Title: **Draft Remediation Work Health & Safety Management Plan (WHS Plan)**	Section: Effective Issue:

Hydro Aluminium Kurri Kurri Pty Ltd DRAFT Work Health & Safety Management Plan

Smelter Remediation

Hydro Aluminium WHS Plan

Revisions

Date	Rev	Details	Reviewed by	Approved
11/04/18	A	Initial Draft	AS & JB	

Contents

1 Project Information

1.1 Management and review

This Work Health and Safety (**WHS**) Management Plan has been developed to outline the approach to managing WHS at the Hydro Aluminium Smelter Site Remediation project situated at Hart Rd, Loxford NSW.

The Hydro Aluminium Kurri Kurri Team will:

- make this plan available to all workers and contractors on this project and ensure they have the opportunity to read, understand, clarify and ask questions
- keep a copy of the WHS Management Plan readily available for the duration of the project or longer as required under the WHS Regulation 2017 (NSW) (the WHS Regulation)
- review the plan regularly throughout this project and make any revisions known to those working on the project
- promote and enhance the focus on safety and lead by example with evaluating, anticipating, minimising and controlling high risk activities

1.2 Principal Contractor Details

Whilst Hydro Aluminium Kurri Kurri (HAKK) are the Principal Contractor for the Site, HAKK have engaged INSERT CONTRACTOR to fulfil the obligations of Principal Contractor for the Remediation Works. The site breakdown of Principal Contractor locations is detailed below (to be developed).

This configuration will be updated during the Project and communicated to personnel via the Site Safety Notifications. This Plan will also be updated to reflect the PC status for both HAKK and INSERT CONTRACTOR.

Hydro Details

Business name:	**HYDRO ALUMINIUM KURRI KURRI PTY LTD**
Address:	Hart Rd Loxford NSW
Contact person:	To be completed
Work phone:	
Mobile phone:	
Email:	
ABN:	ABN 55 093 266 221

Remediation Works Contractor Details

Business name: Remediation works	To be completed
Address:	
Contact person:	
Work phone:	
Mobile phone:	
Email:	
ABN:	
Contract licence number:	
Principal contractor signature:	

1.3 Details of persons at workplace with WHS responsibilities - HAKK

Position	WHS responsibilities
Managing Director	Actively promote the safe systems of work for all site activities and by his representatives, monitoring and enforcing compliance with site and legislative requirements.
Project Manager	Managerial leadership and commitment to safe systems of work for all site activities. Monitoring and enforcing compliance with site and legislative requirements. Promote a positive safety culture.
Construction Manager	Management of site personnel and contractors working on the project; involvement in the development and maintenance of safe systems of work to manage risks so that site and legislative requirements are being applied.
Site Services Manager	Worker and contractor consultation encouraging site Work Health and Safety implementation and ownership within the Care and Maintenance Team.
WHS Manager	Review and promote all safe systems of work in accordance with the safe work method statements (**SWMS**) and Job Safety & Environmental Risk Assessments (**JSERA**) developed by contractors; ensuring that all practices to be undertaken are carried out to the applicable legislation and site rules. Undertaking frequent site inspections and audits on the Remediation Contractor and associated works.
Site personnel and contractors (Varying roles)	Actively apply the rules and requirements of this WHS plan, site requirements and all legislative requirements described in the WHS act and regulations.

1.4 Details of persons at workplace with WHS responsibilities – INSERT CONTRACTOR

Name	Position	WHS responsibilities
To be completed		

1.5 Scope and Purpose

The former Hydro Kurri Kurri Aluminium smelter operated at the Hart Rd Loxford site from 1969 to 2012. Formal closure in May 2014 resulted in plans to demolish and remediate the site for future use. Expectation is that the plant will be demolished and remediated for suitable future reuse.

The scope and purpose is to carry out the remediation of the former Hydro Aluminium Smelter Site.

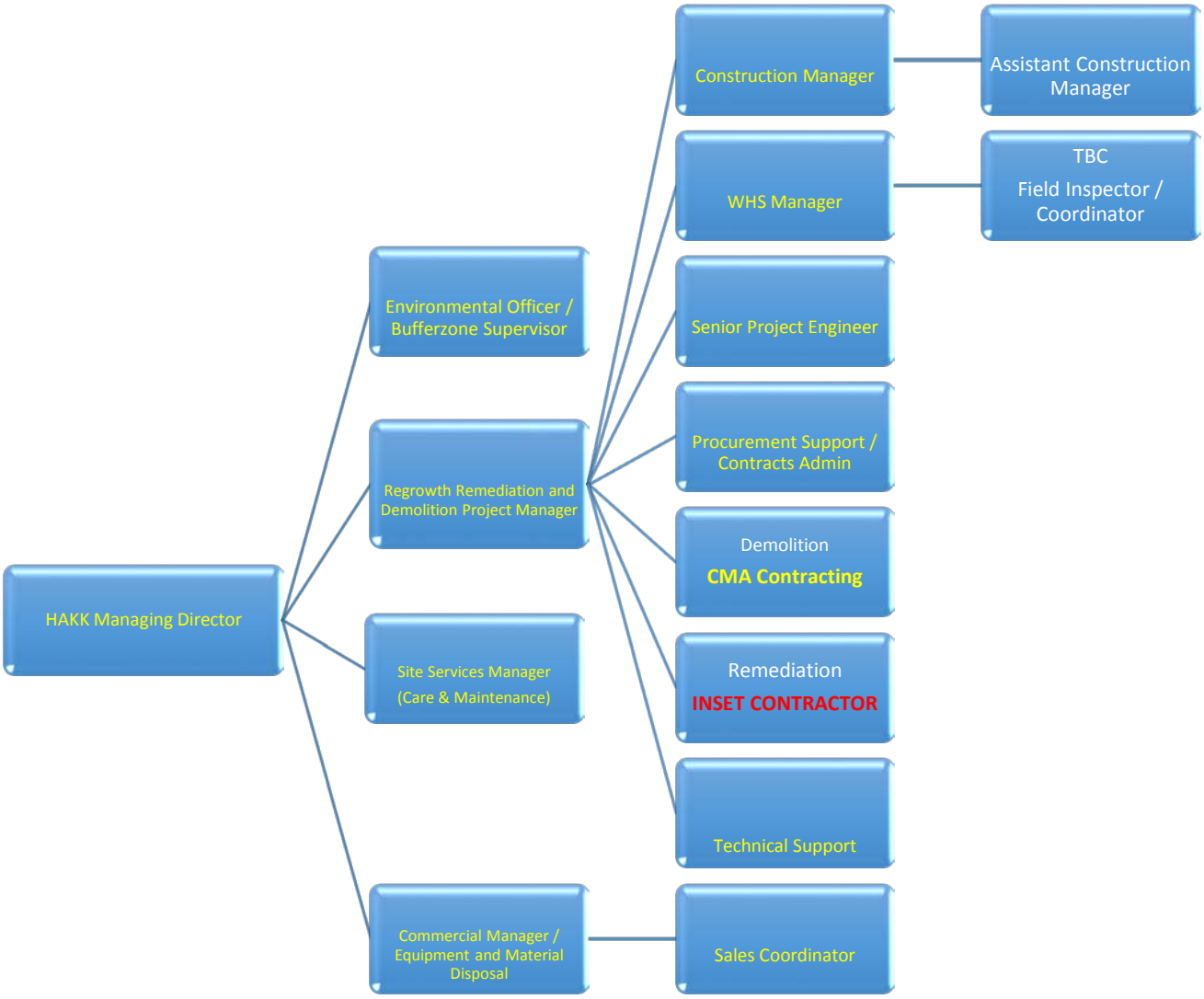
HAKK has identified key activities for the site and has in place a management team to coordinate and set in context the various procedures that will be applied to safely carry out remedial works.

HAKK has a focus on ensuring that all persons conducting business on the smelter site are doing so under the requirements of this HAKK WHS plan, the WHS Act 2011, WHS Regulations 2017, and Codes of Practice including Industry Standards and Guidance Material.

Our commitment is to display leadership in identifying, eliminating, or controlling hazards, preventing incidents that could lead to workplace injury and illness and encouraging all participants on the project to adopt a culture of health and safety leadership, promotion and awareness of hazard identification and risk management.

1.6 Regrowth Project Organisational Chart

The following Organisation Chart demonstrates the positions and personnel involved within the Regrowth Kurri Kurri Project.



