Construction Hazardous Material Management Plan (CHMMP)

Kingscliff High School Upgrade SSD-8744305 July 2023 Rev 2



Document control

Approval and authorisation

Title	Kingscliff Public School Upgrade: Hazardous Material Management Plan
Approved on behalf of Richard Crookes Constructions by	Jason Cooke
Signed	
Dated	19.07.23
Approved on behalf ENV Solutions by	Ben Pieterse
Signed	AND
Dated	

Document status

Revision	Date	Description	Approval
DRAFT	28/4/2022	Draft	Jenny Hellyer
Final	15/5/2022	Deliverable	Jenny Hellyer
Rev 1	6/01/2023	Review	Jason Cooke
Rev 2	19/07/2023	General Review, Appendix C	Jason Cooke

Contents

Glossary/	Abbreviations4
Condition	n B35 Compliance Table5
1.0 Introdu	uction6
1.1 C	Context6
1.2 B	Background and project description6
2.0 Envir	ronmental requirements7
2.1 L	egislation, Guidelines and Standards7
3.0 Hazaro	dous Materials8
3.1 H	lazardous Material Survey8
3.2 As	sbestosLead9
3.3 Le	ead 10
3.4 S	ynthetic Mineral Fibres10
3.5 P	olychlorinated Biphenyls11
3.6 U	Inexpected Finds12
3.7 A	cid Sulfate Soils12
3.8 P	etroleum, Oils and Lubricants13
4.0 Chemi	ical Storage14
4.1 C	leaning up Spills14
4.2 Sj	pill Response Kits15
5.0 Dispos	sal15
6.0 Handli	ing Hazardous Materials16
6.1 Ha	andling Hazardous Substances16
6.2 Re	emoval of Lead16
6.3 Re	emoval of Asbestos17
7.0 Compl	liance management18
7.1 Ro	oles and responsibilities
7.2 Tra	aining18
7.3 Re	porting

Glossary/ Abbreviations

Abbreviations	Expanded text
ACM	Asbestos Containing Material
ADG	Australian Code for the Transport of Dangerous Goods by Road or Rail
ARCP	Asbestos Removal Control Plan
CEMP	Construction Environmental Management Plan
Chemical	Is a distinct compound or substance, especially one which has been artificially prepared or purified. A chemical can be a solid, liquid or gas.
Dangerous Good	Is a substance that presents an immediate threat to safety (e.g., through fire or explosion), health (e.g., toxicity) or property if spilled or involved in some sort of accident or emergency situation. Dangerous goods are allocated a dangerous goods classification under the ADG Code:
СНММР	Construction Hazardous Material Management Plan
Decanting	Is the process of transferring a hazardous substance from one container to another - normally from a larger drum to a smaller container for use on the job
Hazardous Material	Are substances that have the potential to pose a significant risk to the health and safety of people or the environment.
Hazardous Substance	Is any substance present in the workplace, which is on the List of Designated Hazardous Substances [NOHSC:10005] or may be classified as such using the Approved Criteria for Classifying Hazardous Substances [NOHSC:10008].
HAZMAT	Pre-Demolition Hazardous Material Survey
РСВ	Polychlorinated biphenyls (PCBs): Any of a family of industrial compounds produced by chlorination of biphenyl, noted primarily as an environmental pollutant that accumulates in animal tissue with resultant pathogenic and teratogenic effects
SDS	Safety Data Sheet (SDS): Is a document provided by the supplier or manufacturer of a hazardous substance, and by specialist service providers, that specifies the particular hazardous substance, how it shall be stored, handled, used and disposed of, particular precautions that should be taken, and the method of first aid treatment. SDS includes
SMF	Synthetic Mineral Fibres: Fibres such as mineral wool (rockwool and slagwool), glasswool (including superfine glass fibre) and ceramic fibres.

