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28 September 2022

Mr John Sabbouh
Richard Crookes Constructions
Level 3, 4 Broadcast Way
Artarmon NSW 2064

RE: REMOVAL OF ASBESTOS CONTAMINATED DEBRIS IN FILL SOIL BELOW CTC BUILDING LINK BRIDGE AT ST JOHN OF GOD RICHMOND HOSPITAL, 177 GROSE VALE ROAD, NORTH RICHMOND NSW

Dear Sir,

We refer to our visual inspection and asbestos material sample collection undertaken on Tuesday 27 September 2022 following the discovery of asbestos cement sheet debris within the fill soil that is located below the concrete floor slab of the CTC Building Link Bridge located on the western side of the CTC Building and extending to the adjacent Belmont House building that is located within the Richard Crookes Constructions site area at the St John of God Richmond Hospital at 177 Grose Vale Road, North Richmond NSW (the site).

During investigation work to ascertain the presence and type of services that are present below the link brick floor, fill soil that was removed was found to contain fragments of asbestos cement sheet debris.

Sample Collection and Analysis

During the site inspection on 27 September 2022, a piece of the asbestos cement sheet material that has been identified in and below the slab was collected for laboratory analysis to confirm the presence of asbestos in this material.

The sample was placed into a clean resealable plastic sample bag that was marked with the sample details. The sample was forwarded to ESP Laboratories, a NATA accredited laboratory located in Footscray VIC for asbestos content analysis. The samples were analysed using ESP's NATA accredited in-house method No. 2 and methodology consistent with AS4964-2004.

Analysis of the sampled material confirmed it to contain chrysotile asbestos and amosite asbestos. See sample 2 on the attached laboratory report.

Scope of Asbestos Removal Work

The following scope of work is to be completed to remove the concrete floor slab and the asbestos contaminated fill soil from the area where the link bridge is located between the CTC Building and Belmont House:

1. The removal of the concrete with embedded asbestos cement sheet and the fill soil below the concrete slab is classified as non-friable asbestos removal work and may be carried out using the existing non-friable asbestos removal notification for the buildings within the demolition area at the site.
2. A barricade with asbestos warning signs is to be erected around the asbestos contaminated fill soil removal work area at the site.
3. A decontamination and change area is to be established at the entry to the non-friable asbestos removal work area.
4. Water spray is to be used to control dust generated by the work. Work should not be undertaken during periods of high wind that could carry dust potentially containing asbestos fibres into adjoining areas.
5. The concrete floor slab is to be cut into pieces using a demolition saw with the cuts to be made to a depth of 75% the thickness of the slab. The concrete slab is to then be broken and the pieces removed using an excavator. Each concrete piece is to be inspected to ascertain if embedded asbestos cement sheet is present. Concrete with no embedded asbestos cement is to be disposed of as clean demolition waste. Concrete with embedded asbestos cement sheet is to be disposed of as asbestos contaminated waste.
6. The concrete slab pieces with embedded asbestos cement sheet debris is to be loaded into plastic lined skip bins or trucks and transported for disposal as non-friable asbestos contaminated waste at a landfill facility licenced by the NSW EPA to accept the waste soil.
7. After all of the concrete has been removed, loose fragments of asbestos cement sheet debris on the exposed soil are to be collected and bagged for disposal as asbestos waste.
8. The fill soil containing fragments of asbestos cement sheet debris and concrete debris is to be scrapped to remove all concrete and asbestos cement sheet debris. Care is to be taken to not damage the service(s) in the fill soil. The soil is to be removed at each end of the area to expose the pipe(s). These pipes are to be terminated / diverted prior to the bulk excavation of asbestos contaminated fill soil.
9. The remaining asbestos contaminated fill soil is to be covered with plastic sheeting prior to the service termination / diversion work commencing. Persons undertaking the service termination / diversion work need not wear asbestos PPE as fill soil will be covered with plastic sheeting.

11. After the services are terminated / diverted, the asbestos contaminated fill soil is to be loaded out for disposal as asbestos contaminated waste.
12. At the completion of the fill soil removal, the excavated area is to be inspected to confirm that no visible asbestos material is present.
13. Following completion of the visual clearance inspection, a written clearance certification is to be compiled verifying that the asbestos contaminated soil in the area in which the link bridge was located has been removed and the asbestos removal area may be accessed for the construction work to be undertaken without the use of asbestos PPE.

