Project Number: 180924

ASBESTOS REMOVAL
CONTROL PLAN

ARCP

TAECO
ENVIRONMENTAL MANAGEMENT

JAS-ANZ

ECAAS ISO 9001 CERTIFIED QUALITY MANAGEMENT

ECAAS ISO 14001 CERTIFIED ENVIRONMENTAL MANAGEMENT

ECAAS AS/NZS 4801 CERTIFIED SAFETY MANAGEMENT

Contents

001 TAOHSE - Project Details & Introduction

Townsville Asbestos Pty Ltd (TAPL)	
Business/Trading name	TOWNSVILLE ASBESTOS PTY LTD TRADING AS TAECO
ACN/ABN	54 797 755 854
Reference Number	180924
Project Manager	MICHAEL STATHOOLES
Site Managers	WADE LAZANSKI
Business Address	UNIT 4, 17 MACKLEY ST TOWNSVILLE
Site Address	RICHMOND HOSPITAL - GALLAGHER DRIVE RICHMOND
Phone	07 4728 9000 / MICHAEL 0418 191145
Email	admin@townsvilleasbestos.com.au
Additional Information	TOWNSVILLE ASBESTOS PTY LTD TO BE REFERRED TO HEREAFTER AS TAECO

001 TAOHSE - Project Details & Introduction Continued

Principal Contractor or Client Details	
Business/Trading name	ENVIROPACIFIC
ABN	43 111 372 064
Reference Number / PO Number	10700278 / 180924
Authorised Representative	STEWART FRATER
Business Address	4 REVELATION CLOSE TIGHES HILL
Site Address	RICHMOND HOSPITAL - GALLAGHER DRIVE RICHMOND
Phone	0425 533 202
Email	stewart.frater@enviropacific.com.au
Additional Information	ENVIROPACIFIC TO BE REFERRED TO HEREAFTER AS EP

Licenced Asbestos Assessor	
Business/Trading name	ENVIRONICS (QLD) PTY LTD
ABN	76 354 368 913
Reference Number / PO Number	180924
Authorised Representative	LAWRIE LYONS
Business Address	PO BOX 7387 CAIRNS 4870
Site Address	RICHMOND HOSPITAL - GALLAGHER DRIVE RICHMOND
Phone	0429 128 145
Email	lawrie-lyons@environics.com.au
Additional Information	ENVIRONICS (QLD) PTY LTD TO BE REFERRED TO HEREAFTER AS EN

SCOPE OF WORKS

Management of the identified Asbestos containing materials within the Areas 1, 2, 3, 4, 5, 6 as noted in the below Plan, This management is to allow the for the construction of a geotechnical cap over Asbestos containing materials within the identified Areas of the Richmond Hospital grounds.

Please Note:

- Asbestos controls are expected to be required until the cushion geotextile & liner layers are in place within the areas, as cleared by the supervising Licenced Asbestos Assessor (LAA).
- Asbestos controls will be adjusted as directed by the supervising LAA upon complete inspection of the work areas, environment and the levels of Asbestos Risk.

002 TAOHSE – Hazard Identification, Risk Assessment and Control

TOWNSVILLE ASBESTOS will not commence work at a place of work unless:

- The principal contractor/client has provided TOWNSVILLE ASBESTOS with a copy of the relevant parts of its workplace OHSE Management Plan (or equivalent);
- TOWNSVILLE ASBESTOS has undertaken an assessment of the risks associated with the work activities and has provided to the principal contractor/client a written Asbestos Removal Control Plan (ARCP), including Safe Work Method Statement (SWMS); and
- TOWNSVILLE ASBESTOS has provided induction training to all employees and sub contractors.

TOWNSVILLE ASBESTOS maintains and updates the SWMS, and provides the updated SWMS to the principal contractor.

TOWNSVILLE ASBESTOS identifies the potential hazards of the proposed work activities, assess the risks involved and develops controls measures to eliminate, or minimise, the risks. The risk management process is carried out in consultation with the client, PCBU, employees, subcontractors and relevant legislation.

IDENTIFY HAZARDS:

TOWNSVILLE ASBESTOS breakdowns specific work activities into job steps to assist in identifying all potential hazards. These work activities are detailed in a SWMS. The SWMS is a list of job steps and other work related practices.

For each of the work activities and associated job steps identified in the SWMS, TOWNSVILLE ASBESTOS has identified potential hazards and their risks.

To assist in identifying hazards and risks, TOWNSVILLE ASBESTOS has considered the use of resources such as codes and standards, industry publications, safety alerts, hazard profiles for specific trade groups), workplace experience and consultation.

ASSESS RISKS:

TOWNSVILLE ASBESTOS has identified a risk class/ranking for potential workplace hazards by referring to the categories ranging from high to low in a Risk Matrix.

The Risk Matrix is used to determine the level of danger or seriousness (i.e. the consequence) of the risk, how likely it is that this risk will occur (i.e. likelihood/probability) and therefore how detailed control measures will need to be to eliminate or minimise the risk.

003 TAOHSE – Hazards & Current Controls for Asbestos Removal work

RESPONSIBILITY CODE Code identifies role of persons who have signed on to SWMS			
TAPL	Townsville Asbestos Pty Ltd	**C**	Client
PM	Project Manager	**PC**	Principal Contractor
SM	Site Manager	**PCBU**	Person in Control of a Business Unit
S	Staff	**LAA**	Licenced Asbestos Assessor

☒	HAZARDS	INITIAL RISK SCORE	CURRENT CONTROLS	RESIDUAL RISK SCORE	PERSONS RESPONSIBLE FOR CONTROLS
☒	ASBESTOS FIBRES / DUST • INJURY – DEATH • ILLNESS - DEATH	E5 Extreme (10)	NON- FRIABLE • QAULIFICATION – CPCCDE3014A • RPE P2 – FIT TEST • WET & SATURATION METHOD REMOVAL - PREFERRED • DRY METHOD FOR ENERGISED SERVICES • HEPA VACUUMS • MIST WATER SPRAY TO NEGATE RELEASE OF FIBRES. • AIR MONITORING TO CONFIRM REMOVAL PROCESS IS COMPLIANT • PPE FRIABLE • QUALIFICATION – CPCCDE3015A • RPE P3 – FIT TEST • WET, DRY, SATURATION METHOD REMOVAL • NEGATIVE AIR ENVIRONMENT • HEPA VACUUMS & AIR MANAGEMENT SYSTEMS • DECONTAMINATION SHOWERS • WATER MANGEMENT SYSTEM – 5 MICRON • PPE	B1 Low (3)	TAPL - PM, SM, S, SC PC / C / PCBU - PM, SM, S, SC LAA

			JOB SETUP • BARRICADE AREA TO PREVENT PERSONS ENTERING SITE. THIS SHOULD REMAIN UNTIL CLEARANCE CERTIFICATE HAS BEEN ISSUED. PLACE CAUTION SIGNS IN PROMINENT LOCATIONS (E.G. ENTRY TO SITE, ENTRY/EXIT TO REMOVAL AREA). • SIGNS SHOULD STATE, “DO NOT ENTER – ASBESTOS” OR SIMILAR. INSPECT COVERALLS AND OTHER PROTECTIVE EQUIPMENT. IF DAMAGED, DO NOT USE. WEAR RESPIRATORY PROTECTION. CONDUCT FIT CHECK. REMOVE ALL UNNECESSARY ITEMS FROM AREA. ENSLOURE • CONSTRUCT ENCLOSURE (BUBBLE) AS PER PLANNED DESIGN. • ENSURE: - ALL VENTS, WINDOWS, AIR CONDITIONING UNITS ARE CLOSED AND COVERED • ALL PIPES, CONDUITS THAT PASS OUT OF BUBBLE ARE SEALED ADEQUATELY • AIR TIGHT AND NEGATIVE AIR PRESSURE OF APPROXIMATELY 12PA IS PROVIDED (MORE THAN 1 AIR MANAGEMENT UNIT MAY BE REQUIRED) • 200 MICRON PLASTIC IS USED – VIRGIN AS REQUIRED • ADEQUATE LIGHTING IS PROVIDED (USE CLEAR PLASTIC OVER WINDOWS. AVOID HEAT PRODUCING USING LIGHTING INSIDE BUBBLE AS THIS CAN RAISE TEMPERATURES • ALL JOINTS HAVE AT LEAST 100MM OVERLAP AND ARE SEALED WITH CLOTH TAPE • FLOOR IS OF ADEQUATE STRENGTH TO PREVENT PENETRATION (SUCH AS WOVEN PLASTIC AND 3 PLY) • WRAP AND SEAL ANY NON-MOBILE ITEMS THAT NEED TO REMAIN IN REMOVAL AREA. • CONDUCT VISUAL INSPECTION OF BUBBLE. • OBTAIN SERVICES OF AN ASBESTOS ASSESSOR TO INSPECT BUBBLE. IF LEAKS DETECTED, REPAIR AND RE-TEST. ASBESTOS ASSESSOR SHOULD CONDUCT REGULAR INSPECTION/TESTING DURING REMOVAL PROCESS. • IF LEAKS DETECTED, CEASE WORK AND REPAIR/RE-TEST. DECONTAMINATION UNITS • ATTACH TO BUBBLE WITH PLASTIC AND CLOTH TAPE • SHOULD INCLUDE: - DIRTY - CLEAN - CLEAN CHANGING STAGES THAT ARE SEPARATE UNITS BY AIR LOCKS (DOUBLE PLASTIC OR DOORS)		

			• PROVIDE FILTERS FOR WATER RUN-OFF – TO 5 MICRON CAPTURE CAPABILITY • FOR EARTHWORKS THE DECONTAMINATION UNIT MAY BE REMOTE FROM THE WORK FACE WITH A DEFINED TRANSIT ROUTE ASBESTOS REMOVAL: • ASBESTOS MATERIAL SHOULD BE REMOVED WHOLE. IF SOME SECTIONS HAVE BEEN DAMAGED PRIOR TO REMOVAL, APPLYING DUCT TAPE MAY STRENGTHEN THESE. • IDENTIFY THE METHOD IN WHICH THE ASBESTOS CEMENT PRODUCT IS HELD IN PLACE, THEN USE A METHOD THAT WOULD MINIMISE AIRBORNE DUST GENERATION IN REMOVING THE PRODUCT. • FOR EXAMPLE: - FASTENERS: DAMPEN THEN CAREFULLY REMOVE USING A CHISEL • BOLTS: DAMPEN THEN USE BOLT CUTTERS (OR AN OXY TORCH) – DO NOT USE AN ANGLE GRINDER • SCREWS: DAMPEN THEN CAREFULLY UNSCREW WITH A SCREWDRIVER • NAILS: DAMPEN THEN CAREFULLY LEVER THE PANEL OR USE A WOOD CHISEL. • AVOID BREAKING THE ASBESTOS CEMENT PRODUCTS. IF BREAKAGE IS ABSOLUTELY NECESSARY TO REMOVE/ DISLODGE THE PRODUCT, DAMPEN THE MATERIAL AND MINIMISE BREAKAGE. • REMOVE THE ASBESTOS CEMENT PRODUCT WET/DAMPEN BY APPLYING A FINE WATER SPRAY, UNLESS THIS CREATES AN ELECTRICAL RISK. • ONCE REMOVED FROM ITS POSITION, SPRAY THE BACK OF THE PRODUCT WITH A FINE WATER SPRAY. • FREQUENT APPLICATION OF A FINE WATER SPRAY MAY BE REQUIRED DEPENDING ON THE CIRCUMSTANCES (FOR EXAMPLE, A VERY HOT DAY) BUT BE CAREFUL NOT TO CREATE A SLIP HAZARD. ASBESTOS CEMENT ROOF SHEETING: • ASBESTOS CEMENT CAN BECOME BRITTLE WITH AGE, SO ANY REMOVAL WORK ON ROOFS SHOULD ADDRESS THE RISK OF FALL HAZARDS. IF LICHEN/MOSS IS ENCOUNTERED ON ROOF SHEETING, CAUTION SHOULD BE EXERCISED IN THE USE OF WATER AND THE CHOICE OF WORKERS' FOOTWEAR BECAUSE LICHEN CAN BE SLIPPERY, ESPECIALLY WHEN IT IS WET.		