Table 1: Condition B35 Compliance Table

Condition	Condition Requirements	Document reference
	Prior to the commencement of construction, the Applicant must submit a Hazardous Materials Management Plan to the Certifier. The report must:	
B35	(a) address the recommendations in the Hazardous Materials Survey Kingscliff High School, 33 Oxford Street Kingscliff, NSW, dated March 2020 and prepared by Hazmat Services and Waste Management Plan for Kingscliff High School at 33 Oxford Street, Kingscliff prepared by HMC Environmental Consulting Pty Ltd dated March 2021;	8-15
	(b) provide details of management of risks associated with demolition work and for any remaining in-situ hazardous materials located at the site;	8-15
	(c) comply with the relevant NSW Legislation, Codes and Practice and Australian Standards.	8-15

1.0 Introduction

1.1 Context

This Construction Hazardous Material Management Plan (CHWMP or Plan) forms part of the Construction Environmental Management Plan (CEMP) for the Kingscliff High School (KHS) Upgrade (the Project).

1.2 Background and project description

The KHS Upgrade Project will include the demolition of existing facilities including carparks, along with the following planned upgrades;

- Construction of a new Visual Arts, Music and Performance Building (Building O) in the north-western portion of the site;
- Refurbishment of a car park to the east of Building O;
- New bike parking facilities in the northern portion of the site;
- An extension to the south of the existing Building A;
- A new hydrant booster, tank and pump room in the north-eastern portion of the site;
- A new Covered Outdoor Learning Area (COLA) to the east of existing Building H;
- Demolition of a footpath and new landscaping works to the north of the current Building F; and
- Alterations and refurbishment of existing buildings C and G.

The Project site is located in the town of Kingscliff, in the Northern Rivers region of New South Wales (NSW), within the Tweed Shire Local Government Area (LGA).

The Hazardous Materials Survey (HMS) prepared by Hazmat Services Pty Ltd on behalf of the NSW Department of Education (DoE) in support of State Significant Development Application (SSD) SSD-8744305, assessed the potential types of hazardous materials within the Kingscliff Public School.

The Hazardous Material Survey identified Synthetic Material Fibre (SMF), however there was areas not assessed during the survey.

This plan is to meet condition B35 of SSD-8744305. A compliance matrix is set out in Table 1.

2.0 Environmental requirements

2.1 Legislation, Guidelines and Standards

The main guidelines, specifications, and policy documents relevant to this plan include:

- Work Health and Safety Act 2011;
- Work Health and Safety Regulation 2017;
- Demolition Work Code of Practice;
- How to Safely Remove Asbestos Code of Practice;
- How to Manage and Control Asbestos in the Workplace Code of Practice;
- How to Manage Health and Safety Risks Code of Practice;
- Managing Risks of Plant in the Workplace Code of Practice;
- Managing Risks of Falls at the Workplace Code of Practice;
- Confined Space Code of Practice;
- Excavation Work Code of Practice;
- First Aid Code of Practice;
- Managing the Work Environment and Facilities Code of Practice;
- Mobile Crane Code of Practice;
- Labelling Workplace Hazardous Chemicals Code of Practice;
- AS NZS 2601 -2001 Demolition of Structures
- AS 1319-1994 and amendment No. 1 "Safety Signs for the Occupational Environment";
- AS 1715-2009 "Selection, Use and Maintenance of Respiratory Protective Devices";
- AS 1716-2012 "Respiratory Protective Devices";
- Contaminated Land Management Act 1997;
- Dangerous Goods (Road and Rail Transport) Act 2008;
- Environmentally Hazardous Chemicals Act 1985;
- Waste Avoidance and Resource Recovery Act 2001;
- NSW EPA Transport and Tracking Waste Guidance
- Bunding and Spill Management, technical bulletin (Environment Protection Authority, 1997)

3.0 Hazardous Materials

The Hazardous Material Survey prepared by Hazmat Services Pty Ltd dated March 2020, identified Synthetic Mineral Fibres (SMF) on site.

