



# 6BF RELINE PROJECT

## Safety Management Plan

6BFR-PRJ-PLN-0007

Revision 5

03/10/2024



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<b>TITLE:</b>		6BF Reline Project Safety Management Plan	
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## REVISIONS

REV NO	DATE	DESCRIPTION	BY	CHKD	APPROVED
1	20/09/2021	For issue	CJM	BGK, IHD	TMR
2	15/03/2022	Draft version issued with draft agreements			
3	29/09/2022	Changes relating to move from Prefeasibility to Feasibility stage and clarification of Policies. Linked references updated.	DO	BGK, RMC	TMR
4	24/10/2023	Major revision for Execution phase; no changes marked.	DO	BGK, ID, MH, CM, PL	TMR
5	03/10/2024	Added the need to carry a P2 mask and hearing protection, WHS Committee for consultation, welding fumes, requirements for temporary static lines, assessment if demolition is high risk and additional requirements, care for injured people, safety targets are over the life of the project. Removed references to Contractor Safety Management Plans, no requirement for Construction Coordinators to be DEC. Added Plant Owner/DEC role, inclusion of interactions meetings, requirement to escort an injured person to treatment, fixed gas monitoring, use of static lines and inspections required. Updated SWMS and JSEA sections, engineering requirement for enclosed/meshed scaffolds, electrical equipment inspection requirements, strengthened no touch requirements, need for welding screens.	DO	MH, CM, TH, BN, ID, WH	TMR



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## 1. INTRODUCTION

The New South Wales Work Health and Safety Act 2011 and Regulation 2017 are the primary legislation and regulation affecting the management of Construction Work in NSW.

The objectives of the Act and Regulation are to protect the health, safety and welfare of persons working at or affected by construction processes and operations and require that risk of injury or illness resulting from these activities be managed so far as reasonably practicable (SFRP).

The Act and Regulation state how these objectives are to be achieved.

The Act also defines the responsibilities and obligations of people working on projects. People with specific obligations include the Project Manager, Engineering Manager, Construction Manager, Contractors, Designers, Manufacturers, Importers and Suppliers of substances for use at the site, and people who work on the project or may affect those people working on the project.

The Act requires safety and health management systems to be in place, effective management structures to provide competent supervision, and a way for competencies to be reviewed and recognised.

The Work Health and Safety Regulation 2017 supports the Act, giving more detail on how the objectives can be achieved.

BlueScope have developed procedures to comply with the Act and Regulation.

BlueScope general conditions of contract places obligations on Contractors to comply with these procedures.

### 1.1. Project Description

BlueScope (BSL) Port Kembla is an integrated steelworks located in a coastal region of moderate climate in Port Kembla, New South Wales, Australia. BlueScope Port Kembla produces flat products for downstream manufacture of its range of branded coated and building products. BlueScope also supplies hot rolled coil and slabs for domestic and export clients. The plant operates with a single blast furnace, BOF, slab casters, plate mill and hot strip mill, and produces approximately 3.1 Mt/yr.

Currently No. 5 Blast Furnace (5BF) is in operation and No. 6 Blast Furnace (6BF) is shut down. 6BF is a modern design, originally constructed in the 1990s, and is in relatively good condition. Operation commenced in 1996 and it operated successfully until shutdown in 2011.

Current planning aims for a blast furnace restart in August 2026, while 5BF continues to operate to minimise the operational security risk. The execution works are planned on a six day shift roster to minimise costs and optimise labour availability using the local contracting workforce. The scope includes improvements to operational performance, reducing energy use and improving reliability.

### 1.2. Purpose

The purpose of this Safety Management Plan is to define the goals, commitment and specific methodology to be used to ensure that the No. 6 Blast Furnace Reline (6BFR) Project meets and exceeds its safety commitments and obligations for the safety, health and welfare of all individuals and the environment that they work in, with an ultimate goal of Zero Harm, and thus successful project delivery.

The 6BFR Project Team and all Construction Contractors are expected to adhere to all requirements of this document. Contractors are expected to develop their own Safety Management Systems in compliance with and support of this Management Plan.

A basic premise is that all Construction Contractors will comply with BlueScope safety management procedures. All site work will be carried out under the BlueScope Port Kembla Steelworks Safe System of Work (SSW). BlueScope Emergency Management Procedures shall be adhered to by all parties during the Project.

For the purposes of the NSW Work Health and Safety Act, BlueScope Steel (AIS) Pty Ltd will be the Principal Contractor.

During commissioning there will be a mix of live and construction workplaces. The boundary isolations, notifications, etc. for these will be covered in 6BFR-PRJ-PLN-0015 *6BFR Commissioning Management Plan*.

The 6BFR Project will utilise existing BlueScope procedures where possible and where they form the highest standards.

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## 2. POLICY AND COMMITMENT

### 2.1. Our Bond

BlueScope Steel's 'Our Bond' expresses the BlueScope Steel company values and establishes the standard of care we are expected to demonstrate to ourselves, our fellow employees, Contractors and the community. This Safety Management Plan has been built on the fundamental commitments made by 'Our Bond' and has been developed to support 'Our Bond'.





# Our Bond

**Our Bond** outlines the guiding principles strengthening our business. It identifies our key stakeholders, guides how we work together and conduct ourselves, and continues to be our benchmark for success and choosing to do what is right.

## Our Customers are our partners

Our success depends on our customers and suppliers choosing us. Our strength lies in working closely with them to create value and trust, together with superior products, service and ideas.

## Our People are our strength

Our success comes from our people. We work in a safe and satisfying environment. We choose to treat each other with trust and respect and maintain a healthy balance between work and family life. Our experience, teamwork and ability to deliver steel inspired solutions are our most valued and rewarded strengths.

## Our Shareholders are our foundations

Our success is made possible by the shareholders and lenders who choose to invest in us. In return, we commit to continuing profitability and growth in value, which together make us all stronger.

## Our Local Communities are our homes

Our success relies on communities supporting our business and products. In turn, we care for the environment, create wealth, respect local values and encourage involvement. Our strength is in choosing to do what is right.

## 2.2. Our Life Preserving Principles

BlueScope Steel has developed a number of “non-negotiable” principles to protect the safety and well-being of all those working on BlueScope Steel sites. It is an absolute expectation that all 6BFR Project Team members and Contractors will abide by these principles (also known as “Cardinal Rules” and shown below). These rules will be communicated to all Project Team members before commencing on site via the project-specific safety induction.

# AUSTRALIAN STEEL PRODUCTS CARDINAL RULES


**The BSL Life Preserving Principles and ASP Cardinal Rules form part of conditions of employment and breaches will result in disciplinary action up to and including dismissal.**

**We will care for all people on the Site, including ourselves, by:**

- Not deliberately endangering the lives of anybody, including ourselves
- Not knowingly allowing anyone to work in a life threatening environment
- Providing and following identified critical safe work procedures
- Only operating equipment when competent and authorised to do so
- Not attending work or operating if under the influence of alcohol and/or illegal drugs and not consuming alcohol or possessing, supplying or consuming illicit drugs on the Site

**And because we respect each other and the business we will:**

- Not deliberately breach our environmental licence
- Not physically abuse or verbally threaten anyone with violence
- Not have any unauthorised firearms or other weapons on the Site
- Not steal or deliberately damage Company property or that which belongs to other employees or visitors on the Site, or defraud the Company



**Our Life Preserving Principles (DS.BSL-HSE-P-01-03.01) is the over-arching BlueScope policy.**

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AUTHORISED: John Nowlan

These Cardinal Rules should be considered and applied, taking the HOP (Human and Organisational Performance) Principles into account.



## 2.3. BlueScope HSEC Policy

The BlueScope HSEC Policy ([BSL-MS-P-01](#)) states our aspirations and provides a high-level framework of actions to realise these aspirations. This Safety Management Plan supports these aspirations and incorporates detail around the high-level action framework.



**At BlueScope our care and commitment to Health, Safety, Environment and Community is integral to the way we do business and starts with each one of us.**

**To support Our Purpose, Our Bond and align with our 'How We Work' Code of Conduct we are committed to:**

### Health, Safety & Environment

- Fostering an inclusive workplace culture that values and invites a diversity of people and perspectives, and which extends to our customers, contractors, suppliers, and communities
- Providing safe and healthy working conditions to enhance wellbeing and prevent work related injuries, ill health, harm to the environment and our communities
- Applying practical, effective controls to eliminate hazards and reduce risks associated with our workplaces, products and services
- Striving for our goal of no serious injuries or ill-health
- The efficient use of resources, preventing pollution, and reducing the negative environmental impact of our operations, products and services.