2 Roles and Responsibilities

2.1 HAKK - Principal Contractor

The Principal Contractor of this project is responsible for matters including:

- preparing, updating and implementing this WHS Management Plan, including all associated procedures
- identifying and observing all relevant legal WHS requirements
- managing risks associated with the carrying out of remediation work in accordance with the WHS Act and Regulation
- reviewing Safe Work Method Statements (SWMSs) and Job Safety Environment Risk Assessments (JSERAs) prepared by contractors on the project
- planning to do all work safely
- participating in the planning and design stages of trade activities
- identifying WHS training required for an activity
- verifying that workers have undertaken identified WHS training
- communicating and consulting with workers
- investigating hazard reports and ensuring that corrective actions are undertaken
- dispute resolution
- continual review and monitoring of remediation activities, sequence, process and procedures
- Ensuring that the right plant, equipment and personnel to operate are applied to the task
- Investigating incidents

2.2 Remediation – INSERT CONTRACTOR- Principal Contractor

The Principal Contractor of the Remediation project is responsible for matters including:

- preparing, updating and implementing a WHS Management Plan, Remediation Management Plan and all associated procedures
- identifying and observing all relevant legal WHS requirements
- managing risks associated with the carrying out of remediation work in accordance with the WHS Act and Regulation
- reviewing SWMSs and JSERAs prepared by contractors on the project
- planning to do all work safely
- participating in the planning and design stages of trade activities
- identifying WHS training required for an activity
- verifying that workers have undertaken identified WHS training
- communicating and consulting with workers
- investigating hazard reports and ensuring that corrective actions are undertaken
- dispute resolution
- continual review and monitoring of remediation activities, sequence, process and procedures
- Ensuring that the right plant, equipment and personnel to operate are applied to the task
- Investigating incidents and reporting to HAKK in a timely manner

2.3 Contractors

Contractors engaged for this project by HAKK or INSERT CONTRACTORS are responsible for matters including:

- fulfilling the duties of persons conducting a business or undertaking (PCBU) for their own operations
- managing risks associated with the carrying out of remediation work in accordance with the WHS Act and Regulation
- planning to do all work safely
- identifying all high-risk remediation work associated with their activities and ensuring SWMS and JSERA are developed and implemented
- complying with the duties as listed under “Workers” (see 2.4)
- following all safety policies and procedures and site rules
- complying with this WHS Management Plan
- complying with any direction given to them by the principal contactor
- undertaking site-specific induction before starting work and signing off that they have completed this induction
- ensuring the workers they engage undertake site specific inductions
- ensuring they have the correct tools and equipment and these are in a serviceable condition for the task
- follow the safe work method and identify and control the risks associated with the task in their JSERA
- Contractors are responsible for ensuring that safety and health hazards associated with the work they are performing, are satisfactorily controlled and do not pose a risk

2.4 Workers

All workers on this project (including those employed by contractors) are responsible for:

- taking reasonable care of their own health and safety
- taking reasonable care that their conduct does not adversely affect others
- complying with instruction, so far as they are reasonably able
- cooperating and complying with reasonable notified policies and / or procedures
- being actively involved in the formulation of SWMS’s and JSERA’s and understanding the controls to be applied to minimise risk
- raising concerns where uncontrolled risk is evident and the task cannot be completed safely
- Reporting any incident or unsafe condition as soon as reasonably practicable
- Assisting in incident investigations (where required)
- Only operating plant and equipment that they hold current certification and Verification of Competency for
- Presenting to work in a fit condition free from fatigue, alcohol or other drugs

3 General WHS information

3.1 Legislation

Relevant legislation	Tick if applicable
Work Health and Safety Act 2011	☑
Work Health and Safety Regulations 2017	☑

3.2 Codes of Practice and other Guidance Material

Relevant Codes of Practice	Tick if applicable
Safe Work Australia Model COP - **Confined** Spaces	☑
NSW COP - **Construction** Work	☑
NSW COP - Work Health and Safety ***Consultation Co-operation and Co-ordination***	☑
NSW COP - Managing **Electrical** Risks at the Workplace	☑
NSW COP - **Excavation** Work	☑
NSW COP - Managing the risk of ***Falls*** *at Workplaces*	☑
NSW COP - Managing the Work Environment and ***Facilities***	☑
NSW COP - ***First Aid*** *in the Workplace*	☑
NSW COP - Labelling of Workplace **Hazardous** Chemicals	☑
NSW COP - Managing Risks of **Hazardous** Chemicals in the Workplace	☑
NSW COP - Hazardous **Manual** Tasks	☑
NSW COP - Managing **Noise** and Preventing Hearing Loss at Work	☑
NSW COP - Managing Risks of **Plant** in the Workplace	☑
NSW COP - How to Manage Work Health and Safety ***Risks***	☑
Safe Work Australia - Workplace ***Traffic*** *Management Guidance Material*	☑
Safe Work Australia - Working in the vicinity of Overhead and ***Underground*** *Electric Lines Guidance Material*	☑

3.3 WHS Policy

ALUMINIUM METAL
PRIMARY PRODUCTION
KURRI KURRI

HEALTH, SAFETY & ENVIRONMENT POLICY

HSE-POL-01-02

Hydro Aluminium Kurri Kurri Regrowth Goal: Zero Harm

At Hydro Aluminium we are committed to managing the impact of our business on the Health, Safety and Environment of our workers, contractors, visitors and the local community. In fulfilling this responsibility, we have a duty of care to provide so far as practicable, a working environment that is safe and without risks to health, through processes that:

- *Identify, analyse, evaluate or manage risks that could cause an incident, injury or illness to people, property damage or unacceptable impacts on the environment or the community;*
- *Assist workers, contractors and visitors to meet their HSE obligations;*
- *Provide compliance with relevant HSE legislation and conditions of licences under which we operate;*
- *Consider both long term and short-term health, safety, environmental and community impacts when making decisions.*

MANAGEMENT IS COMMITTED TO:	WORKERS & CONTRACTORS ARE REQUIRED TO:
• Providing leadership and engage people in an active way to take responsibility and be accountable for their own safety and that of others. • Undertaking Risk Management activities to manage risks to people in the work environment, including review of work methods and practices. • Compliance with all relevant legislation standards, and other requirements to which Hydro subscribes. • Providing appropriate HS&E training to all workers. • Providing information, resources and supervision enabling workers to undertake their work in a healthy and safe manner. • Consultation with all workers and contractors to enhance the effectiveness of the HSE system. • Ensuring that plant, equipment, and substances are safe and without risk to health when used in accordance with standard operating procedures. • Providing, monitoring, and maintaining systems for safe use, handling, storage and transportation of plant, equipment and substances.	• Carry out work safely and without harm to themselves, others, property, or the environment and in accordance with their training, operating procedures and work instructions. • Stop or not start activities that they believe carry an unacceptable level of risk to themselves and others. • Comply with the Hydro Regrowth Safety Management Plan, HSE Policies, HSE Procedures and programs as appropriate. • Undertake risk assessments of tasks prior to commencing the work. • Actively participate in the reporting of incidents including Personal Injury, Property Damage, and Near Misses. • Report any hazards observed in the workplace or deficiencies with work practice or procedures in a timely manner. • Report any unsafe conditions or environmental issues/concerns that come to their attention. • Ensure appropriate fitness for work and able to perform the task at hand. • Ensure all personnel performing works are adequately trained and competent to perform such works.

Richard Brown
Managing Director
February 2018

Revision 4: February 2018
HSE-POL-01-02 – HEALTH SAFETY & ENVIRONMENT POLICY
UNCONTROLLED COPY – Refer to Hydro Shared Drive for latest revision
Printed On: 8/02/2018

3.4 Additional Policies

HAKK has other policies that apply for activities on the Kurri Kurri Smelter site.

- Alcohol & Other Drugs Policy

4 Risk Management

4.1 Introduction

The system used to identify and control hazards by HAKK is based on a Risk Assessment process. The Risk Assessment process requires several stages of identifying, assessing and controlling hazards.

The identification of hazards is assisted using checklists and team based Risk Assessments, where a range of experience can be drawn from to identify hazards. Many hazards and situations are readily identified and standard controls are used to manage them.

This document nominates the procedures and standards that shall be used on the HAKK site when work involves these and other recognised hazards.

4.2 Risk Assessment Process Overview

The Principal Contractor shall document and submit for acceptance by Hydro Aluminium Kurri Kurri, Safe Work Method Statements for review.

As a minimum, these documents shall be submitted 5 working days prior to commencing work and shall state the following:

- the contractor's representative and Supervisor for the purpose of the Act
- the tasks and activities to be performed
- methodology on how the tasks and activities are to be conducted
- the hazards associated the with tasks/activity
- the proposed method of controlling the hazards identified
- the training (including required licenses, accreditations, permits, certification and the like), experience and any particular attributes required of workers performing the tasks/activities
- The Codes and Regulations the tasks/activities are covered by

The contractor shall ensure all direct and indirect workers are suitably supervised, trained and instructed in the work under the contract performed by the contractor and how the tasks and activities are to be conducted safely, including through:

- Convening and facilitating, or participation in JSERA or their equivalent risk assessments formats, to assess and document the hazards and risks of tasks and activities and develop methods to eliminate or control the hazards and risks
- Co-operative participation in regular safety onsite inspections at times nominated by HAKK
- Immediate discontinuance of any practice (including removal of equipment) considered by HAKK to be dangerous, notwithstanding that the relevant practice, or equipment may have previously been accepted
- Being subjected to and cooperating with SWMS / JSERA or equivalent reviews and/or audit by HAKK to determine the suitability of these risk assessments

The contractor will review each JSERA or its equivalent risk assessment before works commence on a daily basis and each worker shall sign onto the document to demonstrate understanding and commitment to implement the agreed control measures. The contractor shall be able to provide a copy of those reviews to HAKK and/or the principal as required.

A failure by the contractor to comply with the provisions of these requirements shall constitute a fundamental breach of the contract.