Further to this, potential historic use of hazardous materials during the time of construction of the Kingscliff Public School and associated structures including buildings, classrooms and timber structures), has meant hazardous materials in addition to SMF such as asbestos, lead based paints and polychlorinated Biphenyls (PCB's) may be present.

3.1 Hazardous Materials Survey

As discussed, a hazardous material survey has been undertaken by Hazmat Services Pty Ltd and is in Appendix A. This contains details on all hazardous materials on site, their condition and location.

Additionally, the Waste Management Plan for Kingscliff High School at 33 Oxford Street, Kingscliff prepared by HMC Environmental Consulting Pty Ltd dated March 2021 is located in Appendix B.

3.2 Asbestos

Twenty six (26) samples of material that were suspected of containing asbestos were collected and sent for analysis at a Nata accredited laboratory. Not all surfaces and suspected ACM were sampled due to the cost and physical damage associated with the sampling process or were unable to be sampled due to their lack of accessibility (height), good condition without causing damage), possibility of causing contamination. Where materials have appear to be identical to those physically sampled, and confirmed by analysis to contain (i.e. nail and screw heads, cover strips or cover battens), the term "assumed *asbestos*" will be used, and its highly likely that the material contains asbestos and should be treated as such unless positively confirmed otherwise.

In its current state, all assumed ACM located at the Site would meet the definition of "non-friable" asbestos as defined under the *NSW Work Health and Safety Regulation 2017* and on *Page 9 of the Working with Asbestos Guide -2008* produced by *SafeWork NSW*.

These ACM should be removed by a Class A or Class B licensed asbestos removal contractor under controlled asbestos conditions in accordance with all relevant regulations prior to any refurbishment or demolition works.

Removal of ACM is to be undertaken in accordance with the regulations and requirements of the NSW Government and Safe Work Australia, these being:

- NSW Work Health and Safety Act 2011;
- NSW Work Health and Safety Regulation 2017;
- Code of Practice: How to Manage and Control Asbestos in the Workplace 2019;
- Code of Practice: How to Safety Remove Asbestos 2019; and
- Guidance Note on the membrane Filter Method for Estimating Airborne Asbestos Fibres 2nd Edition [NOHSC:3003 (2005)].

Intrusive inspections by suitably qualified and accredited persons are recommended following vacating buildings and prior to demolition. Initially, the licensed demolition contractor or consultant would inspect the structures for the presence of asbestos containing materials and other hazardous wastes. Hazardous waste would be separated and managed in accordance with Safework NSW requirements (eg wetting, wrapping ACM). These hazardous wastes would be removed prior to further demolition occurring.

A summary of the results of laboratory testing for asbestos are provided in Table 3-2 below.