### Community

- Respecting the values and cultural heritage of our communities
- Being a valued corporate citizen, actively engaged in inclusive partnerships with our communities to provide employment, social and economic benefits

### Our Actions

To meet our HSEC commitments we will:

- Foster an environment of care and support for our health and wellbeing
- Be visible leaders across our teams, actively consulting with and seeking participation from our employees and internal and external stakeholders
- Clearly define, articulate and meet our HSEC responsibilities and accountabilities
- Align HSEC activities with business strategies and risk profiles whilst setting, monitoring and reporting on associated objectives and targets
- Provide appropriate HSEC information and training, develop our capability and decision-making abilities whilst fostering an environment of learning
- Continually improve our HSEC performance and supporting management systems, taking into account HSEC risks and opportunities and applying governance programs to assure the effectiveness of risk control measures
- Comply with legal and other business requirements

We value inclusion and encourage our People to share their ideas and feedback. We are committed to fostering a culture of speaking up when something isn't right.



## 2.4. Additional Policies

Additional Policies are covered in the Australian Steel Products (ASP) Induction (SAP Qualification Number 50249328) and How We Work Training (SAP Qualification Number 50192558). This training must be completed prior to doing any work on the 6BF Reline.

## 2.5. BlueScope Health, Safety and Environment Standards

BlueScope expectations with respect to safety management are outlined in the 14 safety management Standards defined in procedure [BSL-HSE-M-01-01 BlueScope Steel Health, Safety & Environment Standards](#).

The compliance of this Safety Management Plan with the 14 standards will be audited using the checklist contained in [BSL-CAP-G-02-03 BlueScope Steel Project Safety Management Plan Guidelines](#).

The following table details how BlueScope's 14 safety elements are addressed in this Safety Management Plan.

Element No.	Description	Section in this document
1	Leadership and Accountability	2, 3
2	Legal Compliance	2, 3
3	Risk Management	9, 10, 11
4	Fit for Work	4
5	Training and Competency	7
6	Engagement, Consultation and Communication	5
7	Document Control and records Management	9
8	Materials and Contractor Management	9
9	Project Management	4
10	Process, Plant and Equipment Integrity	4, 9, 10
11	Emergency Preparedness and Response	8
12	Incident Management	6
13	Preventative and Corrective Action	4, 9
14	Measurement and Verification	9

## 3. SAFETY TARGETS

### 3.1. Philosophy

The following Work Health & Safety targets have been established for the 6BFR Project, taking into account the fundamental belief that Zero Harm is achievable through continual improvement. These targets align with the ASP Manufacturing Health and Safety Business Plan. The project has a threshold target of no life changing injuries over the full project duration.

### 3.2. Lost Time Injury (LTI) Targets

Target is < 1.0 LTIFR over the life of the project.

### 3.3. Total Recordable Injury Frequency Rate (TRIFR) Targets

Target is 6.84 12MMA, with a threshold of 7.6 12MMA over the life of the project.



### 3.4. Audit Targets

Audit targets are as follows:

Audit Frequency / Staff member	Feasibility Phase	Execution / Construction Phase	Commissioning Phase
Project Staff – Level 1 or equivalent	One Audit / Month	One Audit / Month	One Audit / Month
Project Staff – Level 2 or equivalent	One Audit / Month	One Audit / Week	One Audit / Week
Contractors' Staff (whilst on Site)	N/A	One Audit / Week	One Audit / Week

## 4. ROLES AND RESPONSIBILITIES

This section defines the roles and responsibilities in relation to safety management for everyone associated with the 6BFR Project.

All personnel are empowered to ensure that any activity that may endanger the safety of people, environment and/or machinery is carried out with due regard to Safe Systems of Work, a Safe Work Environment, and within the limitations of training and competency of those carrying out the Work.

**This component extends to stopping any activity that is not being carried out in a safe manner.**

### 4.1. All Personnel

Each individual on the Project is expected to fulfil the following responsibilities:

- a. Performing their duties in a manner that does not create situations where they can cause injury to themselves, others, equipment or the environment.
- b. Personally knowing and adopting the BlueScope Safety Beliefs.
- c. Cooperating with others to ensure that all parties can fulfil their safety responsibilities.
- d. Abiding by all the Project's safety rules outlined in this Plan.
- e. Intervening immediately to correct any unsafe acts or conditions they observe when it is safe to do so. They should look after themselves and their fellow workers.
- f. Reporting all actual or potential (near miss) safety issues/incidents.
- g. Maintaining all safety and environmental systems and equipment at all times.
- h. Maintaining a safe means of access and egress to the work areas at all times.
- i. Maintaining a high level of housekeeping on and around the site.
- j. Maximising recycling of resources used on the Project.
- k. Completing safety audits and inspections as scheduled.

### 4.2. Project Manager

The Project Manager demonstrates safety leadership and is accountable for the overall project safety standards including:

- a. Showing safety leadership that is highly visible, models the desired behaviours, and creates urgency and accountability around safety through ongoing personal involvement.



- b. Ensuring appropriate systems and roles are established and audited to ensure compliance with WHS legislation, standards and codes.
- c. Ensuring a project Risk Register is established and maintained. This shall include a non-compliance recording (NCR) system to monitor effective closeout of non-conformance.
- d. Ensuring regular reviews and updates are made to the project Risk Register, including hazard identification, risk assessment and measures to control risks.
- e. Ensuring that the work methodologies, estimates and schedules developed for the Project give adequate consideration to safety.
- f. Ensuring all safety incidents are correctly investigated and reported, results analysed to monitor trends, and improvements put in place to mitigate the risks. Personal involvement in a significant proportion of incident investigations.
- g. Working with the Construction Manager to establish a Safe System of Work (SSW) permit system for sites where plant ownership has formally been handed over to the 6BFR Project Team.
- h. Participating in safety meetings, audits and inspections.
- i. Supporting an effective project-specific WHS Committee
- j. Working to continually improve the project Safety Management System and WHS performance by encouragement, leadership and personal involvement in the development of safety improvement initiatives.
- k. Encouraging the involvement of all Project participants (including Contractors and other external organisations involved) in the improvement of safety performance.
- l. Participating directly, or encouraging participation by Project Team members, in relevant industry forums set up to improve safety performance and support other relevant safety research and development.
- m. Supporting internal risk-based networks and other relevant external networks that promote WHS improvement.
- n. Recognising achievements in safety performance or safety initiatives and celebrating or rewarding these achievements.
- o. Encouraging a healthy balance between work and home life.

### 4.3. Area Managers

The Area Managers report to the Project Manager and are accountable for the safe execution of works within their assigned area including:

- a. Exhibiting safety leadership that is highly visible, models the desired behaviours, and creates urgency and accountability around safety through ongoing personal involvement.
- b. Supporting and maintaining a safe and healthy workplace that adheres to BlueScope policies and other applicable laws, regulations, standards and codes for the workplace.
- c. Ensuring that a safety culture is instilled within their Area team, and that risk management, safe systems of work, procedures and practices are followed in all aspects of the work.
- d. Providing project management for the scope elements for which the role is responsible from Feasibility through to commissioning, maintaining a focus on safety, environmental and community impacts, progress, issues, schedule and budget.
- e. Informing the Project Manager of any emergent potential safety issues.
- f. Participating in safety meetings, audits and inspections.
- g. Accountable for Incident Investigation (refer to RACI Matrix)

## 4.4. Engineering Manager

The Engineering Manager reports to the Project Manager and is accountable for ensuring safety is incorporated into plant and equipment design, including:

- a. Identifying, controlling (through elimination or mitigation) and documenting the risks, during the design phase of the Project.
- b. Establishing and implementing a Design Management Plan to ensure appropriate design reviews are completed utilising tools such as HAZOP, CHAZOP, and the MTEC process.
- c. Ensuring safe constructability of design through engaging key construction and plant personnel in design reviews using tools such as the Construction Hazard Assessment Implication Review (CHAIR) process.
- d. Ensuring safe access and egress is provided to the designed plant to allow appropriate construction and ongoing operational and maintenance activities, including emergency response activities.
- e. Ensuring the human and machine interface issues are considered, so that equipment can be used and maintained without harm.
- f. Ensuring safe isolation and verification requirements are provided in the designed plant.
- g. Advising and reporting on safety aspects of the design to the Construction Team and Plant Owner alike.
- h. Participating in safety meetings, audits and inspections.