Requirements for Non-Friable Asbestos Removal Work

The asbestos removal work shall be contained within the location of the link bridge area between the CTC Building and the Belmont House building within the St John of God Richmond Hospital site at 177 Grose Vale Road, North Richmond NSW.

Prior to the commencement of asbestos removal work, the Class A or Class B licenced asbestos removal contractor is to prepare a project specific Asbestos Management Plan for the removal of the asbestos contaminated concrete and soil from the nominated area of the site in accordance with the requirements of section 3.5 of the How to Safely Remove Asbestos Code of Practice issued by the NSW Government in August 2019. This asbestos removal control plan is to be kept on site for the duration of the asbestos removal work.

A barricade is to be erected around the area where the asbestos contaminated concrete is located. Asbestos removal warning signs are to be placed on this barricade. Warning signs are to be placed at the entry to the asbestos removal work area and should read "Asbestos Work Area, No Unauthorised Entry". These signs are to comply with Australian Standard 1319-1983: Safety signs for the occupational environment.

A change and decontamination area are to be located at the entry to the ‘non-friable’ asbestos removal work area. All persons entering this asbestos removal work area are to change into asbestos protective equipment in the change area and undergo decontamination prior to leaving the work area. All asbestos PPE is to be removed in the decontamination area when exiting the asbestos removal work area.

The contractor will be liable for all damage caused during the work to construction materials that do not form part of this scope of work. Should any damage occur during the course of the asbestos removal work, all costs associated with the repairs to the affected areas will be met by the asbestos removal contractor.

Training and Health Assessment

The asbestos removal contractor shall provide instruction to all persons involved in the work that may be exposed to asbestos in the course of the work regarding the danger to health and the statutory requirements that are required to provide safe working conditions.

The asbestos contractor's staff involved with the removal of the asbestos containing materials must also be formally trained in safe non-friable asbestos removal working procedures and in the wearing and maintenance of protective clothing and equipment.

The supervisor on the site is to have completed formal training in the supervision of non-friable asbestos removal. Evidence of this training must be held on site. The non-friable asbestos removal supervisor is to be on site at all times during the removal of the non-friable asbestos contaminated soil.

All persons involved in the licenced asbestos removal work are to have completed current health assessments in accordance with Clauses 435 and 436 of the NSW WHS Regulation 2017.

Personal Protective Equipment

All persons entering the work areas (to undertake asbestos removal work) are to wear disposable coveralls, Class P2 or P3 respiratory protective equipment (RPE) and washable laceless boots or disposable boot covers.

RPE is to be issued to each person entering the work area and are to be cleaned prior to leaving the asbestos work area.

Persons entering the work areas for supervision or inspection of the work are to wear disposable coveralls, RPE and washable laceless boots.

All persons entering the work area are to be instructed on the correct fit and wearing of the RPE. No person with a beard shall be permitted to enter an asbestos removal work area.

Disposable items of PPE are not to be taken outside of the asbestos removal work area.

The laundering of approved reusable protective clothing shall be carried out in accordance with the procedures approved by SafeWork NSW. Waste water from washing of contaminated clothing is to be filtered prior to disposal to the sewer and clothes dryers used for drying clothes or towels are to be filtered through a HEPA filter.

Decontamination Facilities

For the removal of non-friable asbestos containing and contaminated materials, a designated decontamination area is to be established at the entry to the asbestos removal area. All persons entering the asbestos removal area are to change into / out of their PPE in the designated decontamination area. Wet shower facilities are not a mandatory requirement for non-friable asbestos removal, however they may be provided by the contractor if they wish to do so.

When leaving the work area, the following decontamination procedure is to be followed:

- Remove any visible asbestos dust/residue from protective clothing using an asbestos vacuum cleaner or wiping down with damp cloths. Warning: do not reuse or resoak damp cloths.
- Carefully remove disposable protective clothing and place into bags, (RPE must still be worn).
- Place cloths into asbestos waste disposal plastic bag (200µm thick).
- Take disposable coveralls off and place into asbestos waste disposal bag (RPE must still be worn).
- Use damp cloths to wipe down footwear and place cloths into asbestos waste disposal bag.
- Seal all asbestos waste plastic bags with duct tape and place each into a second plastic bag.
- Seal this second plastic bag and label/mark as ‘Asbestos Waste’.
- Use damp rags to wipe external surfaces of the asbestos waste disposal bags to remove any dust before it is removed from the asbestos removal work area.
- Remove PPE and double bag, seal with duct tape and mark as ‘Asbestos Waste’.
- Remove non-disposable PPE and place in container labelled as containing asbestos.
- Remove disposable RPE and double bag, seal with duct tape and mark as ‘Asbestos Waste’.
- Reusable RPE is to be wiped with damp cloth and bag for reuse. Place the damp cloth into a disposable asbestos waste bag.
- Ensure the outside of the bags are decontaminated by using a damp cloth.
- Place the damp cloths into disposable asbestos waste bags.
- Dispose of asbestos waste at the appropriate waste facility.