 Table 3.2 : Asbestos Identification Analysis

Sample No.	Description	Asbestos Detected
N3412/HS01	800A Weather Boards, Fibrous Cement Sheet	No Asbestos Detected
N3412/HS02	800A Ceiling Lining, Fibrous Cement Sheet	No Asbestos Detected
N3412/HS03	800A Wall Infill Panels, Fibrous Cement Sheet	No Asbestos Detected
N3412/HS04	B00A Control Joints, Mastic	No Asbestos Detected
N3412/HS05	B00B Weather Boards, Fibrous Cement Sheet	No Asbestos Detected
N3412/HS06	BOOC Weather Boards, Fibrous cement Sheet	No Asbestos Detected
N3412/HS07	B00C Control Joints, Mastic	No Asbestos Detected
N3412/HS08	800C Door Infill Panels, Fibrous Cement Sheet	No Asbestos Detected
N3412/HS09	800C CR0014, Window Infill Panels, Fibrous Cement Sheet	No Asbestos Detected
N3412/HS10	800C CR1017, Wall infill panels, Fibrous Cement Sheet	No Asbestos Detected
N3412/HS11	B00C CR1033, Ceiling Lining, Fibrous Cement Sheet	No Asbestos Detected
N3412/HS12	800D Weather Boards, Fibrous Cement Sheet	No Asbestos Detected
N3412/HS13	800 D Door Infill panels, fibrous Cement Sheet	No Asbestos Detected
N3412/HS14	800D Window Infill Panels, Fibrous Cement Sheet	No Asbestos Detected
N3412/HS15	B00D Control Joints, Mastic	No Asbestos Detected
N3412/HS16	BOOF Control Joints Mastic	No Asbestos Detected
N3412/HS17	BOOF Window Infill Panels, Fibrous Cement Sheet	No Asbestos Detected
N3412/HS18	B00G Control Joints Mastic	No Asbestos Detected
N3412/HS19	800G Door Infill Panels, Fibrous Cement Sheet	No Asbestos Detected
N3412/HS20	800G Window Infill Panels, Fibrous Cement Sheet	No Asbestos Detected
N3412/HS21	800H Window Infill Panels, Fibrous Cement Sheet	No Asbestos Detected
N3412/HS22	B00H Control Joints Mastic	No Asbestos Detected
N3412/HS23	800J Toilet Ceiling Lining, Fibrous Cement Sheet	No Asbestos Detected
N3412/HS24	B00K Wall Lining, Fibrous Cement Sheet	No Asbestos Detected
N3412/HS25	BOAG Door Infill Panels, Fibrous Cement Sheet	No Asbestos Detected
N3412/HS26	BODS Wall Lining, Fibrous Cement Sheet	No Asbestos Detected

3.3 Lead

Lead is often found in paint, old water pipes and other plumbing fittings, sheet lead, lead flashing, lead light windows and glass. The age of the structure may be directly related to the amount of lead that can be present.

Representative paint samples were collected throughout the site for laboratory testing. A summary of the results of laboratory testing for lead and provided in Table 3.3 below.

Where the percentage lead content of paint by weight exceeds 1.0 % (10 mg/kg), the paint should be stabilised or removed by either chemical means or in a manner which does not liberate dust to the atmosphere. The waste material should also be tested for total lead and lead leachate to determine the appropriate method of disposal. The paint is not to be removed by dry sanding or by electrical means. The methodology involves moistening the paint with water from an atomising or spray bottle and removal by hand or using a hand scraper or hand sander.

The precautions that will be taken when demolishing materials containing lead include:

- Minimising the generation of lead dust and fumes;
- Removing Lead Paint before hot cutting steel;
- Cleaning work areas properly during and after work;
- Wearing the appropriate PPE, and
- Maintaining good personal hygiene.

It should be noted that during any lead paint removal and prior to disposal of waste materials sampling should be undertaken to assess the appropriate waste disposal criteria. Results of the sample analysis should be compared to the waste disposal criteria. Results of the sample analysis should be compared against the *NSW EPA Waste Classification Guidelines Part 1: Classifying Waste 2014 to* ensure correct disposal procedures are followed.

Sample No.	Description	Lead Detected
N3412/LP01	B00A Fascia's, Paint-Undercoat	Negative
N3412/LP02	B00A Metal Frames, Paint-Undercoat	Negative
N3412/LP03	BOOB Metal Posts & Beams Paint - Undercoat	Negative
N3412/LP04	B00D Metal Posts & Beams, Paint - Undercoat	Negative
N3412/LP05	B00H Metal Posts 7 beams, Paint - Undercoat	Negative
N3412/LP06	B00H Fascia's, paint - Undercoat	Negative
N3412/LP07	B00H Timber Doors, Paint - Undercoat	Negative
N3412/LP08	B00H Door Frames, Paint - Undercoat	Negative

3.4 Synthetic Mineral Fibres

Synthetic mineral fibres (SMF) are used extensively for insulation in building walls and ceilings as well as on items such as air-conditioning duct work. SMF materials should be removed if damaged or in poor condition and prior to refurbishment or demolition works if they are to be distributed as part of that work.