			• ANCHORING SCREWS/BOLTS SHOULD BE REMOVED FROM THE ROOFING SHEETS USING VICE GRIPS OR ANOTHER SUITABLE DEVICE THAT WILL NOT SIGNIFICANTLY DAMAGE THE SHEET. • WHERE THE ASBESTOS CEMENT PRODUCT REQUIRES LOWERING TO THE GROUND, ENSURE THIS IS DONE IN A MANNER THAT WILL MINIMISE THE GENERATION OF RESPIRABLE DUST. REMOVAL OF FLOOR TILES/VINYL: • PLACE A TOOL (SUCH AS A SCRAPER OR WIDE BLADE) BETWEEN THE TILES AND LIFT THE TILE AWAY FROM THE FLOOR, BEING CAREFUL TO MINIMISE BREAKAGE - A HAMMER OR MALLET CAN BE USED TO TAP THE TOOL UNDER FIRMLY-ADHERED TILES TO ASSIST SEPARATING THE TILES FROM THE FLOOR • MINIMISE DUST BY SPRAYING FINE WATER MIST UNDER TILES AS THEY ARE LIFTED • PLACE THE TILES INTO A 200 MM PLASTIC WASTE BAG OR SUITABLE ALTERNATE WASTE CONTAINER DEDICATED FOR ASBESTOS WASTE THAT IS CLEARLY LABELLED WITH AN APPROPRIATE WARNING SIGN INDICATING ASBESTOS WASTE. • USE THE SCRAPER TO REMOVE ANY TILE RESIDUE THAT IS LEFT ADHERED TO THE FLOOR AFTER EACH TILE HAS BEEN REMOVED AND PLACE THIS WASTE INTO THE ASBESTOS WASTE BAG OR SUITABLE WASTE CONTAINER • VINYL CAN BE CUT INTO STRIPS PRIOR TO ITS REMOVAL TO FACILITATE BAGGING, OR IT CAN BE ROLLED INTO ONE ROLL AND WRAPPED SECURELY WITH PLASTIC, MAKING SURE IT IS TOTALLY SEALED. • IN SOME CASES, THE ADHESIVE MAY CONTAIN ASBESTOS. • SOME TILES / VINYL MAY REQUIRE A FRIABLE ENCAPSULATION FOR REMOVAL REMOVAL OF GASKETS AND ROPE SEALS: • WHEN REMOVING GASKETS AND ROPE SEALS: - ENSURE THE PLANT OR EQUIPMENT IS SHUT DOWN AND ISOLATED - DISMANTLE THE EQUIPMENT CAREFULLY - PROTECT ANY OTHER COMPONENTS WITH PLASTIC SHEETING - ENSURE THE PLANT AND EQUIPMENT HAS BEEN MADE SAFE (PIPEWORK EMPTIED, ELECTRICAL SUPPLY ISOLATED AND EQUIPMENT SHUTDOWN, ETC.) • UNBOLT OR UNSCREW THE FLANGE OR DISMANTLE THE		

			EQUIPMENT - ONCE ACCESSIBLE, DAMPEN THE ASBESTOS WITH A FINE WATER MIST OR SIMILAR • CONTINUE DAMPENING THE ASBESTOS AS MORE OF IT IS EXPOSED/ACCESSIBLE • EASE THE GASKET OR ROPE SEAL AWAY WITH THE SCRAPER AND PLACE INTO THE WASTE CONTAINER POSITIONED DIRECTLY BESIDE/BENEATH IT • KEEP THE AREA DAMP AND SCRAPE AWAY ANY RESIDUE – USING A H3 HEPA HEPA VACUUM WHILE SCRAPING REMOVAL OF PIPE LAGGING: USING A GLOVE BAG (SMALL SECTION). ENSURE THAT CLEARANCE OF THE AREA HAS BEEN COMPLETED AND A CLEARANCE CERTIFICATE HAS BEEN ISSUED PRIOR TO REOCCUPATION OF THE AREA. DECONTAMINATION SHOWER PROCESS: • ENTER REMOVAL SITE AS FOLLOWS: • CHANGING AREA - PUT ON CLEAN PROTECTIVE CLOTHING. • CLEAN AREA - PUT ON RESPIRATOR. CONDUCT FIT CHECK. • DIRTY AREA - PUT ON ADDITIONAL PPE, FOOTWEAR • FOLLOW SPECIFIED WORK METHODS: IF AIR ASSIST PACK FAILS, EXIT BUBBLE USING NORMAL DECONTAMINATION PROCESS,THE P3 RESPIRATOR WILL PROVIDE SUFFICIENT PROTECTION FOR EXIT. • WHERE POSSIBLE, ENSURE WET METHODS ARE USED (FINE WATER SPRAY). • MINIMISE RUN-OFF. • ENSURE REGULAR CLEAN-UP, HOUSEKEEPING TO AVOID SLIPS, TRIPS, FALLS. • REMOVE SMALL SECTIONS AND PLACE IN LABELLED WASTE BAGS. ENSURE 1 PERSON IS OUTSIDE OF BUBBLE AT ALL TIMES TO LIAISE WITH SUPERVISORS, ETC AND PREVENT UNAUTHORISED ENTRY. IF HIGH TEMPERATURES IN BUBBLE, ENSURE REGULAR REST BREAKS. EXIT THE REMOVAL AREA AS FOLLOWS: USE VACUUM INSIDE BUBBLE TO REMOVE VISIBLE DUST. • DIRTY AREA: - SHOWER WHILST WEARING PPE AND CLOTHING - LEAVE ON RESPIRATOR AND REMOVE ALL CLOTHING - PLACE IN LABELLED BINS (WASTE OR LAUNDRY). • CLEAN AREA: - SHOWER AND REMOVE RESPIRATOR - WASH RESPIRATOR THOROUGHLY - WASH FACE, HEAD, HANDS AND FINGERNAILS THOROUGHLY • CLEAN CHANGING: - USE A CLEAN TOWEL TO DRY OFF -		

			CHANGE INTO NORMAL CLOTHES - DO NOT RE-ENTER THE CLEAN/DIRTY AREAS. • ALL PERSON RESPONSIBLE TO IMPLEMENT CONTROLS		
☒	ACCESS AND EGRESS • INJURY • ILLNESS	D3 Medium (7)	• ALL STAFF TO BE MADE AWARE OF ENTRY AND EXITS AT SITE INDUCTION • SITE TO BE CLEARLY DEFINED BY SIGNAGE AND HAZARD TAPE 10 METER EXCLUSION ZONE. • TRANSIT ROUTES TO BE KEPT CLEAR AT ALL TIMES • PPE	B1 Low (3)	TAPL - PM, SM, S, SC PC / C / PCBU - PM, SM, S, SC
☒	BIOLOGICAL/BACTERIA • INJURY • ILLNESS	D3 Medium (7)	• PPE TO BE COMPLIANT WITH IDENTIFIED RISK • RESPIRATORS WITH ASSISTED AIR TO BE WORN AS REQUIRED • DECONTAMINATION TO BE AS 0013TAOHSE • PPE	B1 Low (3)	TAPL - PM, SM, S, SC PC / C / PCBU - PM, SM, S, SC
☒	BULK EXCAVATION CONTAMINATED SOIL • INJURY	D3 Medium (7)	• SOIL TO BE REMOVED USING THE SAME PROCESS AS A WET METHOD ASBESTOS REMOVAL. • EXCAVATOR OR BOBCAT TO LOAD SOIL INTO DOUBLE LAYER 200UM PLASTIC EPA TRANSPORT VEHICLES. • MIST WATER SPRAY TO NEGATE RELEASE OF FIBRES. • AIR MONITORING TO CONFIRM REMOVAL PROCESS IS COMPLIANT, AS REQUIRED.	B1 Low (3)	TAPL - PM, SM, S, SC PC / C / PCBU - PM, SM, S, SC
☒	CONFINED/ENCLOSED SPACES • INJURY • ILLNESS	D3 Medium (7)	• QUALIFED STAFF ONLY TO WORK WITHIN AREA • SPOTTER TO BE USED • AIR MONITORING FOR UNSAFE ATMOSPHERE LEVELS • SUPERVISOR TO BE OVERVIEW ALL STAGES OF WORK • EVACUATION PROCESS INPLACE • ENTRY PERMITS APPROVED • ISOLATE ALL HAZARDOUS SERVICES BEFORE ENTERING CONFINED SPACE. • LOCKOUT TAGS AND LOCKS TO BE USED • PURG ATMOSPHERE AND OR VENTILATE SPACE • BREATHING EQUIPMENT TO BE USED BY TRAINED PERSONS ONLY. • 3 POINT CONTACT WHEN CLIMBING • PPE	B2 Low (4)	TAPL - PM, SM, S, SC PC / C / PCBU - PM, SM, S, SC

☒	CONTAMINATED WATER • INJURY – DEATH	E4 High (9)	• WATER TO BE REMOVED USING THE SAME PROCESS AS A WET METHOD ASBESTOS REMOVAL. • PUMP TO PUMP OUT WATER INTO DOUBLE LAYER 200UM PLASTIC BAGS, GOOSE NECK AND SEAL FOR DISPOSAL. • FILTER WATER THROUGH 25 MICRON THEN 5 MICRON FILTRATION SYSTEM AND DISPOSE OF AS GREY WATER IN STORMWATER DRAIN. • AIR MONITORING TO CONFIRM REMOVAL PROCESS IS COMPLIANT, AS REQUIRED. • PPE	B1 Low (3)	TAPL - PM, SM, S, SC PC / C / PCBU - PM, SM, S, SC
☒	CONCRETE SAWING/CUTTING • INJURY	D3 Medium (7)	• ONLY QUALIFED PERSONS TO OPERATE SAW • ALL SERVICES IDENTIFIED AND ISOLATED WITHIN AREA TO BE CUT – CERTIFICATE OF ISOLATION • TENSION TO BE REMOVED FROM SLABS BEFORE CUTTING • AREA TO BE CUT TO BE SUPPORTED BEFORE CUTTING • ENGINEERS REPORT TO INCLUDE ABOVE POINTS WHEN PROVIDED • DUST SUPPRESION BY MIST SPRAY WATER • PPE	B1 Low (3)	TAPL - PM, SM, S, SC PC / C / PCBU - PM, SM, S, SC
☒	CONCRETE WASTE • INJURY	D3 Medium (7)	• CONCRETE TO BE INSPECTED FOR CONTMINATES – OIL, CHEMICALS, ETC. • NON-CONTAMINATED CONCRETE IS TO BE LOADED OUT BY EXCAVATOR AND TRANSPORTED OFF SITE TO LICENCED CRUSHING PLANT TO BE RECYCLED. • CONTAMINATED CONCRETE IS TO BE REMOVED USING COMPLIANT CONTROLS FOR THE CONTAMINATION IDENTIFIED. • WASTE TRACKING DOCUMENTATION TO BE PROVIDED. • PPE	B1 Low (3)	TAPL - PM, SM, S, SC PC / C / PCBU - PM, SM, S, SC
☒	DANGEROUS GOODS (OXY/OTHER) • INJURY	D3 Medium (7)	• BOTTLES TO BE SECURED IN AN UPRIGHT VENTILATED AREA. • QUALIFIED PERSONS ONLY TO USE AS PER MANUFACTURES SPECIFICATIONS • PERMITS TO HAVE ONSITE APPROVED BY PC/CLIENT • DO NOT ROLL BOTTLES WHEN MOVING THEM • DO NOT STORE FULL AND EMPTY BOTTLES TOGETHER • PPE	B2 Low (4)	TAPL - PM, SM, S, SC PC / C / PCBU - PM, SM, S, SC