The contractor may identify other work specific hazards not covered by HAKK management procedures. Where this happens, the Subcontractor's work methods shall conform to:

- Legislative Requirements
- Codes of Practice
- Risk Assessment and Control Methods

4.3 Identifying Hazards and Managing Risks

The Principal Contractor will ensure systems for identifying hazards and assessing risk (in addition to those identified in Section 5.1) are in place prior to any activities commencing on site and shall utilise the Hierarchy of Controls (see Section 4.4) in conjunction with:

- SWMS and JSERA developed by contractors on the project to control risks associated with high risk remediation work
- using a risk management form to control general remediation risks where necessary
- carrying out regular site audits with a focus on a changing work environment

The Principal Contractor will also identify risks (or require a contractor to do so as appropriate):

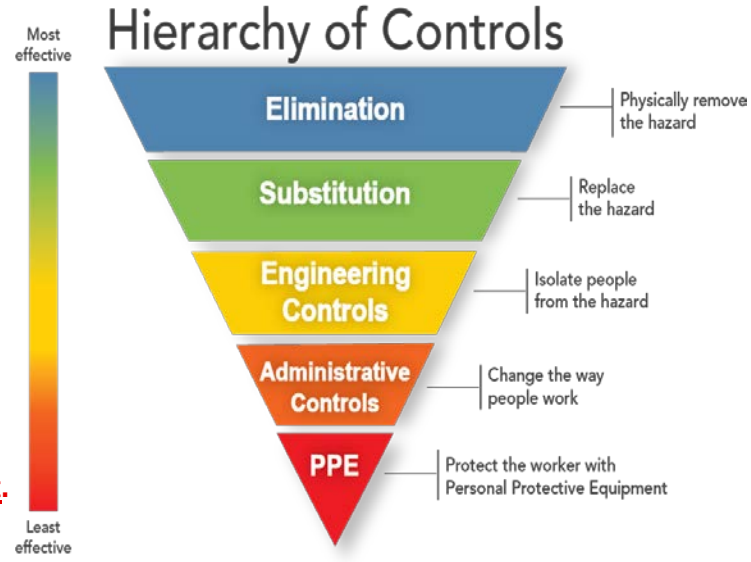
- before introducing any new chemicals
- when introducing a new task
- when new information is received about tasks, procedures, equipment or chemicals.

All hazards that are identified throughout the project must be reported immediately to the Principal Contractor.

4.4 Hierarchy of Control

Where reasonably practical, the Principal Contractor and the subcontractors will manage all risks identified by applying the Hierarchy of Controls as follows:

- **Eliminate**
- **Substitute**
- **Isolate - Engineering controls**
- **Administrative controls**
- **Personal Protective Equipment.**



Where practical, the Principal Contractor and the contractors (as appropriate) will implement risk controls that are high in the order of hierarchy and will implement multiple controls where necessary.

5 High Risk Remediation Work

5.1 High Risk Work

The HAKK Team has identified activities for this project and requires all contractors to develop SWMS's & JSERA's for each of the High Risk Remediation Work activities. Additional SWMS's and JSERA's must also be formulated by contractors for any additional high risk work that is introduced or identified during the project.

High Risk Remediation Work	Potential Risks	Project Specific Examples
Machinery Operators Handling Contaminated Materials	- Exposure to Gases - Exposure to Asbestos	- Removal of Material from the Capped Waste Stockpile - Placement of Material at the Containment Cell
Workers Walking in/ Near Contaminated Materials	- Exposure to Gases - Exposure to Asbestos - Exposure to Leachate/ Contaminated Groundwater - Proximity to Machinery	- Inspection of Capped Waste Stockpile during material removal - Inspection of Containment Cell during material placement - Inspection of Other Smelter Contaminated Sites during material removal
Leachate Management (Pumping/ Removal, Treatment)	- Exposure to Leachate - Exposure to Treatment Chemicals	- Removal of leachate from sumps at Capped Waste Stockpile and Containment Cell - On site leachate treatment
	-	-
	-	-
	-	-
	-	-
	-	-
	-	-
TO BE COMPLETED TO ADDRESAS TASKS DESCRIBED BELOW IN CONSULTATION WITH CONTRACTOR	-	-

Prior to starting work on the project, contractors must provide the Principal Contractor with completed SWMS's / JSERA's. The Principal Contractor will collect and file completed SWMS's / JSERA's in the project folder, which forms part of and supports this WHS Management Plan.

Copies of these statements will be retained by the Principal Contractor for the duration of the project and archived as required under the WHS Regulation.

The Principal Contractor will review the SWMS's / JSERA's where:

- there is a need to change the method of carrying out of the high risk remediation work
- a risk has been identified that is not included and managed within a SWMS or JSERA.

SWMS's / JSERA's are available for inspection at the project office.

5.2 Access Permits

Certain requirements are in place for access to high-risk areas of the Site and high-risk tasks.

The requirement for these will be nominated in risk management documents and nominated on Work Permits as required before the Work Permit can be issued.

All the requirements specified in these Permits shall be met before they can be issued.

Some of the nominated access and task permits are:

- Confined Space Control Measures
- Explosive Tool Control Measures
- Excavation Control Measures
- Hot Work Control Measures
- Crane Lift Control Measures

The specific control requirements to enable the issue of these Permits depend on the circumstances, the hazards present and the level of risk involved.

Some of the main provisions of these requirements are listed below. The full requirements will be issued if required.

Confined Space

Work in a confined space will be identified during the Risk Assessment process.

- Any confined space work shall comply fully with:
    - AS 2865 - Work in a Confined Space
    - Confined spaces Code of Practice and
    - HAKK Confined Spaces Procedure
- The principal requirements of entry into a confined space are:
    - Personnel trained and accredited for confined space entry.
    - A Risk Assessment specifically targeted for the confined space work.
    - Specialised equipment as required to control hazards identified in the Confined Space Risk Assessment. These will generally include as minimum: ventilation and/or breathing apparatus and access and egress equipment.

Restricted Areas

Where the area is not assessed, or recognised as a confined space but still contains hazards, the area may be classified as a restricted area. A Risk Assessment and adequate controls are still required for entry however the entry may be made under the Work Permit without a separate Confined Space Permit.

An area 10 metres wide around each of the Capped Waste Stockpile and the Containment Cell would be managed as Restricted Areas, accessible only to those with the required Work Permit.

The sheds used for the storage of Spent Pot Lining remain under the control of HAKK and they are a Restricted Area, unless a Work Permit has been granted by HAKK.

Explosive Tools

- No explosive power tools are to be brought onto the site without written permission from a HAKK Supervisor.
- All legislative requirements and the requirements of HAKK explosive power tool control measures shall be strictly observed while explosive power tools are on the site.

Hot Work

- No hot work (cutting, welding, grinding or other heat, spark of flame generating process) shall be permitted on the HAKK site without a Work Permit and the satisfactory use of control measures as may be required for the issue of that Permit.
- Welding screens shall be used for all arc welding tasks to protect other persons or traffic from welding flashes.

High Voltage

- No access to high voltage switchyards or control areas is allowed at any time unless specifically authorised and escorted at all times.
- No high voltage work is to be carried out unless personnel are appropriately trained and authorised.

Excavation

- No excavation shall be carried out on the site without an Excavation Permit and the control requirements of that permit fully complied with.
- The HAKK Site Supervisor will advise if an Excavation Permit is required.
- Excavation includes any form of ground penetration including digging, trenching, driving in pegs and stakes etc.

Crane Lifts

- Any non- routine Crane Lift is subject to gaining an approved work permit. This must entail presentation of an approved Safe Lift Plan, Risk Assessment, and Mobile Crane Checklist.

5.3 Licences for High Risk Work

The Principal Contractor require workers or contractors to be licenced / accredited to undertake high-risk work.

Personnel, including contractors engaged on the HAKK site must hold the relevant licence, competencies or accreditation to conduct the works and provide evidence of these matters to the Principal Contractor prior to starting work and at any time when requested by the Principal Contractor.

Types of High Risk Work Licenses	
(CB)	Bridge and Gantry Cranes
(CD)	Derrick Crane
(CN)	Non Slewing Mobile Crane Greater than Three Tonnes Capacity
(CP)	Portal Boom Crane
(CS)	Self Erecting Tower Crane
(C2)	Slewing Mobile Crane up to 20 Tonnes
(C6)	Slewing Mobile Crane up to 60 Tonnes
(C1)	Slewing Mobile Crane up to 100 Tonne
(CO)	Slewing Mobile Crane over 100 Tonnes Capacity
(CT)	Tower Crane
(CV)	Vehicle Loading Crane
(PB)	Concrete Placing Boom
(DG)	Dogging
(RB)	Basic Rigging
(RI)	Intermediate Rigging
(RA)	Advanced Rigging
(SB)	Basic Scaffolding
(SI)	Intermediate Scaffolding
(SA)	Advanced Scaffolding
(LF)	Forklift Truck
(LO)	Order Picking Forklift Truck
(WP)	Boom Type Elevating Work Platform
(HM)	Materials Platform Hoist

