at Bluegums Landfill
- Part 2: Requirements for asbestos waste delivered to Bluegums Landfill
- Part 3: Safe Working Procedure for asbestos disposal at Bluegums Landfill
- Part 4: Asbestos exposure monitoring (this document)

## Methodology

Monitoring of asbestos fibres in air will be carried out at the asbestos disposal area to confirm that the airborne asbestos contamination does not exceed trace levels. Monitoring will be by use of a filter membrane method following the general procedure set out in WorkSafe's Approved Code of Practice: Management of Asbestos 2016 (ACOP).

Monitoring will conform to the following requirements:

- Monitoring will be by an independent licensed asbestos assessor or competent person.
- Frequency: 6 monthly intervals or if conditions change or other factors indicate that there may be increased risk of asbestos fibre release.
- Monitoring at two locations adjacent to the asbestos disposal area chosen in relation to proximity to area of activity and prevailing wind direction.
- Monitoring period to be determined but to include a period when asbestos is disposed.

### Results and actions

The results of monitoring will be reviewed and the following actions taken if the results exceed trace levels of asbestos in air (i.e. exceeding 0.01 fibres/ml).

- The cause of fibre levels will be investigated, including compliance with the Safe Working Procedure for Asbestos Disposal (Part 3).
- A review of the controls will be required and any improvements necessary identified and implemented.
- Consideration will be given to whether follow up monitoring is required.

If the airborne contamination standard for asbestos of 0.1 fibres/ml is exceeded, the following additional actions shall be undertaken:

- Acceptance of asbestos waste at the landfill will cease until the investigation is completed.
- WorkSafe will be notified as soon as practicable.
- Anyone who may have been exposed to asbestos fibres will be identified (as far as is reasonably practicable) and warned about possible exposure to respirable asbestos fibres.