☒	DEWATERING / PUMP OUT • INJURY	D3 Medium (7)	• WATER TO BE REMOVED USING THE SAME PROCESS AS A WET METHOD ASBESTOS REMOVAL. • PUMP TO PUMP OUT WATER INTO EITHER DOUBLE LAYER 200UM PLASTIC BAGS, GOOSE NECK AND SEAL, OR 100OLT PLACTIC PODS FOR DISPOSAL. • FILTER WATER THROUGH 25 MICRON THEN 5 MICRON FILTRATION SYSTEM AND DISPOSE OF AS GREY WATER IN STORMWATER DRAIN. • PUMP AND PUMPING EQUIPMENT TO BE CLASSED AS ASBESTOS CONTAMINATED AND BAGGED AND SEALED FOR DECONTAMINATION AT TAPL FACILITY. • HYGIENIST TO CONFIRM REMOVAL PROCESS IS COMPLIANT, AS REQUIRED. • PPE	B1 Low (3)	TAPL - PM, SM, S, SC PC / C / PCBU - PM, SM, S, SC
☒	DISMANTLING / DEMOLITION • INJURY - DEATH	E5 Extreme (10)	• WHSQ NOTIFIED VIA FORM 65, 5 DAYS PRIOR TO WORK BEING UNDERTAKEN. • ALL ASBESTOS/HAZARDOUS MATERIALS REMOVED BY QUALIFIED TRADES PRIOR TO DEMOLITION. • D1 QUALIFIED PERSON TO SUPERVISE THE DEMOLITION OF STRUCTURE IN REVERSE ORDER TO HOW IT WAS CONSTRUCTED. • DEFINE DEMOLITION ZONE AND DROP ZONES • PROTECT ADJOINING BUILDINGS – HOARDINGS, PROTECTIVE SCREENS. • REMOVE ALL SERVICES WITHIN AREA TO BE DEMOLISHED • QUALIFED PERSONS TO OPERATE ALL PLANT AND EQUIPMENT. • NOISE TO BE KEPT TO A MINIUM USE SILENCED EQUIPMENT. • DUST TO BE CONTROLLED BY WATER. • NO BURING OF DEBRIS. • NO EXPLOSIVES. • SITE TO BE LEFT IN A CLEAN AND TIDY MANNER AT END OF EACH WORK PERIOD. • PPE	B2 Low (4)	TAPL - PM, SM, S, SC PC / C / PCBU - PM, SM, S, SC
☒	EMERGENCY EVACUATION • INJURY - DEATH	E4 High (9)	• SIGNAL TO BE PER SITE SPECIFIC INDUCTION, USE A CAR HORN IF NOTHING ELSE AVAILABLE • DIRTY PERSONNEL TO UTILIZE A SEPARATE EVACUATION AREA THAT IS AWAY FROM CLEAN PERSONNEL AND ADJACENT WORKERS.	B1 Low (3)	TAPL - PM, SM, S, SC PC / C / PCBU - PM, SM, S, SC

			• IDENTIFIY A COMPLIANT DIRTY AREA BEFORE WORKS COMMENCE. • DECONTAMINATION EQUIPMENT INCLUDING - WET WIPES, MIST WATER SPRAYER, BOOT WASH, WASTE BAGS, TO BE AVAILABLE IN THIS AREA. • PERSONS TO PROCEED TO DIRTY OR CLEAN ASSEMBLY POINTS AND AWAIT FURTHER INSTRUCTION • DIAL 000 TO CALL FIRE, AMBULANCE, POLICE AS REQUIRED. • PPE		
☒	ELECTRICITY TOOLS / EQUIPMENT • INJURY - DEATH	E5 Extreme (10)	• ALL ELECTRICAL EQUIPMENT TO HAVE CURRENT TEST & TAG. • VISUAL INSPECTION ON ALL EQUIPMENT PRIOR TO EVERY USE. • TRAINED PERSONS ONLY, TO OPERATE. • USE TO MANUFACTURES SPECIFICATIONS. • PPE	B2 Low (4)	TAPL - PM, SM, S, SC PC / C / PCBU - PM, SM, S, SC
☒	ELECTRICITY SERVICES • INJURY - DEATH	E5 Extreme (10)	• ALL UNDERGROUND SERVICES TO BE IDENTIFIED BY BEFORE EXCAVATION WORKS COMMENCE. • ALL SERVICES WITHIN WORK AREA TO BE ISOLATED. • CERTIFICATE OF ISOLATION PROVIDED BEFORE WORKS COMMENCE • PPE	B2 Low (4)	TAPL - PM, SM, S, SC PC / C / PCBU - PM, SM, S, SC
☒	EXPLOSIVE/PNEUMATIC POWER TOOLS • INJURY - DEATH	E4 High (9)	• PERMIT TO OPERATE ON SITE TO BE APPROVED BEFORE WORKS PROCEED • USE TOOL TO MANUFACTURERS SPECIFICATIONS ONLY • QUALIFIED PERSONS ONLY TO USE. • SIGNAGE • PPE	B2 Low (4)	TAPL - PM, SM, S, SC PC / C / PCBU - PM, SM, S, SC
☒	EXCAVATOR • INJURY - DEATH	E5 Extreme (10)	• PRE-STARTS INSPECTIONS ARE TO UNDERTAKEN AT START OF EACH SHIFT BY OPERATOR. • ONLY COMPETENT PERSON IS TO OPERATE EXCAVATOR. • OPERATOR IS TO BE STOP EXCAVATION WHEN OTHER PERSONS APPROACH SWING ZONE. • EXCAVATOR TO BE FITTED WITH FLASHING LIGHT. • EXCAVATOR NOT TO WORK WITHIN 3 METRES OF OVERHEAD POWER LINES (LOW VOLTAGE) SPOTTER:	B2 Low (4)	TAPL - PM, SM, S, SC PC / C / PCBU - PM, SM, S, SC

			• THE SPOTTER (GIVING DIRECTION FOR EXCAVATION ACCURACY) SHALL NOT APPROACH THE EXCAVATOR WHILE THE BUCKET IS ABOVE GROUND LEVEL. • THE SPOTTER SHALL STAND CLEAR WHEN SPOILS IS BEING CLEARED FROM THE EXCAVATION. • THE OPERATOR SHALL SWING AWAY FROM THE SPOTTER AND LIMIT ROTATION. ALL OTHER PERSONS ON SITE: • ALL OTHER PERSONS WORKING NEAR THE EXCAVATION TO REMAIN A MINIMUM OF 2 METRES OUTSIDE OF THE REACH OF THE EXCAVATOR. • PRIOR TO ENTERING INSIDE THE SWING ZONE THE PERSONS MUST ENSURE THAT THE OPERATOR HAS COMPLETELY STOPPED AND FULLY ACKNOWLEDGED THEM BEFORE MOVING INTO THE SWING ZONE. EXCAVATING: • DIAL BEFORE YOU DIG PLAN REVIEW • THE OPERATOR SHALL STOP EXCAVATING WHEN ANY PERSON WITHIN 2 METRE EXCLUSION ZONE. • ALL PLANT AND EQUIPMENT IS TO BE KEPT A MINIMUM OF DISTANCE THAT IS EQUAL TO THE DEPTH OF THE EXCAVATION; OR • ALL SPOIL IS TO BE STOCKPILED 45 DEGREE FROM THE ANGLE OF REPOSE. • OPERATOR TO WORK BACK FROM THE MARKED UNDERGROUND SERVICES. • OPERATOR IS NOT TO EXCEED SAFE REACH OF EXCAVATOR. BREAKING UP CONCRETE: • EXCLUSION ZONE TO BE MAINTAINED EITHER BY USE OF A SPOTTER (REFER ABOVE) OR PC PROVIDED DELINEATION. • SPOTTER AND OTHER PERSONS NEAR THE CONCRETE REMOVAL AREA SHALL WEAR EYE PROTECTION. • ALL OTHER OPERATORS IN OPEN CAB PLANT SHALL WEAR SAFETY GLASSES. TRUCKS/EPA VEHICLE • PRE-START INSPECTION CHECKLIST AND DEFECT REPORT IS TO BE COMPLETED DAILY BY OPERATOR • DEFECTS TO BE DETAILED ON REPORT		

			• IF PLANT HAS DEFECTS THAT WILL MAKE IT UNSAFE TO OPERATE- STAND PLANT DOWN AND CONSULT SUPERVISOR IMMEDIATELY • IF ANY ESCAPE OF FUEL/OIL OCCURS, CONTAIN SPILL AND CONTACT SUPERVISOR IMMEDIATELY ABOUT OBTAINING A SPILL KIT AND CLEANING UP THE SUBSTANCE • ALL OPERATORS ARE TO HOLD THE COMPETENCIES/LICENCES FOR THE PLANT/TRUCK BEING OPERATED • WORKERS TO BE TRAINED AND FAMILIAR WITH THE OPERATION AND EMERGENCY FEATURES OF THE PLANT ITEM. • A FIRST AID KIT IS TO BE AVAILABLE TO EACH OPERATOR • TRUCKS ARE ONLY TO BE OPERATED IN COMPLIANCE WITH THE MANUFACTURER'S INSTRUCTIONS, REMEMBER AN ITEM OF PLANT WILL MORE LIKELY DESTABILISE DUE TO ROLLING OVER SIDEWAYS ON A SIDE SLOPE • ENSURE PLANT STEPS AND SOLES OF BOOTS ARE CLEAR OF ANY MUD OR SLIPPERY SUBSTANCES • ACCESS AND EGRESS PLANT FACING PLANT USING THE STEPS AND HANDHOLDS PROVIDED- DO NOT JUMP DOWN FROM AN ITEM OF PLANT • MAINTAIN 3 POINTS OF CONTACT AT ALL TIMES • THE SEATBELT IS TO BE WORN AT ALL TIMES WHEN THE PLANT IS MOVING • MOBILE PHONES ARE NOT TO BE USED WHILST OPERATING/DRIVING THE TIPPER TRUCK LOADING • TRUCKS ARE ONLY TO BE OPERATED IN COMPLIANCE WITH THE MANUFACTURER'S INSTRUCTIONS. • ENSURE THAT TRUCKS ARE NOT OPERATED ALONG GRADIENTS THAT EXCEED SAFE TILT FOR VEHICLE. • DO NOT OPERATE THE PLANT ON STEEP SLOPES • CO-ORDINATE WITH PROJECT SUPERVISOR IN RELATION TO AREAS THAT HAVE OVERHEAD ELECTRICAL LINES • PLANT IS TO OPERATE NO CLOSER THAN 3M TO LV LINES AND 6M TO HV LINES. • IF THE PLANT HAS THE ABILITY TO REACH WITHIN THE PARAMETERS ABOVE A SPOTTER IS TO BE EMPLOYED TO ENSURE THE PLANT DOES NOT BREACH THE EXCLUSION ZONES		