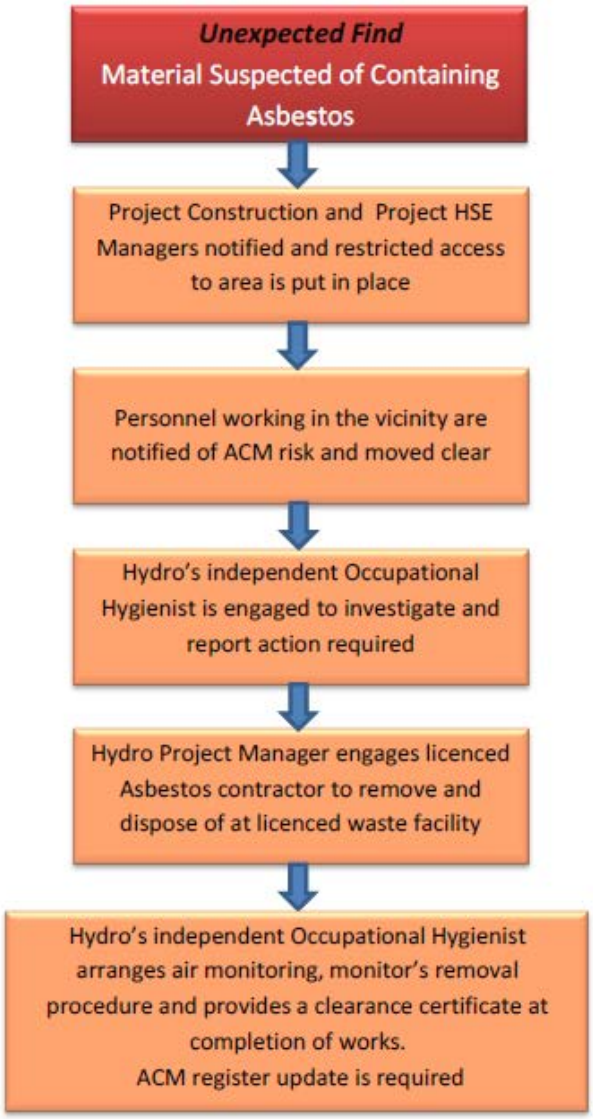
(HP)	Personnel and Material Hoists

5.4 Asbestos

The Principal Contractor requires that:

- all workers understand the Hydro procedures for asbestos and follow the correct removal processes (Hydro Health and Safety Asbestos Management Plan)
- SafeWork NSW is notified five working days before licensed asbestos removal work is commenced
- all workers are trained and use the appropriate personal protective equipment
- only licensed asbestos removalists are used to remove asbestos where the quantity to be remove exceeds the 10 square metre limit or is friable
- the correct signage and controls are in place before any removal of asbestos commences
- the asbestos is contained and disposed of correctly as per the relevant Codes of Practice and the WHS Act and Regulation.

When an unexpected find of asbestos containing material is found on site, the following actions shall be taken.



5.5 Hazardous Materials on Site

The Capped Waste Stockpile comprises approximately 365,000 tonnes of mixed historical wastes arising from the smelter operations and impacted soils lying below the stockpile. The contents of the Capped Waste Stockpile have been approximated from historical site documents and includes spent pot lining, steel, waste anodes, asbestos containing materials and other smelter related wastes. Specific PPE requirements for remediation work within the Capped Waste Stockpile and at the Containment Cell are outlined in Section 9.7.

5.6 Confined Space Work

There are locations on the smelter site that will be deemed a confined space.

This is defined in the Work Health and Safety Regulation with confined space meaning an enclosed or partially enclosed space that—

a) is not designed or intended primarily to be occupied by a person; and

b) is, or is designed or intended to be, at normal atmospheric pressure while any person is in the space; and

c) is or is likely to be a risk to health and safety from—

(i) an atmosphere that does not have a safe oxygen level
(ii) contaminants, including airborne gases, vapours and dusts, that may cause injury from fire or explosion
(iii) harmful concentrations of any airborne contaminant
(iv) engulfment

The Principal Contractor requires that a risk assessment is performed and that confined space control measures are in place prior to any confined space permit being issued. This includes but is not limited to air quality monitoring, access, first aid and rescue requirements, proper sign posting, personnel entry recording and monitoring.

The confined space procedure shall be reviewed and accepted prior to any such work being undertaken.

The Principal Contractors representative shall be notified at the time any confined space is about to be entered as well as the completion of the work.

The standby person will at NO time enter the confined space whilst performing his assigned duties.

All requirements of the WHS Act 2011 and WHS Regulation 2017 and the Code of Practice for Confined Space shall be complied with.

6 Emergency and Incident Response

6.1 Emergency preparedness

The Principal Contractor will:

- train and test all workers and subcontractors regarding the Principal Contractor's emergency plan (including emergency muster points) as part of their induction (this is included in the Principal Contractor's induction presentation)
- display emergency procedures in the site office or other visible location
- check and mark fire extinguishers as serviceable at the beginning of each project and maintain six-monthly inspections thereafter.

  Note: - since closure, abandoned buildings have had their extinguishers removed. Workers or contractors will be required to supply serviced extinguishers appropriate for the task to be undertaken
- train and test personnel on site in relation to the correct use of firefighting equipment
- ensure that first aid trained personnel are identified and that first aid facilities are available (Refer to Section 6.3)
- ensure that hazardous materials are removed where possible or identified and controls in place prior to works taking place.

6.1.1 Emergency Procedure

In the event of a fire or similar emergency evacuation, the Principal Contractor's Emergency Plan requires that on-site personnel:

- stop work immediately and the workplace be vacated if in imminent danger
- assist anyone in the workplace who may not be familiar with the evacuation procedures
- call emergency services on **000 or on 112 from a mobile** phone. Other emergency numbers are on display in the site office (if applicable)
- notify the Principal Contractor as soon as reasonably practical
- assemble in the nominated assembly points until you receive further instructions from the principal contractor or emergency services personnel
- notify site security on **49 370 200 (200 internal phone)** as soon as practicable and give details of the event and location that an emergency has taken place.

6.1.2 Emergency Muster Point

The main site emergency muster point is on the grassed area outside the main gate and south of the main administration office. Dependent on the project activity location and due to the vast size of the site, additional muster points may be allocated or established on differing locations. A site plan illustrating the work area, facilities, traffic routes and the emergency muster point will be displayed in common areas (such as lunch facilities) and also be administered as part of the induction to that specific area.

Sign posting shall also be displayed.

6.1.3 Emergency Contact List For The Site

The Principal Contractor will maintain emergency contact details for all workers on site.

If an incident occurs at the workplace the procedure is:

- immediately notify the Principal Contractor
- do not interfere with the scene of the incident
- depending on the nature and severity of the injury, the Principal Contractor will notify SafeWork NSW (see 6.2 below)

The Principal Contactor will record details of the incident and will ensure any remedial action is taken.

EMERGENCY CONTACT NUMBERS

AMBULANCE POLICE FIRE SERVICE

000 or 112 (mobile)

(BOTH NUMBERS ARE ACCESSIBLE WHILE MOBILE KEY PADS ARE LOCKED)

EMERGENCY CENTRE

Name:	**Hydro Security - Main Gate**
Address:	**Hart Rd Loxford NSW**
Phone:	**49 370 200---- 200 on internal phones**
Operating hours:	**24 hrs**

LOCAL INFORMATION

Police Station:	**131 444**
Poisons Information Centre:	**131126**
Telstra:	**132 999**
Electrical Emergency:	**131 388**
Dial before you dig:	**1100**
Gas Emergency:	**131 909**
Water Emergency: Hunter Water	**1300 657 000**
SafeWork NSW:	**131 050**
EPA	**02 4908 6821**

6.2 Incident Reporting

- All incidents and accidents incurred while working on the HAKK site, shall be reported to the HAKK Management immediately.
- The reporting of incidents and injuries is necessary to investigate and correct deficiencies in control mechanisms. To encourage reporting in the absence of blame or penalty, incident and accident occurrence information (i.e.: the number of injuries sustained) is not used as a performance criteria measure.
- All dangerous occurrences as nominated under the NSW WHS Act 2011 shall be reported immediately to the HAKK Site Supervisor.
- Any incident that has the possibility of being a SafeWork NSW Reportable Incident must be reported to the WHS Manager immediately.

6.3 Notifiable Incidents

The Principal Contractor Management will report the following incidents to SafeWork NSW:

- a death of a person, or
- a serious injury or illness of a person, or
- a dangerous incident.

Section 36 of the WHS Act 2011 describes a serious injury or illness as:

Serious injury or illness of a person means an injury or illness requiring the person to have:

(a) immediate treatment as an in-patient in a hospital, or

(b) immediate treatment for:

(i) the amputation of any part of his or her body, or

(ii) a serious head injury, or

(iii) a serious eye injury, or

(iv) a serious burn, or

(v) the separation of his or her skin from an underlying tissue (such as degloving or scalping), or

(vi) a spinal injury, or

(vii) the loss of a bodily function, or

(viii) serious lacerations, or

(c) medical treatment within 48 hours of exposure to a substance, and includes any other injury or illness prescribed by the regulations but does not include an illness or injury of a prescribed kind.

Section 37 of the WHS Act 2011 describes a dangerous incident as:

A dangerous incident means an incident in relation to a workplace that exposes a worker or any other person to a serious risk to a person's health or safety emanating from an immediate or imminent exposure to:

(a) an uncontrolled escape, spillage, or leakage of a substance, or

(b) an uncontrolled implosion, explosion, or fire, or

(c) an uncontrolled escape of gas or steam, or

(d) an uncontrolled escape of a pressurized substance, or

(e) electric shock, or

(f) the fall or release from a height of any plant, substance, or thing, or

(g) the collapse, overturning, failure, or malfunction of, or damage to, any plant that is required to be authorised for use in accordance with the regulations, or

(h) the collapse or partial collapse of a structure, or

(i) the collapse or failure of an excavation or of any shoring supporting an excavation, or

(j) the inrush of water, mud or gas in workings, in an underground excavation or tunnel, or

(k) the interruption of the main system of ventilation in an underground excavation or tunnel, or

(l) any other event prescribed by the regulations, but does not include an incident of a prescribed kind.

