
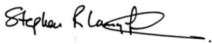


STC – WI 011 – PROCESSING OF SOILS WITH VISIBLE ASBESTOS DEBRIS

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Distribution:	Z/QMS/Work Instructions - STC		

Document Changes

Revision No:	Summary of Changes	Date
7	Change to wording to make it non-site specific	01/06/22

Definitions and Abbreviations

ACM – Asbestos Containing Materials
 >NNLW – Notifiable non-licensed works

Introduction

This procedure relates to the measures to be undertaken for the removal of visible ACM fragments from soil received at the site. The purpose of the removal of asbestos debris would be to allow further treatment of soils by biotreatment or to stockpile processed soils for disposal in the non-hazardous void or to be reused as part of the landfill restoration scheme.

Principle of Operation

The general principle of the operation is to receive and treat soils at the site with visible asbestos fragments that would be classified as hazardous waste under Environment Agency guidance WM3.

The aim of the processing works would be to remove visible asbestos fragments from the soil to facilitate direct reuse in the adjacent non-hazardous void, to be reused as part of the restoration scheme on the landfill, or for further biotreatment to reduce hydrocarbons to concentrations suitable for reuse as described above.

Pre-acceptance checks and analysis of the received soil and processed soil will ensure that no unsuitable soil is received at the facility either for treatment or reuse in the non-hazardous void or restoration scheme. Air monitoring during the soil processing works will ensure the protection of site workers and surrounding receptors.

The works would be notified to the HSE as notifiable non-licensed works (NNLW) on the basis that ACMs are potentially broken/degraded and require effective management to ensure the protection of workers and surrounding receptors. No licensed works are proposed for treating soils at the site.

Procedure

Analysis for soils impacted with visible asbestos fragments would be reviewed prior to any offer to accept at the appropriately licensed sites. Waste acceptance limits for asbestos fibres in soils would be **0.1%** for serpentine asbestos (chrysotile) and **0.01%** for amphibole asbestos types. Site visits will be undertaken where required and any supplementary analysis undertaken to comply with STC-WI 002 and STC – WI 003 to ensure that soils are suitable for treatment using the available methodology at the site.

Should any non-compliant wastes be encountered, the standard rejection procedure should be implemented. In the event that the works to reject waste would constitute licensed asbestos works in accordance with HSE guidance, the standard notification would be made and works would cease until the non-compliant waste is removed.

Soils would be received at the site and placed in asbestos storage area. Soils will be visually inspected to ensure non-compliant materials (e.g. insulation products) are not present, sampled and covered with a tarpaulin to ensure control of any potential emissions during the reception analysis phase. The reception analysis will be reviewed and only soils that are deemed to have no potential to generate asbestos fibres above the detection limit of <math><0.01\text{f/ml}</math> will be formally accepted. Soils that have the potential to generate airborne asbestos fibres, i.e. they exceed the asbestos fibre acceptance criteria or contain non-compliant products (e.g lagging, asbestos insulation board etc) will be rejected and removed from site.

Stockpiled soils will be transferred to the asbestos processing area and loaded onto a three way screen with a fines, mid range and oversize separation system. The mid range fraction will be loaded onto the picking station with asbestos operatives removing visible fragments and double bagging prior to storage in a locked skip. The fines and oversize will be visually inspected prior to storage for validation testing. If visually identifiable asbestos is present in the fines or oversize fraction these will be loaded onto the picking station for picking prior to validation testing.

The locked asbestos skip will be removed from site when full and taken to a hazardous landfill for disposal.

All personnel will enter and leave the asbestos area via the designated decontamination facility.

Plant/Equipment to be Used:

- Tarpaulins
- Asbestos air monitoring equipment
- 360 excavator
- Dumper truck
- 3 way screener
- Picking station
- Decontamination Unit
- Pressure washer/misting unit

Plant/Operator Certification Required:

- CPCS/CSCS Cards
- Asbestos Awareness

Summary of Known or Suspected Hazards (either construction, physical or contamination hazards identified):

- The stored soil from a variety of sources will contain low levels of ACM debris and asbestos fibre concentrations lower than the waste acceptance limits previously described. The potential for airborne asbestos fibres being generated is considered extremely low.
- The potential routes of asbestos exposure are by inhalation of dust.
- Construction hazards (slips, trips and falls on uneven ground, machinery)
- Physical hazards associated with moving equipment & machinery.