			• ERGON ENERGY/ENERGEX ARE TO BE CONTACTED BEFORE BREACHING THE EXCLUSION ZONES FOR SAFETY ADVICE • TRUCK DRIVERS ARE TO REMAIN IN THE TRUCK CAB UNTIL LOADED. • IF NEEDING TO CONVERSE WITH THE PLANT OPERATOR LOADING THE TRUCK, THE DRIVER WILL ATTRACT THE ATTENTION OF THE OPERATOR AND ENSURE THE LOADING PLANT HAS STOPPED BEFORE RECEIVING A SIGN FROM THE OPERATOR TO APPROACH THE LOADING PLANT. • A 3M EXCLUSION ZONE EXISTS FOR ALL PLANT OPERATING ONSITE • IF PERSONAL ARE TO INTERACT WITH THE EXCAVATOR/LOADER THEY SHALL WEAR A SAFETY HELMET WHEN WITHIN SLEW AND REACH AND REMAIN IN THE OPERATORS VIEW. • PRIOR TO ENTERING INSIDE THE SWING ZONE THE PERSONS MUST ENSURE THAT THE OPERATOR HAS COMPLETELY STOPPED AND FULLY ACKNOWLEDGED THEM BEFORE MOVING INTO THE SWING ZONE. • KEEP AT LEAST 2 M AWAY FROM ANY EXCAVATIONS THAT ARE ONSITE • PLANT IS NOT TO BE PARKED/LOCATED ANY CLOSER TO AN EXCAVATION THAN THE ZONE OF INFLUENCE FOR THAT EXCAVATION- PREFERABLY THE ZONE OF INFLUENCE PLUS 1METRE. • PPE		
☒	FATIGUE / THERMAL COMFORT • INJURY - DEATH	E4 High (9)	• STAFF TO WEAR ONLY BRIEFS UNDER COVERALLS • TAKE REGULAR BREAKS. • SUN PROTECTION • DRINK WATER TO STAY HYDRATED. • MANAGE WORK PERIODS TO ENSURE ARE WELL RESTED. • STAFF TO WORK IN PAIRS AS A MINIMIUM • MOVE WORKS TO NIGHT SHIFT IF POSSIBLE • PPE	B1 Low (3)	TAPL - PM, SM, S, SC PC / C / PCBU - PM, SM, S, SC
☒	FIRE / EXPLOSION • INJURY - DEATH	E4 High (9)	• FIRE EXTINGUISHERS TO BE PRESENT TO CONTROL ALL CLASSES OF FIRE RISKS IDENTIFIED AT SITE. • STAFF TRAINED IN USE OF FIRE FIGHTING EQUIPMENT ONSITE. • DIAL 000 TO CALL FIRE, AMBULANCE, POLICE AS REQUIRED.	B2 Low (4)	TAPL - PM, SM, S, SC PC / C / PCBU - PM, SM, S, SC

			• MSDS FOR ALL FLAMMABLE MATERIALS ONSITE, • STORE MATERIALS IN FLAMMABLE CABINET. • SPOTTER TO BE PRESENT UP TO 30 MINUTES AFTER WORKS • PPE		
☒	FLYING / FALLING OBJECTS • INJURY - DEATH	E4 High (9)	• ALL ITEMS TO BE REMOVED IN SAFE MANAGABLE PIECES • MAXIMIUM LOAD LIMIT OF 15KG PER PERSON • ALL ACCESS PLANT AND EQUIPMENT TO BE ERECTED AND USED TO MANUFACTURES SPECIFICATIONS • DROP ZONES TO BE DEFINED AS REQUIRED • OBJECTS ARE NOT ALLOWED TO FALL FREELY. • HOARDINGS, SCREENS, BARRICADES TO BE USED TO PROTECT ADJACENT STRUCTURES / EQUIPMENT. • PPE	B1 Low (3)	TAPL - PM, SM, S, SC PC / C / PCBU - PM, SM, S, SC
☒	FORMWORK ERECTION / DISMANTLING • INJURY	D3 Medium (7)	• ALL WORKS TO BE COMPLETED BY QUALIFIED PERSONS. • CERTIFICATION BY QUALIFIED ENGINEER BEFORE WORKS COMMENCE. • ALL FORMWORK DESIGNED, CONSTRUCTED & MAINTAINED TO SUPPORT LOADS THAT ARE PLACED ON IT. • PPE	B2 Low (4)	TAPL - PM, SM, S, SC PC / C / PCBU - PM, SM, S, SC
☒	FUMES / GAS • INJURY - DEATH	E5 Extreme (10)	• ATMOSPHERIC TESTING TO BE USED TO IDENTIFY AND THEN CONTROL HAZARD. • COMPLIANT RESPIRATORS TO BE WORN AS PER MANUFACTURERS DIRECTIONS. • VENTILATE AREA WITH FANS • STORE DIFFERENT GAS BOTTLES SEPARATLY. • PPE	B1 Low (3)	TAPL - PM, SM, S, SC PC / C / PCBU - PM, SM, S, SC LAA
☒	HABITATS / PROTECTED FLORA / FAUNA • INJURY • ILLNESS	D3 Medium (7)	• ALL AREAS OF CONCERN TO BE IDENTIFIED BY PC/CLIENT BEFORE WORKS COMMENCE. • ALL PERMITS AND APPROVALS INPLACE BFORE WORKS PROCEED. • QUALIFIED PERSONS TO SUPERVISE WORKS. • PPE	B1 Low (3)	TAPL - PM, SM, S, SC PC / C / PCBU - PM, SM, S, SC
☒	HAZARDOUS MATERIALS (ASBESTOS) • INJURY – DEATH • ILLNESS - DEATH	E5 Extreme (10)	• ALL WORKS TO BE SUPERVISED BY QUALIFIED A CLASS. • WET METHODOLOGY – LOW PRESSURE WATER SPRAY TO BE USED TO CONTROL THE RELASE OF FIBRES.	B2 Low (4)	TAPL - PM, SM, S, SC PC / C / PCBU -

			• HAND TOOLS TO BE USED TO REMOVE ASBESTOS PRODUCT. IN SAFE MANAGABLE PIECES. • MINIMIUM P2 MASKS TO BE USED WITH P3 FOR FRIABLE • AIR MONITORING BY LICENCED ASBESTOS ASSESSOR • PPE		PM, SM, S, SC LAA
☒	HAZARDOUS SUBSTANCES • INJURY – DEATH	E4 High (9)	• SDS TO BE KEPT ONSITE. • ALL CONTAINERS CLEARLY LABELLED. • SUBSTANCES TO BE USED ONLY AS DIRECTED BY MANUFACTURES SPECIFICATIONS. • SUBSTANCES TO BE STORED IN WELL VENTILATED AREA, WITH CONTROLLED ACCESS` • SIGNAGE CLEARLY INDENTIFYING STORAGE AREA AND SUBSTANCES. • SUBSTITUTE FOR NON-HAZARDOUS SUBSTANCE IF POSSIBLE. • PPE	B2 Low (4)	TAPL - PM, SM, S, SC PC / C / PCBU - PM, SM, S, SC LAA
☒	HOT / COLD WORKING ENVIRONMENT • INJURY	D3 Medium (7)	• SUN SAFE CLOTHING TO BE WORN, LONG SLEEVES AND TROUSERS • HARD HAT WITH WIDE BRIM. • GLOVES, SAFETY GLASSES, SUNBURN CREAM. • JACKETS FOR COLD WEATHER • WORK PERIODS TO BE REVIEWED DEPENDING ON WEATHER CONDITIONS. • ISOLATE PLANT IN WORK AREA TO REGULATE TEMPERATURE. • FANS OR HEATERS TO REGULATE TEMPERATURE.	B1 Low (3)	TAPL - PM, SM, S, SC PC / C / PCBU - PM, SM, S, SC
☒	HERITAGE & ARCHAEOLOGY • INJURY	D3 Medium (7)	• ALL AREAS OF CONCERN TO BE IDENTIFIED BY PC/CLIENT BEFORE WORKS COMMENCE. • LOCAL AUTHORITY TO BE CONTACTED BY PC/CLIENT TO CONFIRM OWNERSHIP OF STURCTURES • ALL PERMITS AND APPROVALS INPLACE BFORE WORKS PROCEED • QUALIFIED PERSONS TO SUPERVISE WORKS. • PPE	B1 Low (3)	TAPL - PM, SM, S, SC PC / C / PCBU - PM, SM, S, SC

☒	HOT WORK - CUTTING, GRINDING, WELDING • INJURY	D3 Medium (7)	• HOT WORK PERMIT TO BE APPROVED AND ISSUED BEFORE ANY WORKS PROCEED. • EQUIPMENT TO BE FREE OF DEFECTS, INSPECT AT BEGINNING OF EACH SHIFT • GAS BOTTLES TO BE SECURE AN IN UPRIGHT POSITION • ALL GAS HOSES IN GOOD CONDITION • REMOVE ALL PERSONS BELOW HOTWORK AREA • SPOTTER AND FIRE FIGHTING EQUIPMENT TO BE ON HAND. • ISOLTE SEVRICES WITHIN WORKS AREA. • PROTECT ADJACENT MATERIALS, STRUCTURES WITH SCREENS, BARRIDACES, HOARDINGS. • DEFINE WORK AREA, RESTRICTED ACCESS. • PPE	B2 Low (4)	TAPL - PM, SM, S, SC PC / C / PCBU - PM, SM, S, SC
☒	INCORRECT CONTROLS IN PLACE • INJURY – DEATH	E5 Extreme (10)	• COMPLETE JSEA BEFORE TASK COMMENCES • CONFIRM CONTROLS WITH ALL PERSON INVOLVED TO ENSURE NEW CONTROLS ARE UNDERSTOOD • ALL PERMITS INPLACE FOR NEW CONTROLS • ASBESTOS ASSESSOR TO REVIEW AND CONFIRM CONTROLS ARE COMPLIANT • PPE	B1 Low (3)	TAPL - PM, SM, S, SC PC / C / PCBU - PM, SM, S, SC AA
☒	IMPACT ON OTHER TRADES • INJURY	D3 Medium (7)	• TIMELINE TO BE SUBMITTED IN ADVANCE TO CLIENT TO ADVISE ALL TRADES AND PERSONNEL OF HIGH RISK WORKS AND SITE CLOSURES. • SITE CLOSED TILL ASBESTOS ASSESOR CLEARS • PPE	B1 Low (3)	TAPL - PM, SM, S, SC PC / C / PCBU - PM, SM, S, SC AA
☒	MACHINE / EQUIPMENT GUARDING • INJURY – DEATH	E4 High (9)	• ALL MACHINES AND EQUIPMENT TO HAVE ALL GUARDS INPLACE AS PER MANUFACTURES SPECIFICATIONS. • VISUAL INSPECTION BEFORE EACH USE. • PPE	B1 Low (3)	TAPL - PM, SM, S, SC PC / C / PCBU - PM, SM, S, SC
☒	MANUAL HANDLING (LIFTING AND TWISTING) • INJURY	D3 Medium (7)	• TRAINING IN LIFTING PROCEDURES • ONLY MANAGABLE PIECES TO BE HANDLED. • 15KG MAXIMUM LOAD PER ASBESTOS BAGS • ENOUGH STAFF ON HAND TO SAFELY MOVE ITEMS • PPE	B1 Low (3)	TAPL - PM, SM, S, SC PC / C / PCBU - PM, SM, S, SC

☒	MATERIALS HANDLING (CRANE/FORKLIFT/OTHER) • INJURY – DEATH	E4 High (9)	• QUALIFIED PERSONS TO OPERATE MACHINERY. • WORKING, SETDOWN ZONES TO BE CLEARLY IDENTIFIED. • DOGMAN TO BE USED. • LOADS NOT TO EXCEED MACHINES LOAD RATING. • PPE	B2 Low (4)	TAPL - PM, SM, S, SC PC / C / PCBU - PM, SM, S, SC
☒	MOVING PLANT/TRAFFIC • INJURY – DEATH	E4 High (9)	• ALL TRAFFIC ZONES TO BE CLEARLY DEFINED AND SIGN POSTED. • TRAVEL OUTSIDE OF THESE AREAS TO BE APPROVED IN WRITING BY CLIENT • PPE	B1 Low (3)	TAPL - PM, SM, S, SC PC / C / PCBU - PM, SM, S, SC
☒	NOISE • INJURY	D3 Medium (7)	• HEARING PROTECTION TO BE WORN AS REQUIRED. • ALL PPE TO CURRENT LEGISLATION. • PPE	B1 Low (3)	TAPL - PM, SM, S, SC PC / C / PCBU - PM, SM, S, SC
☒	NOISE OR VIBRATION • INJURY • ILLNESS	D3 Medium (7)	• USE EQUIPMENT THAT EMITS A LOW LEVEL OF NOISE AND VIBRATION • STAFF TO REGULARLY VARY WORKING POSTURE TO REDUCE EXPOSURE TO VIBRATION. • ENGINEERS REPORT OF SURROUNDING STRUCTURES STABILITY AND RISK TO VIBRATION. • TRAINING AND INFORMATION FOR ALL PERSONS WITHIN WORK AREA. • PPE	B2 Low (4)	TAPL - PM, SM, S, SC PC / C / PCBU - PM, SM, S, SC
☒	NOISY WORK • INJURY • ILLNESS	D3 Medium (7)	• SILENCED PLANT AND EQUIPMENT TO BE USED WHERE POSSIBLE. • RESTRICTED WORKING HOURS – 7AM TO 5PM. • STAFF TO TAKE REGULAR BREAKS AWAY FROM NOISY AREA. • PPE	B1 Low (3)	TAPL - PM, SM, S, SC PC / C / PCBU - PM, SM, S, SC
☒	PLANT AND EQUIPMENT OPERATION • INJURY – DEATH	E4 High (9)	• PRE-START INSPECTION CHECKLIST AND DEFECT REPORT IS TO BE COMPLETED DAILY BY OPERATOR • DEFECTS TO BE DETAILED ON REPORT • IF PLANT HAS DEFECTS THAT WILL MAKE IT UNSAFE TO OPERATE- STAND PLANT DOWN AND CONSULT SUPERVISOR IMMEDIATELY	B2 Low (4)	TAPL - PM, SM, S, SC PC / C / PCBU - PM, SM, S, SC