PPE such as P2 dust masks (combination of disposable or non-disposable and half-face & full-face) and coveralls if required, depending on the state of the material, will be provided to workers and worn when insulation is being removed during the demolition process and dust will be suppressed by damping down. Suspected SMF materials were identified by visual inspections or through the asbestos identification analysis. Full details of all identified SMF materials are provided in the Hazardous Materials Survey.

Removal of SMF should be carried out in accordance with the current requirements of the legislation and the NOHSC documentation, these being:

- Safe Management of Synthetic Fibres (SMF) Glasswool And Rockwool (SafeWork NSW-1 May 2015);
- National Standard for Synthetic Mineral Fibres [NOHSC:1004(1990)];
- National Code for Practice for the Safe Use of Synthetic Mineral Fibres [NOHSC:2006 (1990)]; and
- Guidance Note on the Membrane Filter Method for the Estimation of Airborne Synthetic Mineral Fibres [NOHSC:3006(1989)].

Dust control measure such as use of plastic screen &/or exhaust fan to be used if significant contamination present.

Disposable suits and any removed insulation to be appropriately bagged and disposed of as general waste.

3.5 Polychlorinated Biphenyls

Workers can be exposed to Polychlorinated Biphenyls (PCBs) when dismantling electrical capacitors and transformers or when cleaning up spills and leaks. Appropriate control measures will be implemented when handling damaged capacitors to ensure that any spillage does not contact workers and is appropriately cleaned up and disposed of. Any equipment or parts containing PCBs will be placed in a polyethylene or suitable bag, and then placed into a marked sealable metal container. If PCBs cannot be transported immediately for disposal, all containers will be stored in a protected area which prevents any discharge of PCBs to the environment.

There were no fluorescent light fittings likely to contain PCB capacitors sighted during the time of the survey.

Where PCB containing capacitors are found, they should be handled and/ or disposed of in accordance with the *PCB Chemical Control Order In Relation to Materials and Wastes Containing Polychlorinated Biphenyl, 1997*, issued by the Environmental Protection Authority of NSW and the PCB Management Plan issued by ANZECC.

Electrical capacitors and transformers are to be disposed of in accordance with:

• Environmentally Hazardous Chemicals (EHC) Act 2008 and subordinate Polychlorinated Biphenyl (PCB) Chemical Control Order 1997; and

• Polychlorinated Biphenyls Management Plan, Revised Edition, April 2003, issued by the Environment Protection and Heritage Council (EPHC).

3.6 Unexpected Finds

If during work on the site, material is exposed that appears to be bonded asbestos (or other forms of asbestos) the following procedure recommended by Safework NSW is to be implemented:

- Stop work immediately
- Immediately report the incident to your manager
- Minimise disturbance of the material and area
- Inform workers to prevent access until the hazard has been contained
- Establish a suitable exclusion zone using barricades and warning signs to restrict access to the contaminated area

• Consult a licensed asbestos assessor to provide immediate advice on making the area safe. Advice regarding decontamination and disposal of clothing (as asbestos waste) should also be obtained

- Contact SafeWork NSW on 131050 to report the incident.
- Contact a licensed asbestos professional to undertake removal works at contaminated area and make the area safe.

• Safework NSW recommend that health monitoring is undertaken or supervised by a registered medical practitioner with experience in health monitoring as soon as practical after the exposure.

• Safework NSW also recommend that any person exposed to asbestos register their details on the National Asbestos Exposure Register

3.7 Acid Sulfate Soils

Acid Sulfate Soils (ASS) is a common name given to naturally occurring sediments and soils containing iron sulphides (generally as iron sulphide or iron disulphide). These soil profiles are typically located in coastal, low lying alluvial or estuarine areas such as mangroves, salt marshes, coastal rivers and creeks, estuaries, tidal lakes and coastal floodplains where historical iron rich sediment deposition in the presence of a sulphate source (commonly salt water), organic matter and microbial action over time has resulted in the formation of particular environmental conditions. ASSs are predominantly encountered in areas where the soil profile has an elevation of less than 5 m Australian Height Datum (AHD) and may be found close to the ground level or at depth in the soil profile where continued deposition actions have resulted in raising of the ground levels.