General Description of Work

- Soils received will be covered with tarpaulins whilst awaiting reception analysis

- Reception analysis to be reviewed and approved by the Operations Manager prior to any transfer to the asbestos processing area.
- All screening and hand picking works to be undertaken with background air monitoring to confirm if asbestos fibres are being generated
- Enter clean end of decontamination unit and pick up disposable overalls/overshoes (if used) and disposable RPE if used
- Don PPE and where required RPE (as specified) prior to entering designated area of site via dirty exit of decontamination unit
- Excavate stockpiled soils in a controlled manner with handpicking of debris into waste asbestos sack directly where possible. Where required, use the surfactant spray if any asbestiform materials appear dry/friable. Place double bagged ACM debris in the dedicated lockable skip at the end of each work period.
- Wipe all tools, etc. with a dampened cloth.
- Place used damp rags in a waste sack and seal.
- At the edge of the work area, clean the outside of all waste sacks and seal.
- Wipe off boots and face mask (if worn) with a cloth and bucket provided.
- Disposable overalls (turned inside out), gloves and where required, any used disposable respirators in asbestos waste bag. Seal the clear bag.
- Once soils have nil visible asbestos and are chemically approved as suitable for further treatment or reuse, they can be sent to the non-hazardous void or restoration scheme following approval from FCC Compliance.
- Ambient asbestos monitoring in air to be undertaken daily during screening/hand picking works. Works must cease to allow damping down measures to be implemented if fibre concentrations exceed a maximum of **0.01f/ml**. Mitigation measures will commence if the Provectus target threshold of <0.0005f/ml is exceeded.

Site Manager to conduct a visual inspection of work areas and transit routes. If a satisfactory level of cleanliness has been achieved they shall complete an interim sign off in the site diary.

Personal Protection

PPE:

- Hi-Visibility vest/jacket
- Hard Hat
- Protective boots (steel toecap/midsole)
- Disposable overalls: Type 5 (BS EN ISO 13982-1)
- Disposable overshoes where required
- Disposable gloves

RPE:

- disposable respirator to standards EN149 (type FFP3) or EN1827 (type FFP3);
- half or full mask respirator (to standard EN140) with P3 filter; or semi-disposable respirator (to EN405) with P3 filter. Masks would be positive or negative pressure depending on face fit requirements. Should negative pressure masks be used then a break every hour of continuous use should be undertaken.

Also:

- Surfactant spay (e.g. Idenden Dampstrip Asbestos Penetrant 30-330 or similar)
- First Aid Kit
- Mobile Phone

Emergency Procedures

Personnel injury/overexposure:

Remove to fresh air and provide first aid procedures as required; Contact Emergency services if accident/injuries warrants; Decontaminate personnel if required (remove overalls and PPE, wash hands and forearms).

Fire or Explosion:

Evacuate the work area and summon local Fire Brigade. Do not attempt to fight fire. Remain upwind of smoke in safe area. Follow existing Site Procedures.

Decontamination Procedure

- Personnel:**
- 1) Remove disposable contaminated clothing and discard in the designated waste container.
 - 2) Wash hands/face/forearms prior to leaving decontamination unit.

Site Rules

- **NO SMOKING**, No eating, drinking, or chewing of gum.
- Wear protective equipment specified above.
- Utilise good personal hygiene habits – wash hands and exposed skin with soap and water prior to leaving site.
- Remove and dispose of contaminated clothing as described above before leaving the working area.

The safe working procedures detailed in this method statement must be adhered to.

DECLARATION

I have read, understood and will comply with the requirements of this Safety Method Statement			
Name	Work Position	Signature	Date