## 4.5. Construction Manager

The Construction Manager is accountable for the safe execution of the 6BFR Project works during the construction phase. In particular, this role includes:

- a. Exhibiting leadership on safety matters that is highly visible, models the desired behaviours, and creates urgency and accountability around safety through ongoing personal involvement.
- b. Ensuring a safe work site is established and maintained through the duration of the construction work.
- c. Maintaining a listing of pre-qualified site work Contractors who have been endorsed as understanding the full safety requirements and expectations of the project, and whose systems have been reviewed to assure compliance with same.
- d. Ensuring new project site work Contractors are audited to assure systems meet the full safety requirements and expectations of the project.
- e. Ensuring all Contractors comply with 6BFR SMP requirements.
- f. Ensuring all site personnel have clearly defined responsibilities for safety management that are clearly communicated to them, are understood, and are implemented.
- g. Contributing to the design process by involvement in constructability studies and other risk reviews such as CHAIRs.
- h. Ensuring that a system is in place so that personnel working on the construction site are inducted and appropriately trained, and that a high level of safety awareness is proactively promoted and maintained.
- i. Establishing a Safe System of Work (SSW) permit system for sites where plant ownership has formally been handed over to the 6BFR Project Team.
- j. Being responsible for the role of SSW Plant Owner for sites where the site ownership has been formally handed over to the 6BFR Project Team, and ensuring access requirements for works are in accordance with the BlueScope SSW process including the appointment of Plant Owner role.
- k. Ensuring a system is in place that manages hours of work in line with company and industry guidelines.
- l. Implementing procedures to ensure work methods developed for the project give adequate consideration to safety and reflect actual task status.

- m. Ensuring that Job Safety and Environment Analyses (JSEAs) and Safe Work Method Statements (SWMSs) comply with the requirements of the NSW Work Health and Safety Regulation.
- n. Ensuring that isolations are carried out in line with company *Isolation Regulations* (DIV-OHS-01-11)
- o. Liaising with project, operational and maintenance personnel on site safety matters.
- p. Ensuring construction-related incidents are recorded, reported and investigated to root cause. Ensuring corrective actions are completed.
- q. Assessing and monitoring the safety management capability of Contractors and other service providers.
- r. Ensuring the implementation of the requirements of the project Safety Management Plan, Emergency Management Plan, Construction Environmental Management Plan, and the various Contractor safety and environment management plans under these umbrella plans.
- s. Participating in safety meetings, audits and inspections.
- t. Ensuring a system for safe site access and evacuation is in place.
- u. Liaising with the Commissioning Manager and jointly agreeing to a handover plan that adequately covers parallel Construction and Commissioning activities.

#### 4.6. Commissioning Manager

The Commissioning Manager is accountable for the safety management of the site during the commissioning phase. Strategies for managing safety during the commissioning phase will be documented in the project Commissioning Management Plan (6BFR-PRJ-PLN-0015). In particular, this role includes:

- a. Exhibiting leadership on safety matters that is highly visible, models the desired behaviours, and creates urgency and accountability around safety through ongoing personal involvement.
- b. Liaising with the Area Managers, Construction Manager and Engineering Manager, and jointly agreeing to a handover plan that adequately covers parallel Construction and Commissioning activities.
- c. Creating a Commissioning Management Plan and communicating this to the 6BFR Project Team.
- d. Providing and maintaining a safe work environment during plant commissioning within the site for all personnel, and ensuring that Contractors fulfil their responsibilities in this regard.
- e. Ensuring all commissioning personnel have clearly defined responsibilities for safety management that are clearly communicated to them, are understood, and are fulfilled.
- f. Ensuring that a system is in place so that personnel working on the commissioning site are inducted and appropriately trained.
- g. Ensuring that a system is in place that manages hours of work in line with company and industry guidelines.
- h. Ensuring that commissioning isolations are developed and carried out according to DIV-OHS-01-11 *Isolation Regulations* whilst being performed by accredited personnel.
- i. Implementing procedures to ensure work methods developed for the project give adequate consideration to safety and the environment.
- j. Ensuring that during commissioning, Job Safety and Environment Analyses (JSEAs) and Safe Work Method Statements (SWMSs) comply with the requirements of the NSW Work Health and Safety Regulation.
- k. Liaising with Project, operational and maintenance personnel on site safety matters.
- l. Ensuring commissioning-related incidents are recorded, reported, and investigated to root cause. Ensuring corrective actions are completed.
- m. Ensuring the implementation of the requirements of the project Safety Management Plan, Emergency Management Plan, Construction Environmental Management Plan, and the various Contractor safety and environment management plans under these umbrella plans.



- n. Verifying that the safety design intent is achieved.
- o. Participating in safety meetings, audits and inspections.
- p. Ensuring a system is in place for safe site access to and evacuation from the site.

## 4.7. HSE Manager

The HSE Manager will be responsible for the following:

- a. Advising the Project Manager, Engineering Manager, Construction Manager, Commissioning Manager and Project personnel on workplace health and safety matters to ensure compliance with the NSW Work Health and Safety Regulation.
- b. Providing resource material on safety management and training including weekly toolbox bulletin to all work groups.
- c. Overseeing the relevance of the Project site safety procedures, and recommending improvements or modifications to the Project Manager, Construction Manager and Commissioning Manager.
- d. Coordinating and carrying out site-specific construction safety inductions and keeping records of these inductions.
- e. Regularly and frequently reviewing and updating the project Safety Management Plan and related plans and their application.
- f. Implementing and managing the project audit schedule.
- g. Participating in safety meetings, audits and inspections.
- h. Ensuring that the safety performance of the Project is monitored through recording and reporting of safety statistics.
- i. Establishing and maintaining an effective project-specific WHS Committee and other structured forms of consultation and communication.
- j. Communicating safety matters with other projects via the safety network.
- k. Maintaining the site Hazardous Materials Register, Hazard Register, induction, training, competency and incident records.
- l. Establishing a set of leading and lagging indicators, and providing expert interpretation of data.
- m. Coordinating the recording of safety statistics. Analysing trends within the safety statistics.
- n. Providing input on safety performance for the various project reports.
- o. Ensuring new project sitework Contractors are audited to assure systems meet the full safety requirements and expectations of the project.
- p. Assisting in the safety mentoring of various Contractors and site personnel.
- q. Providing input into the evaluation and selection of Contractors from a safety culture aspect.
- r. Assisting the Project Manager in mentoring the 6BFR Project Contractors and suppliers.
- s. Communicating any relevant changes to Work Health and Safety legislation, SafeWork NSW regulations and codes of practice, or BlueScope safety procedures, to the 6BFR Project Team, together with advice on how these are best implemented.
- t. In the event of an injury to a BlueScope employee, undertaking the role of DRO (Departmental Rehabilitation Officer) to assist in the injury management process.

## 4.8. MTEC Manager

The MTEC Manager is accountable for the following:

- a. Ensuring all current and revised plant-specific safety procedures, hazards and risks with current plant are communicated to, and understood by, the 6BFR Project Team.
- b. Ensuring that the current plant risk and hazard registers are available for 6BFR Project personnel.
- c. Coordinating the development of required isolation, commissioning, safety, maintenance and operating procedures for the newly installed plant and modified plant, ensuring these are completed in a timely manner to suit the requirements of the project schedule.
- d. Ensuring availability of key plant personnel for coordinating isolations.
- e. Ensuring that 6BFR Project personnel and service providers are accredited in a timely manner to perform works as SSW Plant Owner, SSW Work Owner and SSW Person in Charge Service Providers in operating departments that remain under the ownership of the operating department for the SSW process. This is based on the 6BFR Project personnel being assessed as competent by the “Operations Manager” in the SSW system for that department.
- f. Providing expert input to the project Risk Register, and transferring the latent hazards and risks from the 6BFR Project to the new Plant Owner(s) on handover.
- g. Participating in Project Team safety audit quality reviews.
- h. Participating in safety meetings, audits and inspections.

## 4.9. Engineers

Engineering representatives are accountable for ensuring safety systems are incorporated into plant and equipment design. In particular this role includes:

- a. Designing for safety in accordance with relevant Australian, statutory and company standards and/or procedures as stipulated in the project Design Management Plan.
- b. Participating in project safety audits and safety meetings.
- c. Ensuring safe access and egress is provided in the plant design to allow appropriate ongoing operational and maintenance activities.
- d. Ensuring human and machine interface issues are considered, so that equipment can be used and maintained without harm.
- e. Ensuring that equipment necessary for safe isolation and verification requirements is designed into the plant.
- f. Contributing as required to the development, documentation, communication and utilisation of procedures for the safe isolation and de-isolation of plant and equipment.
- g. Contributing as required to the process to ensure that personnel are trained in the safe operational practices associated with the new and modified plant associated with the 6BFR Project Team.
- h. Reviewing and resolving through best practice design all aspects of safety and environment in design reviews through the utilisation of tools such as HAZOP, CHAZOP, HAZAN, and the MTEC process.
- i. Ensuring that any work performed on site is undertaken by pre-qualified Contractors, or that the selected Vendor is approved for site work by the Construction Manager.
- j. Identifying any residual risks in the final design, documenting these in the project Risk Register and design documentation (along with the controls for the risk), and clearly communicating these risks to the Construction Manager, Commissioning Manager, MTEC Team and operators.
- k. Identifying, documenting and communicating any limitations or operating constraints in the equipment as designed.