Changes in environmental conditions which result in the exposure of these materials to air, via excavation or drainage of subsurface soils, can lead to the reaction of the iron sulphides with oxygen, causing the generation of sulfuric acid.

This may result in significant environmental and infrastructure damage if the produced acid is spread by groundwater or surface water. Neutralisation techniques can be used to treat ASS by the addition of chemicals that react with the produced acid to ensure that acid is not released from the treated material.

Borehole testing undertaken across the site indicated the risk of Potential Acid Sulphate Soils (PASS) with the excavation of soils from a depth of 0.75m below ground level or greater. In accordance with Clause 4.5.5 of the EIS an ASS management plan (ASSMP) has been prepared as a part of a Detailed Site Investigation (DSI) by Douglas Partners (ref: 97611.00) in July 2021 and is to be implemented where the excavation of soils from a depth of 0.75m or greater is required

3.8 Petroleum, Oils and Lubricants

A 100L drumsmart container containing 2 x 20L drums of unleaded petrol and 2 x 20L drums of diesel will be stored at site in portable, double wall self-bunded shipping container in accordance with AS/NZ 4452:1997 – The Storage and Handling of Toxic Substances. The tank shall be inspection monthly or more frequently as deemed necessary. Any release of hazardous materials will be reported immediately, and appropriate measures will be taken to remediate the situation. Delivery records will be kept on site for examination or reference purposes if required.

The site is elevated above the surrounding floodplain and as such is free from flood risk.

4.0 Chemical Storage

Correct storage of hazardous materials must consider:

- All relevant Australian Standards;
- For liquids, a minimum bund volume requirement of 110% of the volume of the largest single stored volume within the bund; and
- The Environment Protection Manual for Authorised Officers: Bunding and Spill Management, technical bulletin (Environment Protection Authority, 1997). In the event of an inconsistency between the requirements listed from a) to c) above, the most stringent requirement shall prevail to the extent of the inconsistency.

In addition to this;

- Hazardous materials shall be stored in a secure, limited access area until disposal;
- Storage is as per SDS recommendation;
- The storage area and bunding should be constructed as per Australian Standard AS1940;
- Incompatible hazardous materials must not be stored together;
- Appropriate first aid equipment must be available.

Main hazardous substances that will be used on site are:

- Fuel;
- Hydraulic oil; and
- Machine grease.

A hazardous chemical storage cabinet will be used to store chemicals prior to usage.

4.1 Cleaning Up Spills

If necessary, enact emergency procedures If the spill threatens the safety or health of people or creates a fire hazard then the site emergency procedure shall be followed. Where a chemical spill occurs, consult the SDS for spill procedures. If the SDS indicates requirement for containment and clean up then the following steps should also be considered

Stop the source and spread of the spill if safe to do so

- Check for danger;
- Prevent the spill from getting larger (turn off valves, block damaged tanks or pipes); and
- Use any suitable material or equipment to confine the spill by "damming it off" (e.g. use available spill response equipment such as booms or absorbent or if unavailable then use soil or other suitable material).

Clean up the spill

Once the spill has been contained, retrieve as much of the spilled liquid as possible and place in an appropriate onsite container (e.g. 20L drum). The liquid should then be either re-used or disposed of in an appropriate manner.

Absorb remaining spill with absorbent material and place used absorbent in the appropriate waste bin and replenish equipment used from Spill Response Kit.

Report the spill

Report and investigate all spills to the Site Supervisor.

4.2 Spill Response Kits

Clearly labelled Spill Response Kits containing the appropriate spill response equipment will be available at appropriate locations.