			• IF ANY ESCAPE OF FUEL/OIL OCCURS, CONTAIN SPILL AND CONTACT SUPERVISOR IMMEDIATELY ABOUT OBTAINING A SPILL KIT AND CLEANING UP THE SUBSTANCE • ALL OPERATORS ARE TO HOLD THE COMPETENCIES/LICENCES FOR THE PLANT/EQUIPMENT BEING OPERATED • WORKERS TO BE TRAINED AND FAMILIAR WITH THE OPERATION AND EMERGENCY FEATURES OF THE PLANT • ACCESS AND EGRESS PLANT FACING PLANT USING THE STEPS AND HANDHOLDS PROVIDED- DO NOT JUMP DOWN FROM AN ITEM OF PLANT • MAINTAIN 3 POINTS OF CONTACT AT ALL TIMES • MOBILE PHONES ARE NOT TO BE USED WHILST OPERATING PLANT • ALL OPERATION ZONES TO BE CLEARLY DEFINED AND SIGN POSTED. • PPE		
☒	POOR LIGHTING • INJURY	D3 Medium (7)	• WEATHERPROOF LEADLIGHTS TO BE USED TO PROVIDE AMPLE LIGHTING TO WORK AREA, ACCESS & EGRESS. • TORCHES TO BE USED IN CASE OF POWER OUTAGE TO MAKE SAFE AND EGRESS WORK AREA. • ALL EQUIPMENT TO BE COMPLIANTLY TESTED AND TAGGED • LIGHTS TO SHINE DOWN ON WORK AREA SO NOT TO BLIND STAFF • ENSURE LIGHTS ARE FAR ENOUGH AWAY FROM STAFF FOR HEAT CONTROL • PPE	B1 Low (3)	TAPL - PM, SM, S, SC PC / C / PCBU - PM, SM, S, SC
☒	PUBLIC (PEDESTRIAN / OTHER) • INJURY	D3 Medium (7)	• SITE TO BE CLOSED TO ALL PERSONS OTHER THAN TAPL STAFF. • PROHIBETED ENTRY UNTIL CLEARED BY ASBESTOS ASSESSOR • PPE	B1 Low (3)	TAPL - PM, SM, S, SC PC / C / PCBU - PM, SM, S, SC
☒	SERVICES (UNDERGROUND/OVERHEAD) ELECTRICAL COMMUNICATION GAS WATER	E5 Extreme (10)	• ALL SERVICES TO BE CLEARLY IDENTIFIED BEFORE WORKS COMMENCE. • HYDROVAC UNDERGROUND SERVICES. • ALL SERVICES TO ISOLATED AND OR REMOVED WITHIN REMOVAL AREA FOR DURATION OF WORKS, BEFORE WORKS COMMENCE.	B2 Low (4)	TAPL - PM, SM, S, SC PC / C / PCBU - PM, SM, S, SC

	FUEL • INJURY – DEATH		• PERMITS TO DIG REQUIRED • SERVICES ISOLATED REMOVED BY QUALIFIED TRADES, WITH SUPPORTING DOCUMENTATION SUPPLIED. • PPE		

☒	SLIPS TRIPS FALLS • INJURY – DEATH	E4 High (9)	• ENSURE GOOD HOUSE KEEPING, REMOVING OBSTACLES AND KEEPING FREE FROM CLUTTTER DEBRIS • 3 POINT CONTACT WHEN CLIMBING LADDERS • USE LED LIGHTS AND HEAD LAMPS FOR GOOD LIGHTING • EXTENSION LEADS OFF GROUND WHERE POSSIBLE • PPE	B1 Low (3)	TAPL - PM, SM, S, SC PC / C / PCBU - PM, SM, S, SC
☒	SPILLS AND RESPONSE • INJURY • ILLNESS	D3 Medium (7)	• SDS TO BE KEPT ONSITE AND TO BE FOLLOWED RE CLEAN UP AND CONTROLS. • WATER TO BE MIST SPRAYED ON ANY BREAK OR TEAR IN PLASTIC SHEETING SEALING ASBESTOS. • PVA AND WATER TO BE USED TO CONTROL LARGER AREAS. • A CLASS QUALIFIED TO SUPERVISE ABESTOS SPILLS • IMMEDIATED RESPONSE TO CONTROL RISK ONCE IDENTIFIED. • PPE	B1 Low (3)	TAPL - PM, SM, S, SC PC / C / PCBU - PM, SM, S, SC
☒	STORMWATER / SEDIMENT CONTROL • INJURY	D3 Medium (7)	• 5 MICRON FILTERS OR SOCKS TO BE PLACED OVER DRAINS, DOWN PIPES, STORMWATER OPENINGS, ETC TO CONTROL THE RELEASE OF ASBESTOS FIBRES INTO WATER SYSTEM. • FILTERS TO BE CHANGED REGULARLY AND DISPOSED OF AS CONTAMINATED WASTE. • PPE	B1 Low (3)	TAPL - PM, SM, S, SC PC / C / PCBU - PM, SM, S, SC
☒	STRUCTURAL ALTERATIONS / SUPPORT • INJURY – DEATH	E4 High (9)	• ALL ALTERATIONS TO A STURCTURAL SUPPORT ARE TO BE CERTIFIED BY AN QUALIFIED ENGINEER. • ISOLATE ALL SERVICES WITHIN WORKS AREA. • ALL PROPS, BRACING TO BE TO RATED TO WORKS REQUIRED. • DEMOLITION WORKS TO BE SUPERVISED BY D1 QUALIFIED. • WORK AREA TO BE MADE SAFE AT END OF EACH WORK PERIOD. • PPE	B1 Low (3)	TAPL - PM, SM, S, SC PC / C / PCBU - PM, SM, S, SC

☒	TRAFFIC & PARKING • INJURY - DEATH	E4 High (9)	• ALL TRAFFIC ROUTES & PARKING AREAS IDENTIFIED WITH SIGNAGE, HARAZRD TAPE, BOLLARDS. • TRAFFIC CONTROLLERS AS REQUIRED. • SITE INDUCTION TO CONFIRM PARKING AREAS AND TRAVEL AREAS. • ALL VEHICLE ONSITE TO BE CLEAN OF MUD, DIRT, OIL LEAKS, ETC. • ALL VEHICLES OPERATED BY LICENCED PERSON. • PPE	B1 Low (3)	TAPL - PM, SM, S, SC PC / C / PCBU - PM, SM, S, SC
☒	TRENCHING / EXCAVATION • INJURY – DEATH	E4 High (9)	• EXCAVATIONS TO BE BATTERED OR LAYERED TO MEET LEGISLATION. • SOIL TO BE STOCKPILED ONSITE IN AN AREA TO BE DEFINED. • HYDROVAC OF ALL EXCAVATIONS. • PPE	B1 Low (3)	TAPL - PM, SM, S, SC PC / C / PCBU - PM, SM, S, SC
☒	ULTRA VIOLET LIGHT (SUNLIGHT) • INJURY • ILLNESS	D3 Medium (7)	• WIDE BRIM HAT • LONG SLEEVES & TROUSERS • SUNGLASSES • GLOVES • 30+ SUNBURN CREAM • PPE	B1 Low (3)	TAPL - PM, SM, S, SC PC / C / PCBU - PM, SM, S, SC
☒	UNFAMILAR SITE INJURY – DEATH	E5 Extreme (10)	• COMPLETE SITE SPECIFIC INDUCTION • CONFIRM EMERGENCY ASSEMBLY LOCATION • CONFIRM FIRST AID LOCATION • CONFIRM AMENITIES & HYDRATION STATION • PPE	B1 Low (3)	TAPL - PM, SM, S, SC PC / C / PCBU - PM, SM, S, SC
☒	UNIDENTIFIED RISKS • INJURY – DEATH	E5 Extreme (10)	• VISUAL INSPECTION OF SITE TO ENSURE ALL RISKS HAVE BEEN IDENTIFIED • CHANGE IN ENVIRONMENT TO BE REVIEWED AND ASSESSED • LICENCED ASBESTOS ASSESSOR TO REVIEW AND CONFIRM CONTROLS ARE COMPLIANT • CLIENT TO PROVIDE ALL INVESTIGATION AND REPORTING AS REQUIRED TO INDENTIFY RISKS	B1 Low (3)	TAPL - PM, SM, S, SC PC / C / PCBU - PM, SM, S, SC LAA
☒	WORK NEAR / OVER WATER • INJURY – DEATH	E4 High (9)	• LIFE JACKETS, FLOATATION DEVICE TO BE WORN. • BATTERY EQUIPMENT TO BE USED INSTEAD OF MAINS POWER EQUIPMENT.	B1 Low (3)	TAPL - PM, SM, S, SC

			• ISOLATE WATER IF POSSIBLE. • PPE		PC / C / PCBU - PM, SM, S, SC
☒	WASTE DISPOSAL • INJURY • ILLNESS	D3 Medium (7)	• EPA LICENCED TRANSPORT AND DISPOSAL OF ASBESTOS WASTE AT REGULATED FACILITY • WASTE TRACKING DOCUMENTATION TO BE PROVIDED AT END OF WORKS • USE WATER TO CONTROL BREACHES IN PLASTIC SEAL AND THEN SEAL WITH DUCT TAPE • ALL OTHER DEBRIS TO BE EITHER SENT TO RECYCLERS OR DISPOSED OF AT REGULATED FACILITY • USE WATER TO CONTROL BREACHES IN PLASTIC SEAL AND THEN SEAL WITH DUCT TAPE • PPE	B1 Low (3)	TAPL - PM, SM, S, SC PC / C / PCBU - PM, SM, S, SC
☒	WASTE HAZARDOUS (ASBESTOS) • INJURY - DEATH • ILLNESS - DEATH	E5 Extreme (10)	• SUPERVISION OF ASBESTOS REMOVAL BY QUALIFIED A CLASS (FRIABLE) FOR ALL REMOVAL WORKS. • ADDITIONAL INSPECTIONS BY ASBESTOS ASSESSOR AS REQUIRED • HEALTH MONITORING IF EXPOSURE HAS BEEN IDENTIFIED • PPE	B1 Low (3)	TAPL - PM, SM, S, SC PC / C / PCBU - PM, SM, S, SC
☒	WEATHER • INJURY	D3 Medium (7)	• ALL WORKS ARE TO BE COMLPETED DURING FINE AND DRY WEATHER CONDITIONS. • OUT DOOR WORKS DURING RAIN IS NOT PERMITTED. • INDOOR WORKS DURING RAIN CAN BE COMPLETED AT “A CLASS” SUPERVISOR DISCRETION. • STRONG WINDS - NO WORKS ARE PERMITTED DURING STRONG WINDS • PPE	B1 Low (3)	TAPL - PM, SM, S, SC PC / C / PCBU - PM, SM, S, SC
☒	WORKING AT HEIGHT • INJURY – DEATH	E4 High (9)	• EDGE PROTECTION/SCAFFOLD ERECTED AND USED TO MANUFACTURES SPECIFICATIONS. • EWP TO BE USED BY QUALIFIED OPERATOR TO ACCESS & WORK WITHIN DEFINED AREA. • DEFINE WORK AREA INCLUDING DROP ZONES WITH HARAD TAPE/ BARRICADES, SIGNAGE. • TRAINED PERSON TO COMPLETE WORKS. • PPE	B1 Low (3)	TAPL - PM, SM, S, SC PC / C / PCBU - PM, SM, S, SC