## 4.10. Construction Coordinators

Personnel on site involved in construction coordination report to the relevant Area Manager and are responsible for the following:

- a. Proactively demonstrating personal commitment to site safety by leading by example and acting as a coach/mentor to the site construction and other personnel on site.
- b. Ensuring that any work performed on site is undertaken by pre-qualified Contractors, or that the selected Vendor is approved for site work by the Construction Manager.
- c. Complying with the requirements of the project work instructions for the 6BFR Project site, relevant statutory obligations, SSWs and other work permits.
- d. Ensuring the implementation of the requirements of the relevant project Management Plans and the various Safety Management Plans, together with the obligations of the regulations and standards.
- e. Conducting safety audits and inspections, and monitoring safety behaviour on site.
- f. Ensuring that Job Safety and Environment Analyses (JSEA) and Safe Work Method Statements (SWMS) are completed, and verifying that each JSEA and SWMS is appropriate, thorough, communicated and followed in accordance with the NSW Work Health and Safety Act and Regulation.
- g. Recording incidents and unsafe acts and conditions in the incident reporting system after they proactively rectifying the issue.
- h. Demonstrating at all times by their proactive actions, the commitment of the management team to the highest standard of safety and environment management.
- i. Participating in Toolbox Meetings.
- j. Participating in incident investigations.
- k. Participating in safety audits and inspections.
- l. Performing the role of SSW Work Owner for sites where the site ownership has been formally handed over to the 6BFR Project Team, and ensuring access requirements for works are in accordance with the BlueScope SSW process.
- m. Assuming the role of SSW Work Owner in some cases where required, for the purposes of the BlueScope SSW system, for an area and duration specified by the Construction Manager. This includes ensuring that all aspects of the SSW work pack are prepared to a high standard with the appropriate sign-offs.

## 4.11. Contractors' Management

The members of the management teams of construction Contractors have the following responsibilities for safety management:

- a. Leading the Contractor's team by example, demonstrating commitment to Zero Harm principles and the requirements of this Safety Management Plan.
- b. Ensuring that a positive safety culture is developed and maintained within the Contractor's team.
- c. Preparing, implementing and maintaining a Safety Management Plan specifically developed for this project (i.e. not generic), incorporating the requirements of this Safety Management Plan and this project. This document shall be amended and reviewed with the Construction Manager as required throughout the life of the contract, to cover the changing working requirements and environment.
- d. Ensuring that JSEAs and SWMSs are developed that adequately address the safety issues and comply with NSW Work Health and Safety Regulation requirements.
- e. Ensuring that all members of the Contractor's workforce have clearly defined responsibilities for safety management, and that these responsibilities are clearly communicated, understood, and fulfilled by them.

- f. Ensuring that all members of the Contractor's workforce are suitably trained and competent for the role in which they are employed. Providing the Construction Manager with a copy of personnel training history if requested.
- g. Maintaining an auditable system that records details of each employee's training, inductions and accreditation.
- h. Ensuring that plant and equipment brought on to site complies with statutory regulations, and establishing a system for checking that compliance is in place.
- i. Ensuring that all activities undertaken by the Contractor comply with the requirements of their plan and the relevant statutory, company and contractual requirements.
- j. Ensuring that the work areas managed by the Contractor are kept safe.
- k. Providing PPE and other equipment necessary for the safe execution of the tasks being undertaken and ensuring compliance with 6BFR requirements.
- l. Ensuring timely notification of all incidents (within 2 hours) to the Construction Manager (in their absence, the HSE Manager or Project Manager) and the Contractor management representative.
- m. Manage Contractor's incident investigations and reporting of findings and corrective actions to Principal in required timeframes and to expected quality and detail.
- n. Participating in company and Contractor safety audit programs.
- o. Making available documents and records for regular safety audits.
- p. Providing a proactive rehabilitation system for the Contractor's workforce.
- q. Ensuring that a worker who is ill or injured receives timely and appropriate medical treatment, and where required, is referred to their company rehabilitation coordinator.
- r. Ensuring a system is in place to manages hours of work and fatigue risk is in line with industry guidelines and this SMP
- s. Ensuring a system is in place to manage the risk Alcohol and Other Drugs pose to Contractor's workers and others.
- t. Consult with Workers on Safety performance and site safety requirements and support 6BFR with personnel for project WHS Committee.
- u. Implement programs to support 6BFR expectations for delivery of daily toolbox meetings, onsite JSEA reviews by work teams and Take 2 risk assessments by teams and individuals.

## 4.12. Plant Owner/DEC

(References: BZ-OHS-S-03-01 *Safe System of Work*, BZ-SEQ-S-11-03 *Emergency Management Plan*)

The Plant Owner/DEC is responsible for the following:

- a. **Plant Owner**
  - i. Authorising Safe Access onto the plant via SSW.
  - ii. Ensuring appropriate documents are authorised.
  - iii. Ensuring the Person in Charge is aware of any interactions with other workgroups likely to be encountered, plant condition or process changes to the plant or the area where the work is to occur.
  - iv. Ensuring that the work can be undertaken safely in respect to other activities that are planned or in progress in the vicinity.
- b. **DEC**
  - i. Understanding the hazards of the area and plant layout.
  - ii. Knowing the location of drains and how to prevent contaminated material flowing to them.
  - iii. Knowing who to contact to get major services isolated.

- iv. Knowing when and how to call for more help.
- v. Understanding the circumstances when evacuation should be called.
- vi. Knowing how to contact adjacent plant, customers and other key people.
- vii. Knowing how the communication is going to occur.
- viii. Understanding links to other plans.
- ix. Auditing to ensure that people are responsible for knowing what to do in an emergency.
- x. Activation of the site/Dept emergency alarm.
- xi. Direct, assist and provide information to external emergency services as required
- xii. Utilisation of emergency equipment within individual's training (e.g. fire extinguishers, spill kits).

### 4.13. Contractors' Supervisors

The construction Contractors' supervisors have the following responsibilities for safety and environment management:

- a. Demonstrating to the Contractor's workforce, by their proactive actions and their commitment, the highest standard of safety management.
- b. Complying with the requirements of the employee and Contractor workplace safety and environment rules, and relevant company and statutory requirements.
- c. Ensuring the implementation of the requirements of the Contractor's Safety Management Plan.
- d. Ensuring that JSEA and SWMS are completed and reviewed, including involvement from all members of the work team, and verifying that each JSEA and SWMS is appropriate to the task, thorough, communicated, followed and implemented.
- e. Understanding plant conditions, hazards, potential interaction risks and equipment and energy sources covered under the isolation required and nominated for the works to be completed. These will be communicated by the Plant Owner and Work Owner in the SSW process. The expectation is that the Person in Charge (PIC) will incorporate this information in their JSEA, and brief the work team on the content of this information as it relates to the work to be performed.
- f. Obtaining approval from the Principal's Work Owner for any deviation from the previously authorised plan of work.
- g. Arranging toolbox meetings on a daily basis and/or when there is a significant change in the task at hand, and ensuring that the meetings are of a high standard, appropriate to the task at hand, with all employees on the project attending, and attendance sign-off.
- h. Ensuring that Toolbox Meetings are documented in their daily diary for daily on site and pre-start toolbox meetings, and communicated to the relevant parties.
- i. Actively support 6BFR Take 2 initiatives and requirements by providing communication, feedback, coaching and encouragement.
- j. Ensuring that safety issues that are raised on the job and/or during Toolbox Meetings are followed up in a timely manner and communicated to the relevant parties.
- k. Ensuring that staff are appropriately trained and competent to perform their tasks.
- l. Ensuring adequate PPE and resources are available and work team comply with 6BFR requirements.
- m. Initiating and completing safety audits and inspections.
- n. Prior to bringing hazardous materials onto site, advising the Safety, Health and Risk Department through the HSE Manager, and providing appropriate Safety Data Sheets (SDSs) and risk assessments for their use and/or storage.