Bagging and Disposal of Asbestos Contaminated Waste

All asbestos contaminated waste from the work is to be placed into plastic lined bins or trucks for disposal at a landfill facility licenced by the NSW Environment Protection Authority (NSW EPA) to accept non-friable asbestos contaminated waste.

The transport of the asbestos contaminated waste is to be undertaken in covered leak proof trucks or bins and is to be disposed of at a landfill site that can lawfully receive this waste in accordance with the 'Section 42 - Special Requirements Relating to Asbestos Waste' as detailed in the Protection of the Environment Operations (Waste) Regulation 2014.

Small items of asbestos contaminated waste such as used disposable PPE are to be double bagged in 0.2 mm asbestos waste bags for disposal at a landfill facility licenced by the NSW Environment Protection Authority (NSW EPA) to accept non-friable asbestos containing material.

The waste material is to be placed into the first asbestos waste bag at the work face and sealed. This bag is to then be placed into a second waste bag away from the work face (but within the work area). Each bag is to separately 'goose necked' and sealed with tape. The waste material is to be wetted prior to placement in the bag.

The bagged asbestos waste is to be transported to the landfill site in leak proof vehicles or bins which are to be lined with two layers of 0.2 mm plastic. This plastic lining is to be fully tape sealed over the waste to prevent water leakage and dust emissions during transport to the landfill site.

Documentary evidence of the correct disposal of the waste shall be provided. This documentation will include name of authorised tip, weigh bridge docket and registration number of vehicle for every disposal. All waste removed from the site is to be registered with the NSW EPA waste locate app.

Regulatory Requirements

The removal and disposal of asbestos containing construction materials in NSW is overseen by various authorities including SafeWork NSW (SafeWork), the NSW Environment Protection Authority (NSW EPA), local government (council) by administering various legislation, regulations and codes of practice. Statutory documents that are applicable to the work include (but are not limited to) the following:

- NSW Work Place Health & Safety Act 2011.
- NSW Work Place Health & Safety Regulation 2017.

- How to Safely Remove Asbestos Code of Practice issued by the NSW Government in August 2019.
- Exposure Standards for Atmospheric Contaminants in the Occupational Environment [NOHSC1003(1995)].
- NSW Protection of the Environment Operations (General) Regulation 2009: Reg 92.
- NSW Protection of the Environment Operations (Waste) Regulation 2014: 'Sections 77 - 81.

Risk Assessment and Asbestos Classification

Health risk from asbestos containing materials only occurs from airborne asbestos fibres. Whilst asbestos containing materials remain undisturbed and there are no fibres being released from these materials then there is no actual risk posed. Materials which contain loose fibres have a high potential to generate airborne when disturbed.

In accordance with the NSW Work, Health and Safety Regulation 2017, asbestos containing materials are classified as either 'friable' or 'non-friable' materials.

'Friable' asbestos containing materials are any material that contains asbestos and is in the form of a powder or can be crumbled, pulverised or reduced to powder by hand pressure when dry.

'Non-friable' asbestos containing material means any material (other than friable asbestos material) that contains asbestos.

The asbestos cement sheet debris in the fill soil below the link bridge between the CTC Building and Belmont House building at the St John of God Richmond Hospital at 177 Grose Vale Road, North Richmond NSW is classifiable as non-friable asbestos containing materials and must only to be removed by a contractor holding a Class A licence for friable asbestos removal work or a Class B licence for non-friable asbestos removal work.

All of the fill soil within this area of the site in which there is asbestos material debris is to be removed from the site for disposal of as special waste – asbestos.

Asbestos Removal Procedure

The removal of the asbestos contaminated fill soil containing asbestos cement material debris is to be undertaken in accordance with the procedure detailed below.