☒	YOUNG WORKERS / UNSKILLED LABOUR • INJURY – DEATH	E4 High (9)	• ONLY TRAINED AND QUALIFIED PERSONS PERMITTED ONSITE. • COPIES OF ALL LICENCES QUALIFICATIONS KEPT IN SITE OFFICE. • PPE	B1 Low (3)	TAPL - PM, SM, S, SC PC / C / PCBU - PM, SM, S, SC

004 TAOHSE – Safe Work Method Statement (SWMS)

Townsville Asbestos Pty Ltd Details			
Organisation Name:	TOWNSVILLE ASBESTOS PTY LTD	Contact Name:	MICHAEL STATHOOLES
ACN/ABN	133474692 / 54797755854	Contact Position:	PROJECT MANAGER
Address:	UNIT 4/17 MACKLEY ST, GARBUTT	Contract Phone No:	0418191145

Project Details			
Project Name:	180924 CONAMINATED SOIL MANAGEMENT RICHMOND HOSPITAL	Council Area:	RICHMOND

High Risk Works ☒ Friable ☒ I Non-Friable ☒ I Demolition ☐ I Heights ☐ I Confined Space ☐ I Excavation ☐	Services to be Isolated ☒ Electricity ☐ I AC / Gas ☐ I Water ☐ I Fire ☐ I Security ☐ I Phone / Comms ☐

Start Date	11/02/19	**Finish Date**	14/03/19	**TAPL Staff**	4	**Subcontractors**	0

Description of Works

The management of the currently identified Asbestos containing materials (ACM) within the Areas 1, 2, 3, 4, 5, 6 as noted in 001 TAOHSE, This management is to allow the for the construction of a geotechnical cap over Asbestos containing materials within the identified Areas of the Richmond Hospital grounds.

- P2/P3 RPE
- Emu Pick of all visible ACM
- Low pressure Garden Hoses / Pump packs for Dust suppression

- LAA to confirm Risk level and Compliant controls when onsite and before works commence

Method of Works		YES	NO
Asbestos Removal:	Non-friable ☒ Friable ☒ Wet Method ☒ Dry Method ☐	☒	☐
Hazardous Material Removal:	Lead ☐ PCB ☐ SMF ☐ Other ☐	☐	☒
Air Monitoring – Licenced Asbestos Assessor:		☒	☐
Clearance Certificate:	Competent Person ☐ Licenced Asbestos Assessor ☒	☒	☐

MINIMUM PPE REQUIREMENTS

Minimum Personnel Protective Requirements or this Project				
RPE	Coveralls	Steel Cap Boots	Safety Glasses	Gloves
				

MANAGEMENT OF REMOVED ASBESTOS

Management of Removed Asbestos	
Onsite Asbestos	Asbestos that has been removed from the work areas, will be contained in double layer 200um plastic during shift and placed within the defined stockpile zones at end of shift
Transport of removed Asbestos	Asbestos will be if required, transported to a regulated waste facility by TAPL registered vehicles – Licence number ENRE00803908

Regulated Waste Facility	N/A

HAZARD CATEGORIES

☒	**Hazard Categories – Controls for Hazards are to be referenced in 003** TAOHSE		
☒	Asbestos Fibres/Dust	☐	Flying/falling objects/debris
☒	Access & egress	☐	Habitats (protected flora/fauna)
☐	Biological/bacteria	☐	Hazardous substances
☐	Bulk excavation contaminated soil	☐	Hazardous material
☐	Concrete wastes	☐	Height & falls
☐	Concrete cutting/sawing	☐	Heritage & Archaeology
☐	Confined/enclosed spaces	☐	Hot/cold working environment
☐	Contaminated water	☐	Hot work (cutting/welding/grinding)
☐	Dangerous Goods (Oxy/other)	☒	Impact on other Trades
☐	Dangerous Goods/Hazardous Substances (use/storage/spills)	☐	Lighting
☐	Dewatering/pump out	☐	Machine/equipment guarding
☐	Dismantling/Demolition	☒	Manual handling (lifting or twisting)
☒	Emergency Evacuation	☐	Materials handling (crane/forklift/other)
☒	Electricity (power tools/other)	☒	Moving plant/traffic
☒	Electricity (isloation/de-energise/isolate)	☐	Noise (hearing)
☐	Explosive/pneumatic power tools	☐	Noise or vibration

☒	Fatigue/Thermal Comfort (shift work/hours of work)	☐	Noisy work (neighbourhood)
☐	Fire/explosion	☐	Plant & equipment operation
☐	Formwork erection/dismantling	☒	Public (pedestrians/other)
☐	Fumes/gas	☐	Services (underground/overhead)
☐	Spills & response	☒	**Additional Categories to be added as identified below ↓**
☐	Stormwater/sediment control	☐	
☐	Structural alterations/support	☐	
☐	Traffic & parking	☐	
☒	Trenching/excavation	☐	
☐	Ultra Violet Light (sunlight)	☐	
☐	Unfamiliar Site	☐	
☒	Unidentified Risks	☐	
☒	Waste hazardous (synthetic min fibre, asbestos)	☐	
☒	Waste disposal	☐	
☒	Weather	☐	
☐	Work near/over water	☐	
☐	Young workers/unskilled labour	☐	

RESPOSIBILITY & MANAGEMENT

- THE TABLE BELOW IDENTIFIES THE PERSON OR PERSONS ON SITE RESPONSIBLE FOR THE MANAGEMENT OF TOWNSVILLE ASBESTOS / TAECO STAFF & THEIR SUB-CONTRACTORS

Name	On Site	Not On Site	Contact Details			
MICHAEL STATHOOLES	☒	☐	Mobile	0418 191 145	Email	michael@townsvilleasbestos.com.au
WADE LAZANSKI	☒	☐	Mobile	0475 132 603	Email	admin@townsvilleasbestos.com.au

Regulator Notification								
WH&S QLD	YES	NO	WH&S QLD	YES	NO	COMCARE FEDERAL	YES	NO
FORM 65 ASBESTOS REMOVAL	☒	☐	FORM 65 DEMOLITION OF STRUCTURES	☐	☒	ASBESTOS REMOVAL	☐	☒

TAPL SWMS has been developed by:	Name: MICHAEL STATHOOLES Position: PROJECT MANAGER Sign:  Date : 23/12/18	**SWMS has been reviewed by:**	Client☐ Principal Contractor☐ PCBU☐ LAA☐ Name: Sign: Date : / / 2019

Resources, Plant & Equipment, PPE – to be used as required and adjusted or altered to meet site requirements			
Resources / Trades Involved:	☒ Asbestos Removal	☐ Demolition	☐ Mould
Plant and Equipment Maintenance checks:	• Hand and power tools to be visually inspected prior to use by Licenced or Qualified Person • Plant OEM Service schedule and Specific Pre-start/safety check. • Equipment Serviceability Step Ladders, Extension Ladders, Work Platforms		

Plant and Equipment Inspections:	• Electrical tools tested and tagged 3 monthly • RCD to be tested and tagged 3 monthly and to be “Push to Test” daily prior to use. • Generators to be tested and tagged every 3 months		
Plant Used:	☒ EPA Approved Vehicle	☒ Decontamination Showers	☒ HEPA Vacuums
	☐ Air Management Systems	☐ Air Monitoring System	☒ Airless Sprayer
	☐ EWP/Mobile Scaffold	☐ Scaffold	☐ Edge Protection
	☐ Floor Grinder	☐ Tile Lifter	☐ Generator
Equipment Used:	☒ Hand Tools	☒ Power Tools	☒ Battery Power Tools
	☒ Pump Pack / Garden Hose	☒ Ladders	☐ Tressels/Planks
	☒ Wheelbarrow	☐ Trolleys	☐ 240v Lighting
	☐ Torch	☐ Compression Breaker	☐ Soft Slings
Materials Used:	☒ 200μM PLASTIC SHEET	☒ 200μm PLASTIC BAGS	☒Duct / Cloth Tape
	☒ Water	☒ PVA	☐ Spray Paint
Mandatory PPE:	☒ P2 ☒ P3 Face Masks	☒ Disposbale Coveralls	☒ Gloves
	☒ Safety Gumboots	☒ Safety Boots	☒ Long Sleeve Shirt
	☒Trousers	☒ Safety Glasses	☐ Hard Hat
	☐ Hearing Protection	☒ UV Protection	☒ As per SDS……
Personnel Qualifications and Experience Required:	☒ A Class Supervisor – Asbestos Removal	☒ A Class Asbestos Removal	☐ B Class Asbestos Removal
	☐ NATA Accredited Hygienist	☒ Licenced Asbestos Assessor	☐ Mould Technician
	☒ OHS Induction Card White/Blue Card		
Training to be provided:	Site Specific Induction training, Induction and training into task specific SWMS controls.		
Signage:	☒ Asbestos Removal Works	☐ Demolition Works	
Barriers:	Safety barriers, Temporary Fencing, Danger / “Warning Asbestos” Tape or Bunting as required to cordon off areas where work is being undertaken.		

Monitoring of SWMS:	Site Supervisors are responsible for monitoring the implementation of this SWMS to ensure that the controls are in place. This is completed through informal visual inspections, Task Observations and formal Site Inspections.
Review of SWMS:	SWMS will be reviewed at monthly intervals or as required (e.g. Post incident, prior to commencing new works, as per client requirements)
Emergency Planning:	Refer to Principle Contractor Project Safety Plan - Emergency Planning and Procedures First Aid Kit to be available on site and in vehicles.

RISK CLASS

Level	Health Impacts	Critical Services Interruptions	Organizational Outcomes / Objectives	Reputation and Image Per Issue	Non-compliance
Insignificant (1)	First aid or equivalent only	No material disruption	Little impact	Non-headline exposure, Not at fault, No impact	Innocent procedural breach, Evidence of good faith, Little impact
Minor (2)	Routine medical attention required (up to 2 wks incapacity)	Short term temporary suspension – backlog cleared < 1 day	Inconvenient delays	Non-headline exposure, Clear fault settled quickly, Negligible impact	Breach, Objection/complaint lodged, Minor harm with investigation
Moderate (3)	Increased level medical attention (2 wks to 3 mths incapacity)	Medium term temporary suspension – backlog cleared by additional resources	Material delays, Marginal under-achievement of target performance	Repeated non-headline exposure, Slow resolution, Ministerial enquiry/briefing	Negligent breach, Lack of good faith evident, Performance review initiated
Major (4)	Exposure to Non-friable Asbestos Fibres Severe health crisis (incapacity beyond 3 months)	Prolonged suspension of work – additional resources required, Performance affected	Significant delays, performance significantly under target	Headline profile, repeated exposure, at fault or unresolved complexities, ministerial involvment	Deliberate breach or gross negligence, formal investigation, disciplinary action, ministerial involvment
Catastrophic (5)	Exposure to Friable Asbestos Fibres Multiple severe health crises/injury or death	Indeterminate prolonged suspension of work, non performance	Non achievment of objective/ outcome, performance failure	Maxium high level headline exposure, ministerial censure, loss of credibility	Serious, wilful breach, criminal negligence or act, prosecution, dismissal, ministerial censure

LIKELIHOOD

Level	Likelihood / Probability	Expected or actual frequency experienced

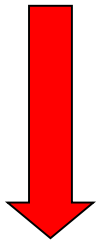
1	Rare	May only occur in expceptional circumstances, simple process, no previous incidence of non-compliance.
2	Unlikely	Could occur at sometime, less than 25% chance of occurring, non-complex process.
3	Possible	Might occur at sometime, 25% – 50% chance of occuring, previous audits/reports indicate non-compliance, complex process with extensive checks & balances, impacting factors outside contol of organisation.
4	Likely	Will probaly occur in most circumstances, 50% - 75% chance of occuring, complex process with some checks & balances, impacting factors outside contol of organisation.
5	Almost Certain	Can be expected to occur in most circumstances, more than 75% chance of occuring, complex process with minimal checks & balances, impacting factors outside contol of organisation.