- o. Reporting incidents and identifying and correcting unsafe acts and conditions.
- p. Participating in relevant investigations of incidents and accidents.
- q. Ensuring timely notification of all incidents (within 2 hours) to the Construction Manager (in their absence, the HSE Manager or Project Manager) and the Contractor management representative.
- r. Monitoring work undertaken by Sub-Contractors.
- s. Monitoring wellbeing of work team members for signs of fatigue, impairment, inattentiveness, distraction and any other leading indicator of risk factors and taking appropriate corrective actions with their management.
- t. Ensuring Contractor's Injury and return to work management processes and requirements are followed as prescribed for injured workers.

#### 4.14. Contractors' Workforce

The personnel of Contractors involved in the site work have the following responsibilities:

- a. Proactively addressing safety and environmental issues, looking for improvements and looking after both themselves and their workmates using the "Take Two" (Stop; Think and Plan for safety) and "Zero Harm" philosophies.
- b. Complying with all safety procedures and statutory requirements.
- c. Ensuring that they are familiar with, and take a proactive role in, the development and application of the JSEA and SWMS for the work to be undertaken, and verifying that each JSEA and SWMS is appropriate, thorough and followed.
- d. Understanding the boundary of any isolations for which they have attached a personal red lock.
- e. Understanding the boundaries of their task assignment and requirement to follow the documented plan for the task.
- f. Consulting with and obtaining documented approval for an alternate plan of work from the work team supervisor before deviating from the previously authorised plan.
- g. Utilising and maintaining the PPE and aids provided.
- h. Reporting all incidents and identifying all unsafe acts and conditions.

#### 4.15. Site Visitors and Non-Inducted Personnel

All non-inducted visitors to the 6BFR Project site have the following responsibilities:

- a. Wearing the required minimum PPE as per chart [CH.BZ-SEQ-S-03-10.01 Minimum Personal Protective Equipment](#).
- b. Undertaking the 6 Blast Furnace Reline Visitors Induction (6BFR-GEN-PRE-0034) prior to entering the site, and always being accompanied on site by an approved inducted person.
- c. Demonstrating their presence on the site by signing the Visitors' Register upon arrival and departure from the site.
- d. Observing all safety signage and directions on the construction site.
- e. Complying with all safety directions.

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## 5. COMMUNICATION

Communication on safety and environment management matters is considered to be one of the key elements in fostering a safe working environment on the 6BFR Project site. Safety **will** be the first topic of any site or 6BFR Project Team meeting.

A number of communication mediums will be utilised on the Project, and each of them are outlined in detail below. Contractors are expected to recognise the need to tap into the following communication channels, and to include those appropriate in their Safety Management Plans.

### 5.1. Project Team HSE & Communications Meetings

All 6BFR Project Team members shall attend a monthly HSE & Communications Meeting as scheduled. Topics for discussion shall include:

- a. Review of last meeting's minutes.
- b. Project safety trends including TRI and LTI performance, number of safety audits conducted versus target.
- c. Review of project incidents and significant safety or environmental occurrences.
- d. General awareness and topical health, safety, environmental or community issues impacting on the Project.
- e. Relevant changes to WHS legislation, regulations and codes of practice that may impact upon BlueScope and project-specific procedures.
- f. Training in project procedures.
- g. Special health, safety, environment, or community related topics as required.

A record of these HSE & Communications Meetings shall be maintained on the 6BFR Project SharePoint site and shall be uploaded to the Aconex Document Register as required.

### 5.2. Project WHS Committee

The 6BF Reline Project has a Work Health and Safety Committee for consultation across the whole workforce. The committee is made up of representatives of the major contracting companies and #6BF Reline project management representatives. The committee abides by the constitution that the members established and review on a regular basis.

### 5.3. Construction Execution Meetings

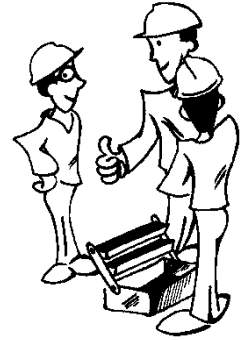
- a. Project site coordination meetings shall be held monthly as a minimum, with all main Contractors once site activities have commenced. This meeting shall be chaired by the Construction Manager or authorised Construction Coordinator. The meeting shall discuss any safety and environmental issues that have occurred in the last week, as well as any issues expected in the next week's work, and follow-up of outstanding safety and environmental issues.
- b. Safety shall be the first topic on the agenda of this meeting. The coordination of the site works and access needs shall be addressed at this meeting.

### 5.4. Construction Execution and Interactions Meetings

- a. Interaction meetings will be held on a daily basis in the respective areas. Contractor representatives will be included in these meetings to identify any interactions between the groups, and how these will be controlled.

## 5.5. Toolbox Meetings

- a. The HSE Manager or delegate will provide via email a weekly briefing that includes safety and environment critical tasks and their specific hazards, recent significant issues and a toolbox theme.
- b. Contractors shall hold Toolbox and Pre-Start Meetings at the start of each shift or at any time of significant change in the job site or work plan. All site personnel shall be involved in these meetings, where the JSEA and SWMS (as required) are to be reviewed, and changes to site conditions or hazards communicated. Hazard mitigation methods shall be developed, organised, communicated and adopted at these meetings, and recorded in the JSEA.
- c. In addition, recent and potential incidents in the workplace and any other site safety and environmental issues should be discussed, with the corrective actions communicated so there are no repeat incidents.
- d. Toolbox Meetings must not be simply an opportunity to ‘dump’ information on personnel, but rather should be an opportunity for proactive, open, two-way communication.
- e. Toolbox Meetings shall be documented and signed by each attendee. Where the Toolbox Meeting only involves review of the JSEA, sign-off on the JSEA discussed will be adequate.
- f. Members of the 6BFR Project Construction Team shall attend Contractor’s Toolbox Meetings to demonstrate commitment to safety and environment. This shall provide an opportunity for direct contact with personnel and ensure that the quality of Toolbox Meetings is adequate.
- g. Where necessary, special Toolbox Meetings shall be convened by the Contractor, either on its own initiative or at the direction of the Construction Manager, to communicate critical safety and environment issues.



## 5.6. Safety Alerts / Significant Safety Occurrences

- a. Safety bulletins, alerts, and Significant Safety Occurrences (SSOs) detailing serious project-related incidents shall be distributed through the Contractor’s and BlueScope safety network.
- b. It is expected that all personnel involved in the project would be aware of significant project-related incidents within 24 hours through distribution of this information at Toolbox and Pre-Start Meetings.

## 5.7. Site Communication

- a. A listing of contact details for all supervisory personnel shall be produced and maintained by the Construction Manager. The Contractor shall provide a full listing of contact numbers for Contractor and Sub-Contractor supervision to the Construction Manager.
- b. Any changes in supervision and personnel contact numbers shall be distributed via the Construction Manager once provided by the Contractor.
- c. It is the responsibility of the respective SSW Plant Owner, SSW Work Owner and SSW Person in Charge to advise others working adjacent to site of daily construction activities.
- d. Any potential conflicts with operations and maintenance activities that cannot be immediately amicably managed shall be brought to the attention of both the Project Manager and business lead for further action.

## 5.8. Health & Safety Initiatives

- a. The 6BF Reline Project will support and promote special health and safety initiatives such as “Stop for Safety”, “RUOK Day”, “Mental Health Awareness”, “Take 2 Recognition” and “Electrical Safety Month”. The primary method for determining the timing of these initiatives will be when the trends and analysis of the leading and lagging indicators have shown that intervention is required. However, any project and site-wide BlueScope initiatives will also be deployed.



- b. The 6BF Reline Project Team will hold Safety Forums to enable the Project Manager and HSE Manager to facilitate the promotion of aligned safety cultures and construction interfacing. These shall be held at critical stages of the Project, including at the kick-off of all major contracts with a site work component.
- c. As per the BSL-OHS-P-04-01 *Alcohol and Other Drugs Policy* and BZ-SEQ-S-04-04 *Alcohol and Other Drugs Procedure*. People may be asked to undergo a random drug and alcohol test. In addition, random screening for alcohol will also be conducted on site by members of the 6BF Reline Team. If a person returns a nonnegative result for the screening test, they will be required to immediately undergo a full drug and alcohol test, typically at the Flat Products Health Centre.