In the event of such an occurrence:

- notify the Principal Contractor who must notify SafeWork NSW by the quickest means possible. The number for SafeWork NSW is **13 10 50** – this number is on the emergency contact list
- fax / email an Incident Notification Form to SafeWork NSW as soon as possible following the incident (must be within 48 hours)
- do not disturb the site until given clearance by the Principal Contractor who will take advice from SafeWork NSW
- the Principal Contractor will confirm the reporting requirements required by SafeWork NSW and the Police
- the Principal Contractor shall only give permission to disturb the site when notified by SafeWork NSW that a formal investigation is not required
- if a formal investigation is required, the Principal Contractor will secure the site
- the Principal Contractor will ensure that corrective actions are completed adequately

6.4 First aid

- HAKK will supply first aid equipment and first aid personnel for their work area, which will be available in the main administration office, HAKK Security gate house, and in site vehicles.
- INSERT CONTRACTOR Limited shall supply first aid equipment and first aid personnel for their work area.
- If anyone becomes aware that an item of first aid is out of stock or out of date, they are to notify the associated Principal Contractor immediately.
- First aid should be administered by trained first aid personnel.

Contractors shall ensure that their workforce consists of qualified First Aid personnel and supply adequate First Aid equipment.

In the event of a person being injured, trained first aid personnel should:

- stabilise the person and administer first aid
- phone an ambulance (depending on the extent of the injuries)
- notify the Principal Contractor and / or HAKK immediately if emergency services are called. In all other circumstances notify the Principal Contractor as soon as practicable.
- Notify site security on **49 370 200 as soon as practicable** and give detail of location where help is required.

7 Induction and training

7.1 Worker Induction

All personnel entering the main security gate to perform works within the HAKK site will be required to undergo a Site Induction.

This induction includes the following:

- the expectations outlined in this WHS Management Plan, including all policies and procedures
- the emergency muster point
- the site rules
- the facilities
- any site specific hazards
- high risk work activities
- Personal protective equipment required to enter the site

INSERT CONTRACTOR personnel will undertake the Remediation Site Induction run by a INSERT CONTRACTOR Representative.

INSERT CONTRACTOR will conduct a Project Specific Induction to ensure all personnel conducting works within the Remediation Project are familiar with the WHS&E Requirements for both HAKK and INSERT CONTRACTOR. HAKK Representatives will attend and review the Principal Contractor induction throughout the contracted works.

7.2 Worker Training

The Principal Contractor will not permit workers to carry out work unless they:

- are trained and competent for the work to be undertaken
- are trained to deal with any risks associated with the work and understand the control measures in place
- have had relevant construction induction (white card) training
- are provided the required on-site training and supervision is provided where required
- undertake external training for specific tasks where required
- have high risk licences for all high risk work available and a register is maintained

Contractors must consult with the Principal Contractor to ensure their workers are appropriately trained and competent prior to commencing work

8 Consultation and Communication

8.1 Consultation

The Principal Contractor will consult with all workers and contractors on WHS issues for this project:

- at toolbox meetings where anyone can raise issues for discussion
- informally during the planning of activities or the development of SWMS by contractors
- when changes to workplace arrangements could affect the health and safety of workers
- during investigations into any incident to establish details of the incident or to formulate corrective action to prevent the incident from re-occurring
- formal progress and remediation meetings
- Regrowth Project Safety Committee Meetings

The Principal Contractor will also consult with contractors and suppliers on WHS issues associated with any products or services provided for the contract:

- during the negotiation phase before agreeing on the work requirements
- before starting any contractor operations
- when any changes to workplace arrangements occur that could affect the health and safety of the contractors or affect their work procedures
- during review of SWMS's and JSERA's

8.2 Communication

The Principal Contractor will provide workers and contractors with this WHS Management Plan before starting work on the project. Contractors are expected to make their workers aware of all WHS requirements.

Records of all communication shall be kept.

The Principal Contractor will communicate relevant WHS information to everyone involved in this project by:

- inductions
- pre-start meetings
- toolbox meetings
- incident reports and outcomes
- distributing safety alerts or guidance material about industry specific hazards/incidents
- review of SWMS's and JSERA's, highlighting known plant hazards and ensuring proposed controls are adequate
- Site Safety Notifications

8.2.1 Pre-start Meetings

The purpose of pre-start meetings is to ensure all information on hazards and the controls to be implemented are in place, and understood by personnel undertaking the works.

They also provide the opportunity for workers to ask questions, bring up areas of concern or uncertainty, and provide last minute input into specific work or site hazards that may be lacking from the risk assessment process or were not evident at the time.

Pre-start meetings are to be conducted daily and are the responsibility of each contractor. Failure to satisfactorily undertake them when required is considered a breach of the contract requirement, and could result in suspension of work or removal from the site.

The requirements for pre-start meetings are, unless otherwise indicated, as follows:

- contractors, unless otherwise nominated and agreed to, are responsible for conducting pre-start meetings and to ensure:
    - Pre-start meetings are held at the beginning of each shift,
    - all workers are in attendance,
    - a record of attendance is taken,
- information contained in relevant Risk Assessments and Work Permits, are discussed and understood by the Subcontractor workers under their control.
- Evidence of the pre-start meeting (in the form of meeting minutes) may be requested by HAKK.

8.2.2 Toolbox Meetings

Weekly toolbox meetings shall be undertaken by each contractor on-site. These meetings will be facilitated by the contractor Supervisor and may include the following items:

- issues of concern raised by workers
- work methods
- accidents or near misses
- incident investigation findings
- other activities in close proximity that may introduce hazards or other factors to the area e.g.: vehicle movements, noise or fumes generated
- changes to work environment
- items raised by HAKK for communication to all site personnel
- general WHS&E items for discussion
- Evidence of the toolbox meeting (in the form of meeting minutes) may be requested by HAKK

8.3 Disciplinary Procedures

Disciplinary action will be taken against persons that deliberately infringe the requirements of this plan, the site safety rules or are in breach of other legislative requirements.

Actions may include a verbal warning, written notification or complete removal/suspension from the project.

For a serious breach of safety, a person or persons may be immediately dismissed and removed from site.

9 Site Safety Procedures

9.1 Site rules

Site personnel and contractors shall carry out works on site as per the site rules and **HAKK Site Induction.** All persons entering the Kurri Kurri site shall take all reasonable precautions to ensure the Health and Safety of persons including:

- The Principal Contractor workers and visitors
- Other Contractors
- The Contractor's workers
- Sub-Contractors
- Third parties

Site personnel and contractors shall take all reasonable precautions to ensure environmental contamination does not occur.

9.2 Site amenities

- Toilets and drinking water will be provided on site at nominated locations
- All workers are to have good hygiene standards and clean up after themselves
- Demountable amenities may be required if working in remote locations on site
- Remediation Offices and cribbing facilities (INSERT CONTRACTOR) will be located INSERT LOCATION. INSERT CONTRACTOR will be responsible for the provision of services for their facilities during the Remediation works

9.3 Mobile Phone use on site

The use of personal mobile phones in a work area (non Company supplied) is restricted unless agreed arrangements have been made between management and the worker or the Principal Contractor and the Contractor.

Use of mobile phones is prohibited whilst travelling in a motor vehicle unless the vehicle is fitted with a hands free device.

Personnel who are carrying mobile phones and are on foot shall cease walking, ensure they are in a safe position before answering, making a call, checking emails or texting.

9.4 Site security

The Principal Contractor, as well as appointed contractors will, so far as reasonably practicable, secure the site by:

- keeping the work area secure during the project
- erecting a fence to prevent unauthorised access where required to do so under the WHS Regulation
- locking gates to the site outside normal hours of operation
- HAKK shall maintain site security services stationed at the main gate, roving patrols of the HAKK controlled work areas, and swipe card access for entering site

Workers and contractors are required to keep the site secure, for example by closing or locking gates and regular inspection and maintenance of security fencing.

9.5 Environment

- All workers shall ensure operations are conducted in a manner that shall prevent pollution and comply with the applicable laws, regulations and HAKK requirements regarding environmental protection

- No rubbish, waste, oil or other pollutants shall be discharged or allowed to escape from the worker's equipment
- Contractors are responsible for the removal and lawful disposal of materials used or generated by them, relating to the work and as specified in the contract scope of work
- Pollution or contamination caused by the contractor shall be cleaned up by the contractor at the contractor's expense

9.6 Site signage

The Principal Contractor will display signs on the entrance of each site including:

- the principal contractor's name, contact details and after-hours telephone number
- Supervisor's name and contact number
- the location of the site office

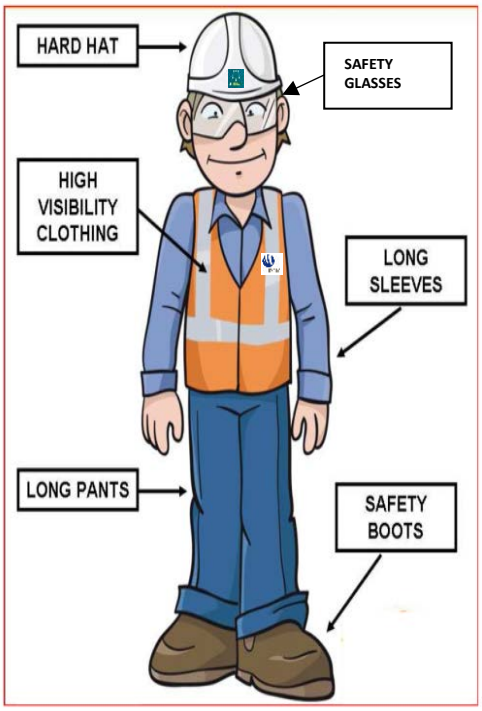
The Principal Contractor as well as its contractors will also display:

- PPE requirements for entering the site as well as speed limits and any other mandatory requirement as set out by HAKK
- Any signs required by the Cessnock City Council as required under their conditions of consent

All signage will be clearly visible from outside the work area where the activities are being undertaken.