RISK MATRIX

LIKELYHOOD	CONSEQUENCE				
	Insignificant (1)	Minor (2)	Moderate (3)	Major (4)	Extreme (5)
Rare (A)	Very Low (2)	Low (3)	Low (4)	Low (5)	Low (6)
Unlikey (B)	Low (3)	Low (4)	Low (5)	Medium (6)	Medium (7)
Possible (C)	Low (4)	Low (5)	Medium (6)	Medium (7)	Medium (8)
Likely (D)	Low (5)	Medium (6)	Medium (7)	High (8)	High (9)
Almost Certain (E)	Low (6)	Medium (7)	Medium (8)	High (9)	Extreme (10)

HIERARCHY OF CONTROL

Hierarchy of Control	
Most effective	**Elimination**: remove the hazard completely from the workplace or activity

(High level)  Least effective (Low level)	**Substitution**: replace a hazard with a less dangerous one (e.g. a less hazardous chemical)
	Redesign: making a machine or work process safer (e.g. raise a bench to reduce bending)
	Isolation: separate people from the hazard (e.g. safety barrier)
	Administration: putting rules, signage or training in place to make a workplace safer (e.g. induction training, highlighting trip hazards)
	Personal Protective Equipment (PPE): Protective clothing and equipment (e.g. gloves, hats)

JOB STEPS AND CONTROLS

- JOB STEPS AND CONTROLS ARE TO BE READ IN CONJUNCTION WITH 004 TAOHSE & 0011 TAOHSE

JOB STEPS	HAZARDS / RISKS	INITIAL RISK SCORE	CONTROL MEASURES	RESIDUAL RISK SCORE	PERSONS RESPONSIBLE FOR CONTROLS
SITE PREPARATION & SETUP • NOTE WORKS WILL BE - 6AM & 6PM MON-FRI SITE CONTROLLED • ENVIROPACIFIC LAA • ENVIRONICS (QLD) PTY LTD	• UNFAMILIAR SITE • UNIDENTIFIED ASBESTOS RISKS	E4 High (9)	UNFAMILIAR SITE • Provide EP site specific induction including location of amenities, first aid facilities, emergency plans & evacuation points, incident reporting, communication, contact persons etc • Scope of works has been confirmed by all Stakeholders UNIDENTIFIED RISKS • LAA to inspect site and confirm all Asbestos risks have been identified and controls are compliant • Define removal area with hazard tape, bollards, signage as required • EP to de-energize and isolate all services within work areas • Exclusion zone to be defined & maintained for duration of works period	B1 Low (3)	TAPL – PM, SM, S, SC EP – PM, SM, S, SC EN – LAA

JOB STEPS	HAZARDS / RISKS	INITIAL RISK SCORE	CONTROL MEASURES	RESIDUAL RISK SCORE	PERSONS RESPONSIBLE FOR CONTROLS
			• All persons other than TAPL staff or equally trained persons excluded from removal area. • PPE		
ASBESTOS ASSESOR • SITE INSPECTION • SET UP AIR MONITORS	• MANUAL HANDLING • SLIPS TRIPS FALLS • SNAKES	E4 High (9)	➢ RPE P2 & PPE ➢ ALL WORKS TO BE SUPERVISED BY TAPL A CLASS. MANUAL HANDLING • Use tripods for air monitors to reduce bending/awkward angles • Only carry manageable loads, 15kg maximum SLIPS TRIPS FALLS • When walking over undulating ground ensure you have solid footing. • Take small steps to reduce loss of balance • Ensure good lighting & house keeping • Only walk in areas approved by EP SNAKES *Procedure when a snake is sighted* Do not approach the snake • Snakes are protected species and they are not to be harmed in any way. Snakes have poor hearing but heightened reaction to vibration, so tread gently when they are seen Do not make any attempt to kill it, • Capture it, or make it move away. The vast majority of snake bites occur when the snake is threatened Do alert • Those working in the immediate vicinity that the snake is there, and warn them not to approach it Do alert • EP site manager, so a snake catcher can be called to site	A5 Low (6)	TAPL – PM, SM, S, SC EP – PM, SM, S, SC EN – LAA

JOB STEPS	HAZARDS / RISKS	INITIAL RISK SCORE	CONTROL MEASURES	RESIDUAL RISK SCORE	PERSONS RESPONSIBLE FOR CONTROLS
ASBESTOS REMOVAL • Remove visible Asbestos using an Emu Pick process • Removal to take place in the following order – Area 1, 2, 3, 4, 5, 6 • This step is to take place before the grubbing works commence, with the methodology for the grubbing to be confirmed by the LAA, with the below information to be considered - On previous works, when managing Asbestos contamination in soil, there has been a requirement for the Asbestos technicians to work directly in front line of sight, of excavators / skid steers to remove loose Asbestos fragments. UHF radios are used to communicate with operators / supervisors. This was to ensure the release of fibres was kept to within compliant levels. Clarification of this process will be sort from the LAA when the site is inspected and the level of risk is confirmed.	• ASBESTOS FIBRES / DUST • WORKING AT HEIGHTS • MANUAL HANDLING • SLIPS TRIPS FALLS • SNAKES • KNIFE CUTS • FATIGUE • MOVING PLANT & TRAFFIC	E5 Extreme (10)	➢ RPE P2 / P3 & PPE ➢ ALL WORKS TO BE SUPERVISED BY TAPL A CLASS. ASBESTOS FIBRES / DUST Soil contaminated with deteriorated asbestos may pose the risk of asbestos fibres become airborne. Using the following controls will limit the risk of airborne Asbestos fibres • All windows & doors of hospital directly adjacent to the removal areas to be closed, Box AC units to be switched off during works • Area 5 - 200um plastic to be used to seal AC units and surfaces directly in contact with the work face • Use low pressure water from pump packs or garden hoses to negate the release of fibres into the atmosphere • LAA to use dust track to monitor dust levels and confirm process is compliant • Use hand pickers to remove visible Asbestos and place into 200um plastic bags, ensure all removed Asbestos is wet • A Clean and Dirty assembly points will be identified as per 0013TAOHSE • Decontamination showers to be erected adjacent to Caretakers Shed, between areas 3 & 4 WORKING AT HEIGHTS • 3 point contact at all times when climbing on ladders to install plastic, and when accessing and egressing trucks or excavators MANUAL HANDLING • Alternate hands when using hand-pickers to reduce hand/finger strain • Wear gloves to protect from blisters • Training in lifting procedures	A5 Low (6)	TAPL – PM, SM, S, SC EP – PM, SM, S, SC EN – LAA

JOB STEPS	HAZARDS / RISKS	INITIAL RISK SCORE	CONTROL MEASURES	RESIDUAL RISK SCORE	PERSONS RESPONSIBLE FOR CONTROLS
			• Only manageable items, materials, or equipment to be handled • 15kg maximum load per asbestos bags • Enough staff on hand to safely move items, material, or equipment in and out of removal areas SLIPS TRIPS FALLS • Ensure good house keeping, removing obstacles and keeping free from clutter debris • Inspect transit routes for obstacles at the beginning of each shift SNAKES *Procedure when a snake is sighted* Do not approach the snake • Snakes are protected species and they are not to be harmed in any way. Snakes have poor hearing but heightened reaction to vibration, so tread gently when they are seen Do not make any attempt to kill it, • Capture it, or make it move away. The vast majority of snake bites occur when the snake is threatened Do alert • Those working in the immediate vicinity that the snake is there, and warn them not to approach it Do alert • EP site manager, so a snake catcher can be called to site to remove snake KNIFE CUTS • When using knifes push blade away from body, always cutting the plastic in a safe direction • Retract blades after use and ensure uncovered blades are not put into pockets or left lying around		

JOB STEPS	HAZARDS / RISKS	INITIAL RISK SCORE	CONTROL MEASURES	RESIDUAL RISK SCORE	PERSONS RESPONSIBLE FOR CONTROLS
			• A sharp blade is a safe blade, do not use blunt knifes FATIGUE • Eye strain – vary depth of focus and do not look into sun • Staff to wear only briefs under coveralls • Take regular breaks, during the shift, alternate duties • Drink water to stay hydrated. • Staff to work in pairs as a minimum MOVING PLANT & TRAFFIC • Control risks from mobile plant/vehicles - establish traffic management plan – include barricades signs, as per the EP site induction. • Include safe detours for pedestrians if pathways will be affected. • Ensure all persons are aware of the one way traffic route at Hospital		
LICENCED ASBESTOS ASSESOR • Visual clearance for removal areas • Please note clearance limited to removal areas only • EP to accept custody of site to begin cushion geotextile & liner layers installation	• ASBESTOS FIBRES / DUST • SLIPS TRIPS FALLS	D3 Medium (7)	• RPE P2 & PPE • ALL WORKS TO BE COMPLETED BY EN LAA ASBESTOS FIBRES / DUST • Visual clearance of surfaces within the removal areas • Confirm remaining Asbestos has been sealed below clean soil SLIPS TRIPS FALLS • Ensure good lighting & house keeping • Only walk in areas approved by EP	A4 Low (3)	TAPL – PM, SM, S, SC EP – PM, SM, S, SC EN – LAA

005 TAOHSE – Certificates and Insurances

Certificates / Insurances/ Work Cover Approvals:
CERTIFICATE TO PERFORM PRESCRIBED ACTIVITY (ASBESTOS REMOVAL FRIABLE AR1, AR2) NUMBER: - 2302382 EXP: 19/12/2023
CERTIFICATE TO PERFORM PRESCRIBED ACTIVITY (DEMOLITION OF STRUCTURES D1) NUMBER: - 2310824 EXP: 13/09/2019
WORK COVER POLICY NUMBER: - WHA081103733 EXP: 30/06/2019
PUBLIC LIABILITY POLICY NUMBER: - 09030283; PROFESSIONAL INDEMNITY INSURANCE POLICY NUMBER: - XL4316013227 EXP: 31/05/2019

006 TAOHSE - Register of Regulations & Legislation

Legislation:

- How to Manage and Control Asbestos in the Workplace 2011
- How to Safely Remove Asbestos 2011
- Demolition of Structures AS 2601-2001
- Workplace Hazardous Manual Tasks 2011

007 TAOHSE – Qualifications and Experience

Qualifications and experience required to complete the task	☒ Name	Asbestos Role	Site Specific Training Required to Complete Work
Friable Asbestos Supervisor, Friable Asbestos Removal, Licenced Asbestos Assessor, OHS Induction Card White/Blue Card	☒ **MICHAEL STATHOOLES**	**Project Manager**	**TAPL Site Specific Induction, Client / PC Induction**
Friable Asbestos Supervisor, Friable Asbestos Removal, OHS Induction Card White/Blue Card	☒ **WADE LAZANSKI**	**Site Manager**	**TAPL Site Specific Induction, Client / PC Induction**
Friable Asbestos Removal, OHS Induction Card White/Blue Card	☒ **BEN HAND**	**Technician**	**TAPL Site Specific Induction, Client / PC Induction**
Friable Asbestos Removal, OHS Induction Card White/Blue Card	☐ **GABRIEL STATHOOLES**	**Technician**	**TAPL Site Specific Induction, Client / PC Induction**

Friable Asbestos Removal, OHS Induction Card White/Blue Card	☒ **CHRIS WARE**	**Technician**	**TAPL Site Specific Induction, Client / PC Induction**
Friable Asbestos Removal, OHS Induction Card White/Blue Card	☐ **PAUL DWYER**	**Technician**	**TAPL Site Specific Induction, Client / PC Induction**
Friable Asbestos Removal, OHS Induction Card White/Blue Card	☐ **JARROD ANDERSON**	**Technician**	**TAPL Site Specific Induction, Client / PC Induction**
Friable Asbestos Removal, OHS Induction Card White/Blue Card	☒ **TOBY OBRIEN**	**Technician**	**TAPL Site Specific Induction, Client / PC Induction**

008 TAOHSE – Respirator Fit Check

A fit check (different to a fit test), in accordance with AS/NZS 1715:1994 *Selection, use and maintenance of respiratory protective devices* and the manufacturer's instructions, needs to be performed immediately before commencing work with the respirator each time it is to be used.