## 6. INCIDENT MANAGEMENT

- a. All incidents and accidents associated with activities related to the Project (whether involving BlueScope employees or Contractors) shall be reported immediately (maximum of 2 hours) to the Contractor's site representative, the Construction Manager, and the Site Plant Owner (DEC) as per BSL-HSE-SD-12-01 HSE Incident Management.
- b. Arrangements shall be made for investigating, recording and reporting safety incidents and public complaints, and for taking appropriate corrective action to prevent recurrence.
- c. The incident reporting system shall be used to document the details of incidents (the Contractor shall also document the incident on their own forms for entering into their own databases). The Project Manager and Construction Manager will review the incidents to ensure root causes have been correctly identified, corrective actions are appropriate, and responsibilities and dates for completion have been assigned. Any new hazards identified as a result of the incident shall be entered into the site Hazard Register.
- d. All LTIs, MTIs, P5 and P4 are also to be entered into MARS by the HSE Manager. Other incidents that have relevance wider than just the Project Team may also be entered into MARS.
- e. The Project Manager (or nominee) shall also ensure that corrective actions have been closed out and documentation of these actions (e.g. records of revised procedures, work methods, minutes of Toolbox Meetings, memos confirming actions complete by Contractors, etc.) is filed with the incident report. A copy of all incident documentation shall be provided to the HSE Manager for filing in accordance with legislative requirements.
- f. Further:
  - i. The BlueScope Fair Way model shall be used as a guideline for serious safety breaches.
  - ii. Personnel involved in incidents may be required to undergo alcohol and other drugs testing in accordance with BSL-OHS-P-04-01 BlueScope Alcohol and Other Drugs Policy and BZ-SEQ-S-04-04 Alcohol and Other Drugs Procedure.
  - iii. The ICAM process shall be adopted as the model for incident cause analysis of safety incidents requiring in-depth incident review.

### 6.1. Injury Management and Return to Work

- a. Any injured person should be escorted by a responsible person to receive treatment until point of handover to the injured person's employer.
- b. In accordance with BZ-SEQ-S-04-05 Injury Management Procedure, the Project has nominated a Return to Work (RTW) Coordinator to support the injury management process in the event of an injury to a BlueScope employee. The HSE Manager will take on the responsibilities of the RTW Coordinator.
- c. In the event of an injury to a Contractor working for or with the Project, the contracting company shall be responsible for coordination of the injured person's rehabilitation and return to work. The BlueScope RTW Coordinator may be required to liaise with the injured person and their Return to Work Coordinator to ensure that the Contractor is fit to perform their duties prior to returning to site.

- d. Any injured person should be escorted by a responsible person to receive treatment until point of handover to the injured person's employer

## 6.2. Learning Culture

- a. When an incident (including an injury) occurs it should be seen as an improvement opportunity, and everyone involved is encouraged to contribute to preventing another incident. The 6BFR Project will consider incidents with the Human and Organisational Performance Principles in mind. These are:
- Human error is normal
  - Blame fixes nothing
  - Learning is vital
  - Context drives behaviour
  - How you respond to failure matters.

## 6.3. Unsafe Work and Acts

- a. Further to the BlueScope General Conditions of Contract, the Contractor is to be aware that the Principal's Representatives are empowered to direct the Contractor to stop any work that the Principal's Representatives consider is being carried out in an unsafe manner and/or may create an unsafe condition.
- b. The Principal will not pay for costs of delays or rectification brought about by such a direction by a Principal's Representative if the work is found to be being carried out in an unsafe manner and/or may create an unsafe condition.

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## 7. TRAINING AND INDUCTIONS

- a. Training and induction requirements for people on the 6BF Reline Project Team shall be recorded on the project Safety and Training Matrix. The Project Safety and Training Matrix shall be registered as a separate document, updated regularly, and made available on the 6BFR Project SharePoint site.
- b. Contractors shall maintain their own training and induction matrices in addition to utilising ComplyFlow.
- c. All training, including for contractors, shall be developed and conducted only by appropriately qualified persons. No person shall work on site unless they have completed the required training.
- d. Contractors to the Project must, in their role as Employers, not allow any work to be undertaken unless they are sure that the employee involved has undergone the relevant WHS training.
- e. If any change occurs in the nature of the site or in the type of activities conducted on the site that result in the need for additional training, such training shall be completed by the individuals involved before work proceeds.
- f. Contractor's shall be able to produce documented evidence of training and competency of personnel as requested by the Principal's representative.
- g. Visitors to the site must be taken through the 6 Blast Furnace Reline Visitors Induction (6BFR-GEN-PRE-0034) and comply with section 4.14.

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## 8. EMERGENCY PLANNING AND EVACUATION

Emergency response plans for the 6BFR Project have been developed for Project-specific risks and hazards in alignment with BZ-SEQ-S-11-03 *Emergency Management Plan*.

- a. The Project Department Emergency Controller (DEC) shall be the Plant Owner as nominated on the SSW permit coordination board in the 6BFR Project site office for any site that has been formally handed over to the 6BFR Project Team.
- b. For the sites that are not owned by the 6BFR Project Team, the local department plans for emergency response and evacuation shall be used, and all 6BFR Project personnel and Contractors shall follow the direction of the local Department Emergency Controller (DEC).
  - i. Relevant information about these departmental emergency plans will be provided during the 6BFR Project site induction.
  - ii. Typically, the plant supervisor or shift operations manager shall be the DEC. This person is identifiable by their yellow safety helmet.
- c. The Contractor shall keep a daily site register to allow for the identification of all Contractors' and Sub-Contractors' personnel and Contractors' visitors on site in case of an emergency or evacuation.
- d. The Contractor shall nominate a warden (nominally the SSW Person in Charge) for their personnel. This warden will be required to report to the DEC the status of their personnel in the event of an evacuation or emergency situation.
- e. Contract companies must be able to account for all employees on site (including office based contractor employees)

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## 9. HAZARD AND RISK MANAGEMENT

- a. Each Contractor shall incorporate procedures for the identification and management of hazards identified before or during the execution of work and the completion of SWMS and JSEA.
- b. Contractors are responsible for the establishment and implementation of the necessary detailed procedures for Hazard Control and preparation of JSEA. These procedures shall be submitted for approval and may be subject to periodic audit by the 6BFR Project Team.
- c. 6BFR require project personnel including Contractors to employ the Take 2 System of Hazard identification at the commencement of an activity and following interruptions to work continuity or changes in in the task or conditions the work is being conducted in.
- d. Contractors are required to submit copies completed JSEAs and work pack documentation to the Principal after work is completed.

### 9.1. Risk Review

Management of risks on the project is an ongoing process that will continue throughout the life of the Project. The Project Execution Plan includes detail of how risk will be managed on the Project.

- a. Safety hazards shall be identified in an ongoing process and recorded, along with any associated actions, in the Project hazard register system. Safety hazards listed in the departmental Hazard Registers for the operating departments in which the 6BFR Project Team will be working shall be included in the Project Hazard Register.
- b. Various types of risk review and assessment methodologies shall be utilised at various project stages. These shall include:

- i. Design reviews
- ii. HAZOPs
- iii. CHAZOPs
- iv. CHAIRs
- v. Project site risk assessments
- vi. Environmental risk assessments
- vii. Job specific risk assessments
- viii. Confined/controlled space assessments
- ix. High Risk Construction Work Risk Reviews.

## 9.2. Safety in Design

- a. Consideration of safety during the design process is the responsibility of all Engineering Team members.
- b. Safety in design shall be an integral part of all design activities. This Design Management Plan specifies the minimum requirements to fulfil the responsibility and accountability of designers to manage the risk associated with their designs to ensure plant can be manufactured, installed, commissioned, operated, maintained and decommissioned without causing harm to people, the business, the community or the environment.
- c. The hazard and risk management system described in BlueScope Steel's SP-ENG-DES-001 Design Control Procedure shall be adopted. This system includes:
  - i. Hazard identification
  - ii. Risk assessment
  - iii. Control of risk
  - iv. Provision of information.
- d. Specifically, as a minimum, the following actions shall be implemented for each design on the Project:
  - i. Known existing and potential hazards and risks shall be identified and documented as part of the Customer Requirement Specification (CRS) development.
  - ii. A Preliminary Hazard Analysis shall be conducted prior to the commencement of the Basic Design. The purpose of this process is to identify those facilities to be classified as having serious process safety risks and outline the key criteria those operations must comply with BSL-HSE-C-03-23 Process Safety Code of Practice.
  - iii. DIV-ENG-13 Technical Risk Management Guidelines shall be followed, to ensure that potential major accident events are identified, and the necessary engineering controls are provided to manage the associated risks. It is intended that these HRF requirements will be incorporated into the normal project design hazard analysis process, to produce designs that comply with the BlueScope risk tolerability criteria.
  - iv. It is expected that outputs of previous HRF-related work (e.g. MAE identification, likelihood and consequence assessments in areas such as the BOS and Energy Services) will be reviewed and incorporated into the HRF process for new plant and equipment.
  - v. Other forms of hazard analysis shall be used to identify other (less than Level 5 consequence) events requiring consideration during the design process. These may include preliminary Hazard and Operability (HAZOP) Studies (DIV-ENG-17 HAZOP Study Procedure) and Construction Hazard Assessment and Implication Reviews (CHAIRs) (DIV-CAP-PRO-211 Construction Hazard Assessment and Implication Review (CHAIR) Guidelines).
  - vi. Formal design reviews and design verification shall be conducted.
  - vii. A formal hazard review shall be conducted near the completion of the final design.