5.0 Disposal

The transport and disposals of hazardous waste presents a high risk to the environment. These wastes must be tracked when transported into, within or out of NSW. The waste consignor, transporter and receiving facility all have obligations to ensure that the waste is properly tracked and disposed of at an appropriately licenced facility. To ensure all Hazardous Building Materials sent for disposal offsite are tracked to their destination and RCC meet all legal and contractual obligations, RCC will employ the use of RCC Waste Register located within Appendix A of the Construction Waste Management Sub Plan.

Steps in Waste Tracking to an appropriately licensed facility include:

- Determine whether the waste to be transported requires tracking (see the Waste that must be tracked fact sheet and the current list of exemptions). Waste streams for this project are concrete, brick, bitumen, asbestos, general demolition waste & soils;
- Obtain prior approval to transport the waste in the form of a consignment authorisation (CA) issued by a person authorised to do so;
- Create a transport certificate which must accompany the waste while it is being transported;
- Complete the transport certificate when the waste has arrived and been processed by the receiving facility;
- Report any non-compliances to the Environment Protection Authority (EPA).

6.0 Handling Hazardous Materials

6.1 Handling hazardous Substances

When using and handling hazardous materials consider (as mentioned in Section 3):

- Only transport and use hazardous materials according to relevant regulations and directions given on the SDS that applies to the substance;
- Use correct PPE;
- Suitable signage will be used whenever hazardous materials or dangerous goods are transported;
- Decanting and labelling will be carried out according to the National Code of Practice for the Labelling of Workplace Substances NOHSC (1994); and
- The types of containers to be used for decanting hazardous materials are advised on the SDS that applies to the substance. All containers holding hazardous materials will be labelled appropriately.

6.2 Removal of Lead

Elevated levels of lead in dust shall be removed in accordance with the AS4361.2-2017 prior to the commencement of any demolition works. It is anticipated that a portion of the lead dust hazards will be removed in conjunction with asbestos removal works. Where peeling or deteriorated lead paint will be removed under controlled conditions. The lead-based paints, as identified should also be managed in accordance with the AS4361.2-2017. It is anticipated that lead removal work procedures may include one or a combination of the following:

- Bulk removal of lead flashing and/or painted materials where the paint is in good condition via removal of whole panels, window frames, etc.
- Stabilisation of lead in poor condition via over-painting and/or application of PVC glue prior to wholesale removal of construction materials (eg. Cladding, gutters, signage, window frames, etc), followed by bulk removal of the stabilised building material.
- Removal of paint systems in poor condition via soft water stripping, chemical stripping or similar, prior to disposal of resulting collected lead waste.
- Removal of lead dust and flaking paint via dry/wet vacuuming using industrial equipment fitted with HEPA filters. Where power tools are used, exhaust ventilators on units are required to be fitted with HEPA filters to reduce the potential distribution of lead containing dust and associated future user exposure.
- Disposal of all lead containing waste, inclusive of collected shavings, chemical stripping residues, used PPE etc is required to be appropriately bagged, or otherwise sealed. This material will require disposal in accordance with the requirements of the NSW EPA (2014) Waste Classification Guidelines.
- Collection and off-site disposal of all excess water generated by site activities is required to be collected using a wet/dry vacuum operated in conjunction with the cleaning/removal process. The water will require treatment prior to off-site disposal.

6.3 Removal of Asbestos

All ACM and assumed ACM identified in Appendix A: Hazardous Material Survey should be removed in accordance with the *Code of Practice: How to Safely Remove Asbestos* prior to any refurbishment or demolition works being undertaken. Identified or suspected (ACM) is to be removed, prepared & disposed of by licensed asbestos handing contractor approved by Safework NSW.

Asbestos material is to be disposed at the Stotts Creek Resource Recovery Centre at Leddays Creek Road, Stotts Creek.