9.7 Personal Protective Equipment

The Principal Contractor and its contractors will manage the risks associated with remediation work by requiring personnel to utilise the personal protective equipment (**PPE**) provided to workers on site.



Contractors must ensure that the PPE is:

- suitable for the nature of the work and any hazard associated with the work
- a suitable size and fit ensuring it is reasonably comfortable for the worker who is to use or wear it
- maintained, repaired or replaced so that it continues to minimise risk to the worker by
    - ensuring it is clean and hygienic
    - ensuring it is in good working order
    - ensuring it is used or worn by the worker, so far as is reasonably practicable

Contractors must also:

- provide workers with information, training and instruction in the proper use, wearing, storage and maintenance of PPE
- ensure that any other person at the workplace (such as site visitors) is appropriately provided with PPE to wear when entering the site

Workers must:

- follow all instructions to wear and use PPE as per the manufacturers specification
- take reasonable care of PPE
- assess the task and ensure that the correct PPE is being applied

9.7.1 Contaminated Materials PPE Requirements

Specific PPE requirements for remediation associated with the handling of contaminated materials at the Capped Waste Stockpile, Containment Cell and other contaminated soils are:

- Appropriate personal protective equipment must be provided to workers who are undertaking activities in or within 10 metres of the Capped Waste Stockpile and the Containment Cell; and in other contaminated sites. The equipment will remove exposure pathways relating to dermal exposure, incidental ingestion and inhalation. This must include:
    - Waterproof boots, pants and long sleeved shirt as a minimum. Face shields are required for personnel working in close proximity to exposed groundwater (when in locations and situations where splashing could result in incidental ingestion of groundwater and/or eye and skin contact).
    - Appropriate masks are required to prevent dust (including asbestos) inhalation.
    - A respirator appropriate for ammonia, methane, hydrogen, hydrogen cyanide and hydrogen sulfide is to be available and ready to be used for all workers at the Capped Waste Stockpile.
- Real-time ambient air monitoring must be undertaken at several locations around the Capped Waste Stockpile when waste from the Capped Waste Stockpile is exposed. At a minimum, the ambient air would be monitored for concentrations of ammonia and hydrogen cyanide gases, and airborne asbestos fibres.
- Real-time ambient air monitoring must also be undertaken inside machinery cabins at the Capped Waste Stockpile, and workers within these housings would also have appropriate respirators available.

Personnel required to undertake tasks at the Capped Waste Stockpile, Containment Cell and other contaminated soils locations would need to be trained in the use of the required PPE and the in-cabin monitoring equipment (for the machinery operators).

9.8 Managing Hazards Specified in the Regulations

9.8.1 Falls from Heights

The Principal Contractor will manage the risks associated with falls from heights. This will include the Principal Contractor requiring a contractor to:

- ensure that where practicable, any work involving the risk of a fall is undertaken on the ground or on a solid construction (such as an elevated work platform)
- where this is not practicable, provide a fall prevention device such as secure fencing, edge protection, working platforms and/or covers
- where this is not practicable, provide a work positioning system such as plant or a structure (other than a temporary work platform) that enables a person to be positioned and safely supported
- where this is not practicable, provide a fall arrest system such as a safety harness system. Workers will be trained in emergency procedures for fall arrest systems
- apply a fall restraint where a harness and lanyard restrict personnel from a fall zone
- consider the fall zone and possible “pendulum effect”
- Ensure any voids created during the remediation process are either backfilled immediately or solid barricading is installed to ensure the fall risk is eliminated

When undertaking work involving the risk of a fall from height, workers must:

- follow all instructions

- work with a buddy when using a ladder
- only use approved work platforms
- assess climate – (wind, rain, dust, sufficient light etc.)
- assess the surface that requires access, (corrosion, stability, gradient, slip possibility / grip etc.)
- assess that the equipment being used is suitable for the task and fit for use. Inspection tags on harnesses and any fall prevention equipment to be current
- check that a suitable anchor point is available and can withstand the force of a fall
- static lines are to be rated, inspected and in good condition.
- have a rescue plan attached to their SWMS's / JSERA's

9.8.2 Falling Objects

Where practical, the Principal Contractor will manage the risks associated with falling objects. This will include requiring contractors to use control measures such as barriers, toe-boards and by storing and stacking materials safely.

Where this is not possible, a risk assessment must be undertaken and appropriate control measures implemented to manage the risk of injuries from falling objects.

Some areas of the plant such as the pot rooms and the pot room basement area will require barricading or demarcating of work zones due to falling object hazards being a definite risk for "Personnel Working Below".

Other areas of the plant contain dilapidated structures where there is a risk of falling debris. In the first instance, pedestrians on foot should avoid these areas. These risks will need to be controlled within the JSERA's / SWMS's for the works.

Additional risks of falling objects will be present during the internal strip out works during remediation. Control measures will be identified, communicated, and implemented as the works progress.

9.8.4 Excavation Work & Trenching

Anyone undertaking excavation work will not be permitted by the Principal Contractor to start work unless they have:

- obtained an excavation permit
- investigated any underground services that may be affected by their works, before starting work
- implemented control measures to avoid direct or inadvertent contact with underground services
- pot-hole dug (by hand) to expose existing services before any mechanical excavation near the services
- consider ground stability

Any issues must be reported to the Principal Contractor.

A contractor's SWMS and JSERA are to accompany this WHS plan for trenches of at least 1.5 metres deep. Contractors must ensure their workers are familiar with and implement the control measures in the SWMS/ JSERA.

9.8.5 Work Near Overhead or Underground Essential Services

The Principal Contractor will manage the risks associated with working in the vicinity of an overhead or underground power line. If maintaining a safe distance is not reasonably practical, the Principal Contractor and/or a contractor will be required to:

- assess the risk associated with the proposed work
- implement control measures consistent with the risk assessment
- contact and consult with the local essential services provider

For excavation work near underground essential services:

The Principal Contractor will:

- take all reasonable steps to obtain current underground essential services information before directing or allowing the excavation work to start
- provide this information to any person engaged to carry out the excavation work
- consider this information when carrying out, directing, or allowing the carrying out of the excavation work
- ensure this information is available for inspection

Contractors must comply with the following rules:

For work near overhead power lines up to and including 132kV:

- work is not permitted within 3 metres of overhead power lines
- the Principal Contractor (or contractor in charge of the work) must have written authority from the electrical supply authority to work within the “no go” (exclusion) zone
- a safety watcher shall be used if using plant or equipment in the vicinity of overhead power lines

For work near overhead power lines of greater than 133kV:

- work is not permitted within 8 metres of overhead power lines
- the principal contractor (or contractor in charge of the work) must have written authority from the electrical supply authority to work within the “no go” (exclusion) zone
- safety watcher shall be used if using plant or equipment in the vicinity of HV overhead power lines

9.8.6 Isolation

Several requirements are to be observed with isolations:

- No worker can perform any isolation unless specifically authorised and instructed by HAKK
- Only HAKK authorised worker is allowed to authorise and perform isolations. Where workers are not authorised to perform isolations, HAKK will isolate and supervise the attachment of personal protection locks and tags by the contractor as required under HAKK isolation procedures
- All personnel working on energised equipment shall be required to have a personal protection lock and tag on the specified isolator and follow the HAKK Isolation procedure (LOTO) requirements
- The issue and sign off, of the work permit is the contractor’s notification that the isolation has been effected

9.8.7 Electrical

- All electrical power tools, leads and portable electrical equipment shall be tagged and inspected in accordance with the NSW Code of Practice for Managing Electrical Risks at the Workplace.
- Power supplied to the site must only come from:
    - an electricity distributers main
    - an existing switchboard permanently installed at the premises
    - a compliant low voltage generator
    - a compliant inverter. (to be approved by The Principal Contractor management)
- Switchboards and distribution boards used on site must:
    - be of robust construction and materials capable of withstanding damage from the weather and other environmental and site influences (IP23 minimum rating)
    - be securely attached to a post, pole, wall or other structure unless it is of a stable freestanding design able to withstand external forces likely to be present
    - incorporate suitable support and protection for flexible cords and cables and prevent mechanical strain to the cable connections inside the board
    - protect all live parts at all times
    - be individually distinguished by numbers, letters or a combination of both (where multiple boards are present)
- Flexible cords used on construction sites must be rated heavy duty.
- To avoid confusion with individual earthing conductors, green sheathed flexible power cords must not be used on site.
- Flexible cords must be either protected by a suitable enclosure or barrier (flexible or rigid conduit) or located where they are not subjected to mechanical damage, damage by liquids or high temperature (e.g. Leads must be elevated on stands or hung from nonconductive support brackets).
- The Principal Contractor will monitor contractors to verify their leads do not exceed the maximum length as stated in Table 1 of AS3012 below:

Rated current	Conductor size	Maximum length in metres
10amp	1.5mm 2.5mm 4.0mm	35 60 100
15/16 amp	1.5m 2.5m 4.0mm	25 40 65
20 amp	2.5mm 4.0m 6.0mm	30 50 75

- The Principal Contractor and its contractors will maintain an in-service inspection and test regime for all portable electrical leads, tools and earth leakage devices (or RCD's).
- The Principal Contractor will verify that after the equipment has been inspected and tested, it will be fitted with a durable, non-reusable, non-metallic tag. The tag will include the name of the person or company who performed the test and the test and re-test date.
- Records of all inspections, tests, repairs and faults related to all electrical equipment will be recorded in a "testing and tagging" register.
- RCDs and portable equipment must be inspected, tested and tagged every 3 months. Electrical equipment used in hostile environments should be inspected more frequently

- Workers must conduct an RCD push button test after connection to a socket and before connection to equipment at least once a day.
- Workers must report any damaged electrical equipment to the principal contractor. It will be removed from service and either repaired or replaced and subsequently inspected and tested as required.
- New electrical equipment must be recorded in the register and subjected to the in-service testing regime within the first 3 months of service.

9.8.8 Plant and Equipment

The Principal Contractor and its engaged contractors will manage the risks associated with working on the project including in relation to all plant and equipment used on site. Such plant and equipment must comply with the requirements of the WHS Regulations and codes of practices.

The Principal Contractor requires that:

- plant and equipment is used only for the purpose for which it was designed
- all health and safety features and warning devices on plant are used
- all information, training and instruction provided must be followed
- guarding must be permanently fixed and is not permitted to be removed
- no person other than the operator may ride on the plant unless the person is provided with a level of protection that is equivalent to that provided to the operator
- maintenance/ servicing and testing is carried out and logged
- check equipment is “fit for use” each shift
- all plant is regularly maintained, inspected and tested by a relevant competent person
- all plant that lifts or suspends loads is specifically designed to lift or suspend that load.
- all safe guards are in place and operational. (e.g. fire extinguishers, E stops, flashing lights etc)
- the plant operator is ticketed or holds competencies in the use of the equipment
- Site vehicles and trucks are well maintained, road worthy and that personnel are licensed to operate.
- persons operating unregulated Plant and equipment shall be instructed in their safe use
- hire equipment shall be supplied with safe use instructions.
- mobile plant must have a specific Plant Hazard Risk Assessment for the work to be done
- Specific control measures such as fully sealed cabins and HEPA filtered A/C systems shall be applied

9.8.9 Welders and Generators

- All welders and generators shall be inspected and used in accordance with the SafeWork Code of Practice for Managing Electrical Risks at the Workplace.
- All welding 240V power outlets are to be protected by Voltage Reducing Devices (VRD’s) which are inspected according to the above Code of Practice.
- All welding works are to be carried out in accordance with the SafeWork Code of Practice for Welding Processes.

9.8.10 LPG, Oxygen, Acetylene and other Compressed Gas

- All portable gas should be stored and used in accordance with the NSW Dangerous Goods Regulations, and in accordance with the requirements of the HAKK General Site Safety Rules.
- All oxygen and acetylene / propane sets are to be secured and have flashback arrestors fitted to both ends of the hoses

9.9 Managing Other Remediation Hazards

9.9.1 Manual handling

The Principal Contractor and its engaged contractors will manage hazards associated with manual handling. The Principal Contractor requires that:

- all users follow good manual handling practices
- risk assessment of loads or tasks occurs
- mechanical lifting aids are used where applicable
- appropriate PPE is provided to workers

9.9.2 Chemicals and Substances

- No hazardous substance shall be brought onto the site unless accepted by HAKK.
- The use and storage of chemicals and substances shall comply with the SafeWork Code of Practice - Managing Risks of Hazardous Chemicals in the Workplace.
- On award of contract, Safety Data Sheets shall be submitted for all hazardous substances to the HAKK Site Supervisor not later than 5 working days prior to them being required, to allow for the HAKK acceptance process.
- Chemical labelling and safety data sheets shall be compliant with Globally Harmonized System of Classification and Labelling of Chemicals (GHS), third edition
- All hazardous substances approved to be brought on to the site shall be transported, stored and handled in accordance with the requirements of the NSW Hazardous Substances Regulations and AS 1940 and AS 1596.

9.9.3 Slips, trips and falls

The Principal Contractor and its engaged contractors will manage hazards associated with slips, trips and falls. The Principal Contractor requires that:

- slips, trips and falls checklist are used as required
- visual checks are conducted for hazards that could cause someone to slip, trip or fall
- workers keep the site tidy as part of the written site rules
- regular audits on work areas are conducted
- pre-start meetings cover the importance of housekeeping and engagement of personnel to be proactive in the rectification of any hazards identified in work areas
- Protecting openings or voids created or discovered during works, eliminating the chance of fall injury

9.9.4 Hand Operated and Power Tool Use

The Principal Contractor and its engaged contractors will manage hazards of hand operated and power tools. The Principal Contractor requires that:

- tools are regularly checked to ensure they are in a safe working order
- all electrical tools are recorded in a test and tag register
- electrical tools are tested and tagged every 3 months (as per AS 3760-2010)
- any issues identified with power tools are communicated to workers through a toolbox meeting

Before using power tools, workers must ensure:

- electrical connections are secure
- electricity supply is through an RCD
- safety guards are in position
- the machine is switched off before activating the electricity supply
- appropriate PPE is used as required by manufacturer's guidelines or as guided by the principal contractor
- The tool is being used for the purpose for which it is designed
- The operator is competent in its use
- The tool is not restricted on site (e.g. 9" grinders or explosive power tools)

Workers must report any issues with power tools to the Principal Contractor. Unsafe tools will be tagged out of service and removed from the work area

9.9.5 Sun Safety

All persons on site should:

- try and work in shaded areas or erect sun shades
- wear adequate clothing (e.g. hat broad brims) and other protection methods (e.g. sunscreen) to protect themselves from the effects of working while exposed to UV rays
- manage working in the sun to avoid dehydration and heat stress related illnesses
- promote awareness of UV ratings and the harmful effects of too much sun
- encourage self-screening and the seeking of advice if any skin abnormalities are discovered

9.9.6 Site Traffic Movements and Mobile Plant

The Principal Contractor or their engaged contractors will manage risks associated with traffic management in relation to the project. The Principal Contractor requires that;

- all vehicles on site are to be road worthy
- drivers and operators to be licenced for the vehicle or machine being operated
- speed limits sign posted across the site and adhered to
- alternate traffic routes to perform project activities will be set out on a Traffic Management Plan, informing all relevant personnel on site inclusive of security.
- sign posting of traffic directions, stop and give way etc.
- delineation, safety kerbs, berms and barriers as required
- maintain crossing and walkways for foot traffic

9.9.7 Mobile Plant Handling Contaminated Materials

The Principal Contractor requires that those operators of mobile plant to be used in the removal of material from the Capped Waste Stockpile and other contaminated sites, and in the placement of material in the Containment Cell:

- Enter the cabin a minimum of 10 metres from the Capped Waste Stockpile, Containment Cell or other contaminated sites to be remediated
- Prior to operating the machinery, confirm that the PPE and monitoring equipment described in Section 9.7 is present and operating effectively (as applicable)
- Not exit the cabin unless it is a minimum of 10 metres from the Capped Waste Stockpile, Containment Cell or other contaminated sites to be remediated; or the operator is wearing the required PPE as described in Section 9.7

The Principal Contractor requires that the cabins of all machinery used in the removal of material from the Capped Waste Stockpile and other contaminated sites, and in the placement of material in the Containment Cell are regularly inspected to confirm that the cabin is fully sealed and that the air conditioning filters are maintained as required by the supplier.

9.9.8 Housekeeping

- All materials are to be safely stored in areas designated for this purpose.
- Work areas shall remain ordered and free of unnecessary or surplus materials.
- Rubbish shall be cleared and removed on a regular basis.
- Upon completion of the project the Subcontractor shall remove all facilities, equipment, temporary works and scrap materials unless otherwise specified in the contract scope of work.

9.9.9 Kangaroos, Snakes, Spiders and Other Wildlife

As the majority of the site has been closed for the past number of years, wildlife, such as kangaroos, rabbits, foxes and birds have made this site their home. All personnel are to stick to designated pedestrian access ways when walking through the site.

Kangaroos

Kangaroos are often portrayed in the media as friendly and cuddly Australian cultural icons. However, they can hurt people.

The risk of being attacked by a kangaroo is very low. Several thousand people seek medical attention each year for injuries from domestic pets, while fewer than five people in NSW are treated for kangaroo-related injuries. The greatest risk is in areas where people have altered kangaroos' natural habitat and feeding patterns.

Kangaroo attacks may occur where:

- their numbers, movements and group structure have changed because kangaroos' natural predators are no longer present, or new habitat has been provided with the creation of dams, shelter and pastures
- kangaroos have lost their instinctive fear of humans because people have fed or handled them
- a kangaroo sees a person as a sparring partner or threat to themselves, their offspring or their dominance of the group
- a kangaroo is cornered or startled
- female kangaroos are weaning their young
- a habituated kangaroo (a kangaroo who is used to people) has aggressive traits.