- viii. In addition, informal design reviews, peer reviews, safety audits and site inspections shall be carried out on various aspects of the design throughout its project life cycle.
- ix. Identified hazards that are inherent to the design shall be incorporated into project and/or plant Risk Registers.
- x. The design plan shall detail the appropriate level of risk assessment required at each stage of the design.
- xi. Where there is major one-off work such as large crane lifts, a risk assessment shall be carried out for that work, and the outputs communicated to all relevant stakeholders.

### 9.3. Hierarchy of Control

- a. Following hazard assessment, controls shall be applied for unacceptable risk. A hierarchy of control measures to eliminate or minimise the risk shall be followed in the following order of priority:
  - i. Firstly, try to **eliminate** the hazard.
  - ii. If this is not possible, prevent or minimise exposure to the risk by one or a combination:
    - A. **Substituting** a less hazardous material, process or equipment
    - B. Redesigning equipment or work processes
    - C. Isolating the hazard – separation/barricading
 (Note: these measures may include engineering methods).
  - iii. As a last resort, when exposure to the risk is not (or cannot be) minimised by other means:
    - A. Introduce administrative controls
    - B. Use appropriate personal protective equipment (PPE).
- b. All risk assessments shall be forwarded to the Project HSE Manager for inclusion in the project's Hazard Register.

### 9.4. Site Access Control

- a. The 6BFR Project shall implement the BlueScope Safe System of Work as per BZ-OHS-S-03-01 *Safe System of Work Procedure*.
- b. The 6BFR Project controlled construction and commissioning areas shall be barricaded, and appropriate signage installed. This signage shall note the Site Owner, Project Plant Owner and respective contact details.
- c. All personnel accessing the 6BFR Project site must have completed either
  - i. the face to face 6 Blast Furnace Reline Induction or
  - ii. the 6 Blast Furnace Reline Visitors Induction and be continually accompanied by an inducted person when on site.
- d. Personnel must also complete one of the following:
  - i. SSW permit and be on the Person In Charge's crew list,
  - ii. Sign Visitors Log or
  - iii. Online Location Board
- e. The signing on of the SSW permit does not signal the commencement of work. It is a process to ensure that correct documentation, hazard Identification and work interactions have been provided and understood. Work will commence once all the conditions of the documentation have been met.
- f. The Safe System of Work Plant Owner shall maintain the integrity of the 6BFR Project access control, in conjunction with the area Construction or Commissioning Coordinators.

- g. All Contractors shall maintain a personnel sheet listing the labour on site including sub-contractors at the Work Permit sign-on.
  - i. In the event of an evacuation the personnel sheet shall be used to account for all personnel
  - ii. Work Permit hand over sheets for ongoing work shall be maintained, at which time an updated personnel sheet shall be placed with the Work Permit.
- h. Personnel visiting all offices or conference rooms shall sign onto the Online Visitors' Register or the visitors book either in the furnace awning or in room 2.
- i. A written Work Permit shall be utilised for each logical group of work packages and Work Group. A complete list of work to be performed shall be attached to the Work Permit in addition to a handover form.
- j. The signing of the Work Permit by the Work Owner and Plant Owner does not signal the commencement of work. It is a process to ensure:
  - i. The Work Owner has:
    - A. Provided and checked for correct documentation and content
    - B. Provided and checked for hazard Identification
    - C. Ensured that the Work Permit has been understood.
  - ii. The Plant Owner has:
    - A. Checked that permits are authorised
    - B. Ensured that work interactions are identified and mitigated
    - C. Ensured any plant conditions that may have changed have been communicated
    - D. Ensured that the Work Permit has been understood.
- k. Work will commence once all the conditions of the documentation have been met.

## 9.5. Isolation

- a. All isolations shall be carried out in accordance with divisional document DIV-OHS-01-11 Isolation Regulations. All isolations shall be carried out referencing an authorised Procedure or Work Order.
- b. No work shall proceed until the Person-In-Charge has cross-checked the isolation in their work pack to the isolation covered by the Group Isolation Board.
  - i. Personal locks shall not be placed on the isolation board until the Group Isolation Board is active.
- c. Isolations shall be discussed as part of the Toolbox Meeting, including boundary of the isolation and a review of the planned isolation to ensure it is appropriate for the task. Any changes or concerns with isolations shall be communicated to the Work Owner.
- d. The Person in Charge is responsible for understanding plant conditions, hazards, potential interaction risks and equipment and energy sources covered under the isolation required and nominated for the works to be completed. These will be communicated by the Plant Owner and Work Owner in the SSW process. The expectation is that the Person in Charge (PIC) will incorporate this information in their JSEA and brief the work team on the content of this information as it relates to the work to be performed.
- e. All personal locks **must** be clearly identifiable with Name, Personnel ID and Contact no. as a minimum, with Company name desirable. If an Identification label or purple tag is becoming difficult to read, it shall be replaced.
- f. Personnel accessing the Furnace or Stockhouse must place a personal red lock on to the relevant group isolation board.
- g. Personal locks **must** be removed before leaving the job-site.

## 9.6. Gas Safety

- a. Within the 6BF Reline site the following gases have been isolated for the purposes of execution (note this may change as the project progresses)
  - i. BFG – Positively Isolated at Slip Plate in Energy Services footprint
  - ii. COG – Decommissioned
  - iii. NG – Decommissioned
  - iv. N<sub>2</sub> – Decommissioned
  - v. O<sub>2</sub> – Decommissioned
  - vi. Steam - Decommissioned
  - vii. SO<sub>2</sub> – Not expected to be present due to no slag production
  - viii. H<sub>2</sub>S – Not expected to be present due to no slag production.
- b. The following Gases will be Live on the plant:
  - i. Compressed Air
  - ii. Instrument Air
  - iii. Local construction gases.
- c. Given the extensive removal of Process Gases from the site, the 6BF site will not be considered a Gas Hazard Area while this isolation is in place for execution.
- d. During construction, there are fixed gas monitors installed that report gas alarms to the DEC and other key project members.
- e. When the project begins to re-introduce gases to the site in the commissioning phase, the site will once again become a Gas Hazard Area and revert to the original conditions where:
  - i. All areas of 6BF are classified as Gas Hazard Area, except the following:
    - A. 6BF Stockhouse
    - B. 6BF Reline Project Offices and Reline Crib Rooms.
  - ii. Each work group is required to have a personal CO monitor (within a group that will stay close together indicatively ~10 m of each other) when entering a Gas Hazard Area. Monitors can be collected from:
    - A. The Gas Watcher cabin located at 5BF on Blast Furnace Road.
- f. There is a risk that gas can be detected onsite from other operating departments close by, i.e. Energy Services, No.5 Blast Furnace and Steelmaking.
- g. The controls for these gas hazards are defined in procedure SP-BF6-O-A-SAF-10 *6BF Gas Monitoring Requirements Procedure*.

## 9.7. Pre-Contract Responsibilities

- a. Hazards shall be identified for specific packages of work related to the Project, and these shall be listed in the tender documents. This information shall be compiled from the project-related hazards that have been identified.
- b. The Contractor will be required to prepare a Safe Work Method Statement (SWMS) on the basis of this data, which shall include an explanation of how the hazards and risks associated with their activities will be managed and controlled. This should be submitted to the Principal or their representative within 28 Days of contract award and prior to work starting.

## 9.8. Construction Hazard Identification

- a. As per this Safety Management Plan each Contractor shall identify hazards and management controls before or during the execution of work and prepare SWMSs in accordance with the NSW Work Health and Safety Act and Regulation.
- b. Contractors are responsible for the establishment and implementation of the necessary detailed procedures for hazard control, and for the preparation of JSEAs.
  - i. These procedures shall be submitted for approval and may be subject to periodic audit by the 6BFR Project Team.
  - ii. The SSW permit system requires that the risks and/or hazards for a task(s) are assessed and addressed prior to the issue and application of an SSW permit.