Any work involving the disturbance or penetration of these materials must be undertaken under controlled conditions. Following the AM removal, visual and air clearances should be provided by competent persons to validate that the ACM has been removed.

An Asbestos Register has been prepared previously by Noel Arnold and Associates dated 2019. This register is in Appendix C. ACM has not been confirmed in areas subject to demolition, however some areas are recorded as assumed asbestos or requires inspection.

Air monitoring should be undertaken during asbestos removal work. All monitors are to be placed around the boundaries of the Asbestos Work Area by a Licensed Asbestos Assessor or Competent Person (e.g. Hazmat) during all stages of work.

Visual clearance inspections and air clearance monitoring and soil validation sampling must be undertaken at the completion of asbestos remediation works by a Licenced Asbestos Assessor or Competent Person to validate the asbestos contamination has been removed and the affected areas are safe for reoccupation.

Should any ACM remain in-situ, and as required under the *NSW Health and Safety Regulation* 2017, an Asbestos Management Plan (AMP) should be initiated to ensure trade persons undertaking works at the property are made aware of the presence and location of all ACM.

The following recommendations would apply for in-situ ACM:

- All ACM should be labelled to warn the presence of asbestos in accordance with the NSW Work Health and Safety Regulation 2017 and the Code of Practice: How to Manage and Control Asbestos in the Workplace.
- Any ACM identified should be regularly maintained and painted and should not be sawn, drilled or disturbed or abraded. Any work involving the disturbance or penetration of these materials must be undertaken under controlled conditions.
- Broken or damaged section of ACM should be removed or replaced with suitable nonasbestos alternatives.
- Regular monitoring of the condition of the ACM identified in this report and replacement with suitable non asbestos alternatives if damaged or structural alteration is required.

7.0 Compliance management

7.1 Roles and responsibilities

The Richard Crookes Construction Project Team's organisational structure and overall roles and responsibilities are outlined in the CEMP.

7.2 Training

The site safety induction will also include discussion of hazardous materials on site, identification of their whereabouts, and explanation of handling methods to be employed, including Personal Protective Equipment (PPE) to be used. The following areas shall be covered in the induction.

- Awareness of the hazardous materials held on site, and their potential to cause harm to people and the environment;
- Use of correct PPE and any appropriate and/ or necessary health and safety training;
- Safe and correct use of all spill clean up equipment or pollution prevention structures on site;
- Safe handling and legal disposal of contaminated materials and wastes resulting from an incident; and
- Emergency management procedures.

7.3 Reporting

Reporting requirements and responsibilities are documented in the CEMP.

Appendix A: Hazardous Materials Survey

Q:\1200-1249\1227 - FNCS Kingscliff\6 Site Management\000. SSD Management Plans\KHS

| Kingscliff Public School Upgrade: Construction Hazardous Material Management Plan January 2023 Rev 1

| Kingscliff Public School Upgrade: Construction Hazardous Material Management Plan January 2023 Rev 1

Appendix B: Asbestos Register

Q:\1200-1249\1227 - FNCS Kingscliff\5 Site Monitoring\Tracking Registers\Waste and material tracking

| Kingscliff Public School Upgrade: Construction Hazardous Material Management Plan January 2023 Rev 1 **Appendix C: Training**

-KINECT | TRAINING

CERTIFICATE OF COMPLETION

Awarded to

LACHLAN BOX

For successfully completing KINNECT Training's Asbestos Awareness

21/06/2023

Issued Date

Never

Jonathan Wilson (*Director*)

Certificate ID: 7829-03f3-7aec-248c

Expiry Date

-KINECT | TRAINING

CERTIFICATE OF COMPLETION

Awarded to

DARREN LOVELL

For successfully completing KINNECT Training's Asbestos Awareness

21/06/2023

Issued Date

Never

Jonathan Wilson (*Director*)

Certificate ID: 1b8b-77fd-cb2d-a92e

Expiry Date