A kangaroo will attack a person as if they were another kangaroo. It may push or grapple with its forepaws or sit back and kick out with its hind legs. As resulting injuries can be serious, avoiding conflict with kangaroos is vital.

Avoiding Kangaroo related risks

- Do not walk directly towards a kangaroo.
- Do not stand up tall, stare or hold your arms out towards a kangaroo.
- Do not go near kangaroos engaged in courtship or mating behaviour – for example, males sniffing, touching or moving round with females.
- Do not go near male kangaroos that are sparring, fighting or showing off their size and strength to each other.
- Do not go near a kangaroo that is growling or clucking.
- Do not move between a female and her joey.

Risks associated with wildlife such as Kangaroos should be discussed at Toolbox Meetings to ensure the workforce are kept informed.

Snakes

Australia has some 140 species of land snake, and around 32 species of sea snakes in Australian waters. Some 100 Australian snakes are venomous, although only 12 are likely to inflict a wound that could kill you.

The most dangerous snakes belong to the front-fanged group, which in NSW include the tiger snake, brown snake, death adder, mulga or king brown snake and a few species of sea snake.

Australia's other snakes are the solid-toothed non-venomous snakes (such as pythons, blind snakes and file snakes) and venomous rear-fanged snakes (such as the brown tree snake and mangrove snakes). All native snakes in NSW are protected under the *National Parks and Wildlife Act 1974*.

Snakes are not naturally aggressive and always prefer to retreat. They will only attack humans if hurt or provoked - most bites occur when people try to kill or capture snakes. If you come across a snake on the site, just calmly walk the other way and report the location to a HAKK Representative as soon as possible.

4

Spiders

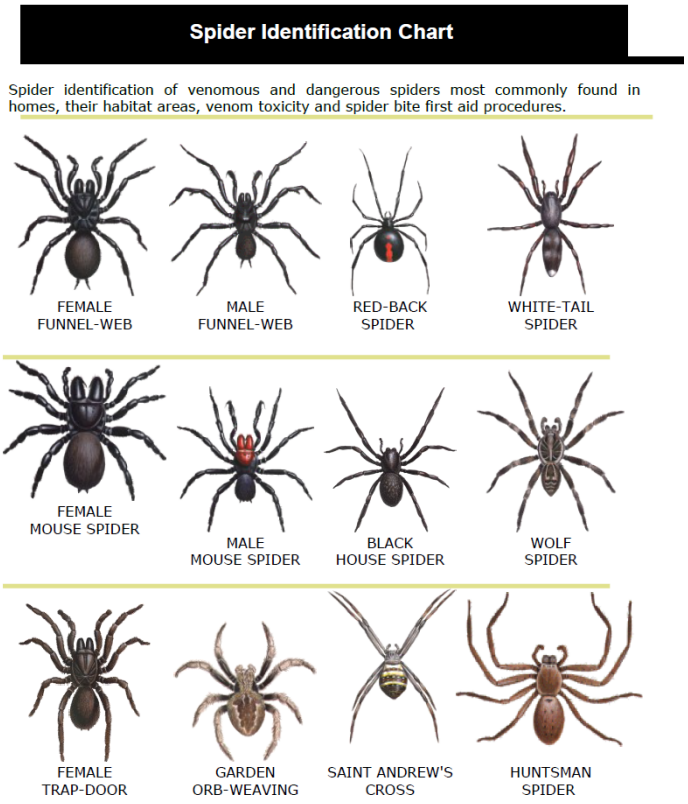
Spiders can be found all over the site in places such as workshops, offices, garden areas and pedestrian walkways.

Inspect your work area prior to commencing works to determine if spiders / spider webs are in your way.

Ensure gloves are worn when handling materials on site to minimise the potential for a spider bite.

If bitten by a spider, report the bite as soon as possible to your immediate Supervisor and seek medical assistance.

Where possible, attempt to take a clear photo of the spider front on, and another of its body from above. Not all spiders live everywhere, so an expert is needed to identify which spider you have encountered.



10 Audits and Inspections

The goal of undertaking Audits and Inspections on the Regrowth Project is to recognize positive behaviours and work practices, identifying areas in need of improvement and assessing how tasks are being undertaken as well as the environment in which they are being performed.

The interactive presence with site personnel and the information captured helps assist with creating a safe working culture

10.1 Walk, Observe, Communicate (WOC)

A WOC is a structured program of workplace observations to initiate discussions based on specific or general issues.

The purpose of WOC is to:

- Coach, motivate and facilitate positive behaviours and approaches to work.
- Identify and correct issues and hazards in the work area including unsafe acts and conditions.
- Prevent injury, damage and lost production by developing a culture of commitment to resolving their underlying causes in the workplace.
- Reinforce and raise standards – 'The standard we achieve is the standard we walk past'.
- Eliminate injuries, damage and waste.

WOC sessions are NOT policing exercises. Their success is based on open and honest discussion of the issues. The focus must be on identifying causes not attributing blame.

Where continued non-compliance is observed disciplinary action must be implemented in accordance with Site policy, but separate from the WOC process.

Management shall undertake WOC's on their work areas to ensure the abovementioned purposes are conducted.

Completed WOC's shall be forwarded to the WHS Manager for review and record management.

10.2 Weekly Safety Inspection

In order to ensure the safety and welfare of personnel on site, Weekly Safety Inspections shall be undertaken and documented by area Supervisors. The inspections shall be carried out to identify:

- Potential hazards in the work area
- Unexpected risks due to working in proximity with other trades / Contractors
- Deficiencies with plant or equipment
- Areas of improvement in the working environment or process implementation

All actions raised during the inspection shall be documented and tracked until completion.

10.3 Targeted Inspections

In addition to the Weekly Safety Inspections, specific Targeted Inspections shall be undertaken on the Regrowth Project. Targeted Inspections include the following:

- Office and Amenities
- First Aid and Facilities
- Housekeeping, Access and Egress

- Fall Prevention
- Lifting Equipment
- Cranes
- Scaffolding
- Electrical Equipment
- Mobile Plant
- Worker Conduct
- JSERA's
- Permit to Work
- Hazardous Substances
- Welding / Hot Work
- Excavations
- Confined Space Entry
- Environment
- Electrical Isolations
- Driving Safety
- Earthmoving Activities

All actions raised during the inspection shall be documented and tracked until completion.

10.4 Monthly Contractor Audits

Contractors performing works on the Regrowth Project will participate in Monthly Contractor Audits carried out with a HAKK Representative. The audit process will include a site inspection where samples of plant, personnel and equipment will be detailed. The audit template has been developed based on this WHS Management Plan, and any additional requirements for each individual Contractor.

All actions raised during the audit shall be documented and tracked until completion.

Audit results are communicated each month via the Regrowth Health and Safety Committee.

11 Contractor / Subcontractor Requirements

11.1 Acceptance of Compliance

The Subcontractor warrants that they are aware of and will observe the requirements specified below in respect of health and safety and the implications thereof for the execution of the work under the contract. These requirements constitute:

- The Work Health and Safety Act 2011 and Work Health and Safety Regulations 2017
- SafeWork Codes of Practice
- Australian Standards
- HAKK WHS Management Plan
- HAKK regulations and policies
- HAKK Induction requirements and information contained therein
- Reasonable directions from HAKK authorised personnel for the purpose of WHS&E compliance

11.2 Failure to Comply with Safety Requirements

HAKK has an obligation to stop work that is unsafe or environmentally damaging, and review work methods and hazard controls before work can resume.

HAKK, on failure by the Subcontractor to comply with statutory safety requirements or those requirements specified in this document, shall be entitled to:

- direct the Subcontractor to remedy such failure and ensure the health and safety of their workers and/or
- stop the work until such failure has been remedied to the satisfaction of HAKK and/or
- direct the Subcontractor to remove individual workers from the site

Such action shall be through authorised HAKK Site personnel unless there is an immediate threat to life and limb, property or the environment.

11.3 Performance Assessment

HAKK includes Subcontractor safety performance criteria in the selection of bidders and the award of site contracts.

Unless previously accepted onto the approved Subcontractor list Subcontractors are required to complete the:

- Contractor HES Evaluation (Company Questionnaire) or
- HSE Management Submission (Sole Traders & Small Companies)

Information provided to HAKK as part of the evaluation and submission process may be verified.

Site performance, inspection and audit results shall be reviewed for pre-qualification and selection of future Subcontractors.

12 Safe Work Method Statements and Job Safety Environmental Risk Assessment

As stated in sections 2 & 4 above, all high risk activities to be carried out on site will require a SWMS and a JSERA to be prepared by a contractor and a copy provided to the Principal Contractor for review and acceptance prior to any work commencing.

The Principal Contractor management team will review the method statement and the risk assessment to ensure that the contractor has thought about and planned the process of carrying out the task in the safest possible manner.

Once the SWMS and JSERA have been accepted, the contractor shall be issued with a HAKK Work Permit that allows the specific work activity detailed within the Work Permit to commence. All personnel undertaking the activity must sign onto the Work Permit at the commencement of each shift, and sign out at the end of the shift.

The contractor carrying out works must continually review the works and through consultation with work crew/s update any new tasks, hazards or risks that develop on their SWMS and JSERA.