1. A barricade with asbestos warning signs is to be erected around the asbestos contaminated concrete and soil removal work area at the site.
2. A site and project specific safe work method statement and risk assessment for the proposed work including details of the asbestos related precautions to be incorporated into the asbestos removal work as required by section 299 of the Work Health and Safety Regulation 2017 at the site is to be compiled by the asbestos removal contractor undertaking the work.
3. The asbestos removal contractor must compile an asbestos removal control plan as per section 3.5 of the How to Safely Remove Asbestos Code of Practice.
4. A decontamination and change area is to be established at the entry to the non-friable asbestos removal work area.
5. Water spray is to be used to control dust generated by the work. Work should not be undertaken during periods of high wind that could carry dust potentially containing asbestos fibres into adjoining areas.
6. The concrete slab pieces with embedded asbestos cement sheet debris is to be broken up and loaded into plastic lined skip bins or trucks and transported for disposal as non-friable asbestos contaminated waste at a landfill facility licenced by the NSW EPA to accept the waste soil. Concrete without embedded asbestos cement sheet l to be disposed of as clean demolition waste.
7. After all of the concrete has been removed, the loose fragments of asbestos cement sheet debris are to be collected and bagged for disposal as asbestos waste.
8. The fill soil containing fragments of asbestos cement sheet debris and concrete debris is to be scrapped to remove all concrete and asbestos cement sheet debris. Scrapping is to be undertaken in layers of 50mm or so until no further asbestos cement sheet debris.
9. The transport of the asbestos contaminated waste is to be undertaken in plastic lined covered leak proof bins and is to be disposed of at a landfill site that can lawfully receive this waste in accordance with the ‘Section 42 - Special Requirements Relating to Asbestos Waste’ as detailed in the Protection of the Environment Operations (Waste) Regulation 2014.Documentary evidence of the correct disposal of the waste shall be provided. This documentation will include name of authorised tip, weigh bridge docket and registration number of vehicle for every disposal.
10. After the asbestos contaminated concrete and soil has been removed, the remaining soil within the excavated area is to be inspected to confirm that no visible asbestos material is present.

11. Following completion of the visual clearance inspection, a written clearance certification is to be compiled verifying that the asbestos contaminated concrete and debris and underlying fill soil has been removed and the asbestos removal area may be accessed for the construction work to be undertaken without the use of asbestos PPE.
12. Monitoring for airborne asbestos fibres should be carried out at all times that the non-friable asbestos removal work is being carried out.

If you require any further information, please contact the undersigned on 0437 251 358.

Yours faithfully
P. CLIFTON & ASSOCIATES PTY LTD

Philip Clifton
Principal
BOHS IP402 Certified
SafeWork NSW Licenced Asbestos Assessor

Attachments: Photograph, Laboratory Report

PHOTOGRAPH

28 September 2022

Asbestos cement sheet debris in fill soil below the link bridge between the CTC Building and Belmont House. The asbestos cement debris in this area contains chrysotile asbestos and amosite asbestos

P. CLIFTON
& ASSOCIATES

LABORATORY REPORT

A division of Enviro-Net Australia Pty. Ltd.
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ASBESTOS IDENTIFICATION REPORT

Date: 28 September 2022

ESP Job Number: J47155

Customer: P. Clifton & Associates Pty Ltd

Address: PO Box 457, Turramurra, NSW

Attention: Phil Clifton

Sampled From: As received (Your ref: 7420 - 2022, North Richmond)

Sampled By: As received

Date Received: 28 September 2022

Date Analysed: 28 September 2022

Test Method: Qualitative identification of asbestos types in bulk samples by polarised light microscopy, including dispersion staining and trace analysis, with a calculated practical detection limit of 0.01 %, using methodology in accordance with AS 4964 and ESP in-house Method No. 2.

ESP Lab No.	Sample location (if provided) and sample description	Result	Notes
E81999	1: 1 - Fibro – Fibro cement material (45 x 40 x 5 mm)	Chrysotile asbestos detected	-
E82000	2: 2 - Fibro – Fibro cement material (120 x 50 x 5 mm)	Chrysotile asbestos detected Amosite asbestos detected	-

The results contained in this report relate only to the sample(s) submitted for testing. ESP Environmental & Safety Professionals accepts no responsibility for the representivity of the sample(s) submitted.

Approved Identifier: Ross Cooper
Approved Signatory: Ross Cooper

Accreditation No. 3110

NATA Accredited Laboratory
Accredited for compliance with ISO/IEC-17025 - Testing