FIT CHECK

Full or half-face respirator fit check:

1. Close off inlet to filter
2. Inhale gently
3. Hold for 10 seconds
4. Face piece needs to remain slightly collapsed.

009 TAOHSE – Hazard Reporting

Townsville Asbestos encourages all employees to report hazards **immediately** to the Works supervisor.

Townsville Asbestos investigates all reported hazards and implements control measures to eliminate and/or minimise the likelihood of an incident or injury.

Townsville Asbestos identifies a risk class/ranking for all hazards by referring to the categories ranging from low to high in the Risk Matrix. The Risk Matrix is used to determine the level of danger or seriousness (i.e. the consequence) of the risk, how likely it is that this risk will occur (i.e. likelihood/probability) and therefore how detailed control measures will need to be to eliminate or minimise the risk.

Townsville Asbestos reviews and evaluates the effectiveness of control measures until the hazard is addressed and/or all risks have been mitigated or reduced.

0010 TAOHSE – Air Monitoring

AIR MONITORING

When is air monitoring required?

Air monitoring requirements will vary depending on the type of asbestos being removed, the location and position of the asbestos, if an enclosure is used and whether the asbestos removal work is within a building or outside.

Friable asbestos removal – Air monitoring is mandatory for all friable asbestos removal. This includes prior to dismantling an enclosure and for the purposes of the clearance inspection.

More than 10 m2 of non-friable asbestos removal – Air monitoring is not required but may be considered to be carried out by an independent licensed assessor or competent person to ensure compliance with the duty to eliminate or minimise exposure to airborne asbestos and to ensure the exposure standard is not exceeded.

0011 TAOHSE – Decontamination Procedures

PERSONAL DECONTAMINATION

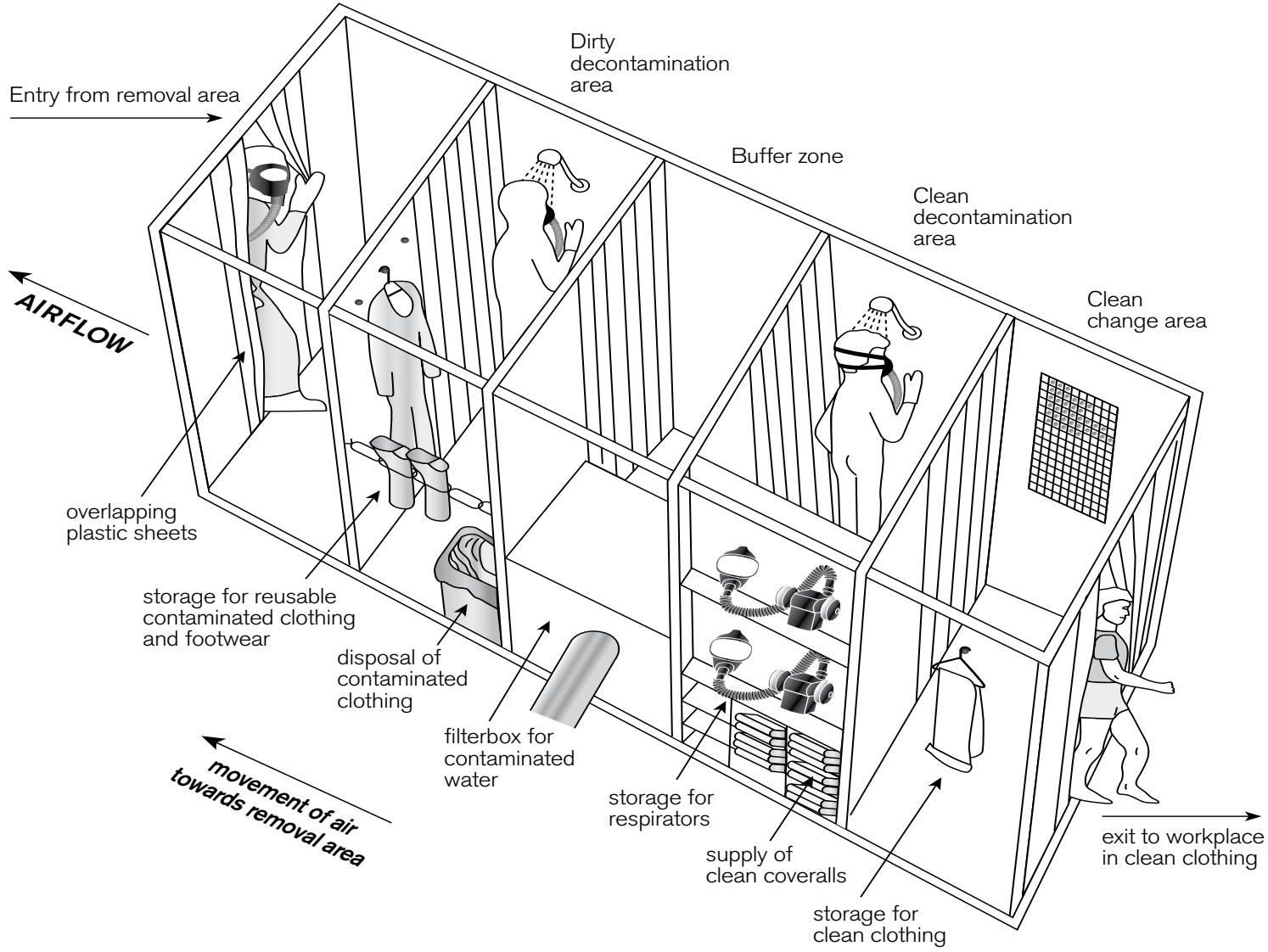
Personal decontamination must be undertaken each time workers leave the asbestos work area and at the completion of the asbestos maintenance or service work. Personal decontamination should be done within the asbestos work area where re-contamination cannot occur.
Asbestos-contaminated PPE should not be transported outside the asbestos work area except for disposal purposes.

Respiratory protective equipment should be used until all contaminated disposable coveralls and clothing has been removed and bagged for disposal, and personal washing has been completed using wet-wipes.

Any PPE used while carrying out asbestos work must not be taken home.
Personal hygiene and careful washing are essential. Particular attention should be paid to the hands, fingernails, face and head.

Emergency Evacuation: During an emergency evacuation, the following decontamination process is to apply – supervisor to mist spray all contaminated staff members with a low-pressure water mist. The sprayed water will contain loose fibres in the short term and allow a swift exit from work area to assembly point. Once at assembly point, a compliant personal decontamination is to be completed.

Decontamination Shower Unit – (Negative Air Encapsulations)


Entry from removal area
Dirty decontamination area
Buffer zone
Clean decontamination area
Clean change area
AIRFLOW
overlapping plastic sheets
storage for reusable contaminated clothing and footwear
disposal of contaminated clothing
filterbox for contaminated water
storage for respirators
supply of clean coveralls
storage for clean clothing
exit to workplace in clean clothing
movement of air towards removal area

0011 TAOHSE – Decontamination Procedures Continued

WORKPLACE DECONTAMINATION

Any asbestos dust or debris must be collected in a safe manner and the asbestos work area decontaminated, paying attention to all walls, ledges, fittings and furnishings.
Two types of decontamination procedures may be used: wet and dry decontamination:

Wet decontamination, or **wet wiping**, involves the use of damp rags to wipe down contaminated areas. Cleaning rags should only be used once, although they may be re- folded to expose a clean surface. The rags should be used flat and should not be wadded. If a bucket of water is used, the rags should not be re-wetted in the bucket, as this will contaminate the water. Care should be taken to avoid any potential electrical hazards when using this procedure.

Dry decontamination should be only used where wet methods are not suitable or pose a risk because of other hazards such as electricity or slipping. Dry decontamination procedures include carefully rolling or folding up and sealing plastic sheeting and/or vacuuming the asbestos work area with an asbestos vacuum cleaner. Large pieces of asbestos debris should be wetted and picked up by hand rather than vacuumed.

Whenever the asbestos work area cannot be decontaminated using either the wet or dry method — for example, if there is rough sawn wood that cannot be fully decontaminated by wet wiping or vacuuming — pigmented polyvinyl acetate (PVA) may be used to seal the contaminated sections of the asbestos work area, including any plant or equipment where practicable.

DECONTAMINATION OF TOOLS AND EQUIPMENT

All tools and equipment used during the removal task should be decontaminated using the wet decontamination procedures described above, with the method chosen depending on its practicality and the presence of any electrical hazards.

All tools will be tagged to indicate asbestos contamination and double bagged in asbestos waste bags before being removed from the asbestos work area. This equipment and tools will remain sealed until either decontamination at our facility or the commencement of the next asbestos maintenance or service task where the equipment can be taken into the work area and reused under full control conditions.

PPE should be worn when opening the bag to clean or re-use the equipment or tools, and decontamination should only be performed in a controlled environment.

Bags containing asbestos contaminated equipment and tools should be clearly labeled with an appropriate warning statement.

0012 TAOHSE – Enclosures

Where friable asbestos is removed, our licensed Class A qualified asbestos removal team will remove the asbestos.
The asbestos removal work area will be enclosed (sometimes referred to as the ‘bubble’) to eliminate or minimise the release of airborne asbestos fibres.

When large-scale friable asbestos removal work is being undertaken, the asbestos removal work areas should be enclosed and under ‘negative pressure’ with the use of negative air pressure units.

The use of enclosures in large-scale non-friable asbestos removal requiring a Class B licence should be determined on the basis of a risk assessment.
Factors such as proximity to other work areas, weather conditions if outdoors, and the amount of material to be removed should be considered.

To prevent the escape of airborne asbestos from the enclosed asbestos work area, an exhaust extraction fan will be installed so as to create a ‘negative’ air pressure of approximately 12 Pa (water gauge) within the enclosed asbestos work area.

The negative air unit may operate continuously (24 hours a day) until all asbestos removal work and decontamination within the enclosure has been completed, and a clearance certificate issued by an Asbestos Assessor.

Maintenance work on these negative air units should only be performed after they have been thoroughly decontaminated, or the work may be carried out under controlled conditions, such as in an asbestos removal enclosure while wearing appropriate RPE/PPE.

0013 TAOHSE – Evacuation Plan/Map

Plan / Map to be inserted once onsite

Reviewed by: _____ Position: _____ Date ____ / ____ / 2019

0014 TAOHSE – Review & Acceptance

This Asbestos Removal Control Plan (ARCP) has been Produced, Reviewed and Accepted by the following:

PRINCIPAL CONTRACTOR / CLIENT/ PCBU	TOWNSVILLE ASBESTOS PTY LTD
This ARCP has been Reviewed & Accepted by: Signed:…….. Full Name:…….. Position:…….. Date:……/……./2019	This ARCP has been produced by: Signed:  Full Name: MICHAEL STATHOOLES Position: PROJECT MANAGER Date: 23/12/18

0014 TAOHSE – Review & Acceptance Continued

This Asbestos Removal Control Plan in its entirety has been read, understood and signed by all Persons undertaking the works: **TO BE SIGNED WHEN ONSITE FOR FIRST PRESTART AND BEFORE ANY WORKS COMMENCE.**									
RESPONSIBILITY CODE									
TAPL	Townsville Asbestos Pty Ltd				**C**	Client			
PM	Project Manager				**PC**	Principal Contractor			
SM	Site Manager				**PCBU**	Person in Control of a Business Unit			
S	Staff				**LAA**	Licenced Asbestos Assessor			
SC	Subcontractors				**O**	Other			
RC	Name	Signature	GI Card No	Date	RC	Name	Signature	GI Card No	Date