## 9.9. Preventative and Corrective Action

- a. Corrective actions and learnings resulting from safety initiatives on the Project shall be captured and implemented as a means of facilitating continuous improvement in safety outcomes. Information for this process can be derived from:
  - i. Design reviews
  - ii. Hazard reviews
  - iii. Workplace inspections and audits
  - iv. WHS system audits (self-assessments)
  - v. Incident investigations including ICAMs
  - vi. Trend analysis
  - vii. Management reviews
  - viii. Emergency drills.
- b. It is expected that Contractors have appropriate systems in place to identify, prioritise, record and track to completion preventative and corrective actions identified while undertaking work for BlueScope Steel.



## 9.10. Safe Work Method Statement (SWMS)

- a. A Safe Work Method Statement (SWMS) is a high level document that details all the potential high risk work activities that may be carried out to complete an overall job as detailed in the Safe Work Australia *Construction Work Code of Practice*. The SWMS must be completed within 28 days of contract award and prior to any work commencing. The SWMS should be developed first, and used to document the JSEA.
- b. Work shall not commence until the Principal has accepted the Contractor’s SWMS.
- c. Contractors are responsible for ensuring that a SWMS is prepared for the Contract Works being undertaken. Contractor Safety Management Plans shall incorporate mechanisms for defining those activities that must not be completed until the SWMS has been completed, agreed and communicated.
- d. A SWMS must include hazard identification and controls for at least safety and the environment.
- e. Corrective actions and learnings resulting from safety initiatives are to be included in SWMSs.
- f. A significant change to the task at hand shall trigger an immediate review of the SWMS.
- g. The potential of “Stuff That Kills You or harms the Environment (STKYE)” including falling objects, are mandatory considerations for all SWMSs during this project.
- h. Auditing of SWMSs shall take place throughout the project.



## 9.11. Job Safety and Environment Analysis (JSEA)

- a. A Job Safety and Environment Analysis (JSEA) is a document developed for a specific task or group of tasks to be carried out on a specific day/s. The JSEA must describe a step-by-step method to complete the work and include the hazards and controls for each step, as well as who in the work group is to ensure the controls are in place.
- b. A SWMS should be developed first, and referenced in the development of the JSEA. The Contractor must submit an initial JSEA to the Principal's Representative for review and approval prior to obtaining a SSW permit for the associated work.
- c. A significant change to the task at hand shall trigger an immediate review of the JSEA. Irrespective of any changes, the JSEA shall be reviewed at least daily, and updated to include any additional tasks or site-related hazards and controls identified by the work crew, and communicated at the Toolbox Meeting. Learnings from other incidents and safety initiatives should be also considered when reviewing the JSEA.
- d. It is an expectation that all personnel involved in the job or task will have input into the JSEA.
- e. When third parties become involved in part of a job (e.g. crane drivers performing a lift), they shall review, modify and sign the JSEA of the work group. Changes shall be communicated to the entire work group.
- f. The potential of "Stuff That Kills You or harms the Environment (STKYE)" including falling objects, hand safety and housekeeping are additional mandatory considerations for all JSEAs during this project.
- g. Auditing of JSEA shall take place throughout the project.
- h. All members of a work group shall sign the JSEA before commencing work. This acknowledges that all team members are aware of all the hazards and controls associated with the work.
- i. The JSEA shall be signed off by the Person in Charge.
- j. The JSEA shall be present in the work information package and be immediately accessible to the work group on the jobsite during works. This is to ensure that it can be readily referenced by the work group during works, can be reviewed by new personnel joining the work group, can be reviewed by the Principal and Contractor during work site inspections and audits and revised by the work group as the plan and work changes or new hazards are identified.
- k. Once the entire job is completed, the Person in Charge (PIC) will scan and email a copy of the final JSEA including modifications and signatures to the Work Owner (typically the Construction Coordinator) within 24 hours.
- l. The Construction Manager may sign a JSEA where Construction Manager approval is required for an activity as a means of providing formal authorisation.

## 9.12. Take Two

"Take Two" (Stop; Think and Plan for safety) is a safety philosophy used within BlueScope to minimise the risk of injury. The basis for "Take Two" is prior to starting the task, to think about the hazards involved, and then planning to control those hazards.

- a. The "Take Two" philosophy is part of the BlueScope safety culture, and the site inductions, Project safety forums and meetings shall encourage "Take Two" at every opportunity.
- b. A "Take Two" identifying new hazards will trigger a JSEA review, where the new hazards and control measures are documented.
- c. As a minimum, a written or online "Take Two" shall be conducted at the start of the shift, when returning from a meal break, and/or when the job changes. "Take Twos" shall be periodically quality checked by the Contractor's Construction Supervisors.



### 9.13. Personal Protective Equipment (PPE)

- a. The chart CH.BZ-SEQ-S-03-10.01 *Minimum Personal Protective Equipment* describes the PPE required for all BlueScope ASP, NZ and PI sites and operations, and must be complied with when visiting or working in these areas.
- b. All PPE is to be worn correctly as per the manufacturer's instructions.
- c. The minimum PPE requirements are:
  - i. Protective Helmet – must have a chin strap or other approved retaining device and preferably reflective stripes. To reduce the likelihood of a safety helmet falling and injuring someone below, hard hats are to have retaining devices fitted whilst on site, and retaining devices employed when:
    - A. Above the tuyere level on the Furnace
    - B. Above ground floor for all other areas including the Stoves, Hot Blast System, Gas Cleaning, Charging System, Stockhouse, Highline, Slag Granulation Plant, Baghouses, Utilities Service Structures, Capital Store
    - C. Lifted off the ground, such as on a scaffold, in a workbox or elevated work platform.
  - ii. Hard hat retaining devices are not required in the Main Control Building. In high winds, consideration should be given to employing retaining devices in all outside areas to mitigate the risk to an acceptable level. Chin Straps shall be worn when wind speed exceeds 11 m/s. Refer Wind TARP 6BFR-PRJ-PLN-0038.
  - iii. Bump caps are acceptable in electrical switchrooms and cable ducts provided peak is <30 mm.
 

**NOTE: Safety helmets cannot be yellow – this colour is reserved for the DEC. General personnel wearing a yellow helmet may cause confusion in an emergency.**
  - iv. Eye Protection – Safety glasses with side shield or bandit style. Positive seal and/or goggles are recommended for all work if dust is an identified risk or hazard. Glasses should be clear, except in sunlit areas where suitable tinted glasses are acceptable.
  - v. Ear Plugs / Ear Muffs / Moulded Ear Plugs - Hearing protection is required in process areas whilst plant is running, and should be considered for all tasks generating noise or conducted in an area affected by noise. As a minimum everyone should have easily access to hearing protection (preferably carried at all times).
  - vi. Protective Gloves –Gloves are to be worn on site at all times by all personnel. Gloves may be removed for short durations to perform low risk activities where high dexterity is required, e.g. writing, turning pages, etc. Gloves are to be donned immediately afterwards. Gloves are to be selected to provide the appropriate level of protection for the task being performed.
  - vii. High-Visibility Garments - Cotton drill clothing (long sleeve collared shirt and trousers) with reflective tape. Sleeves must not be rolled up.
  - viii. Safety Footwear – Fully enclosed, steel capped- see standard.
- d. Deviation from the above minimum PPE requirements shall be identified as per Risk Assessments, SWMSs and JSEAs.
- e. Other task-specific PPE to be worn shall be identified as per Risk Assessments and JSEAs.
- f. Contractors shall supply Contractor's workers and subcontractors with PPE required to safely perform works and comply with 6BFR PPE requirements, including consideration of additional PPE when handling metal strapping as per clause 9.35.
- g. Everyone must carry a P2 mask (as a minimum level of protection) in case dust is generated in an area in which they are in.

## 9.14. Housekeeping

Housekeeping is an integral part of every job in achieving a quality, safe outcome. Good housekeeping sets the standard for a safe project.

- a. Housekeeping must be considered in all work tasks, and shall therefore be included in the JSEA.
- b. No job shall start or be considered complete until all housekeeping issues have been rectified.
- c. It is never appropriate to place spares or tools in a position where there is potential for them to fall to levels below the immediate work site.
- d. All spares, removed parts, and consumables shall be tagged and returned to the nominated spares storage area.
- e. Housekeeping shall be reviewed and managed throughout the project. As a safety control, job site reviews shall occur prior to and after breaks before work recommences.
- f. All welding rod ends, cable ties, tape and packaging shall be picked up and disposed of in the general waste bins.
- g. An SSW shall not be signed off until the job site is deemed to be in as good (or better) condition than it was found.
- h. Scrap Bins shall be on the job site to manage any scrap materials.
- i. Rubbish bins shall be provided for disposal of general rubbish.
- j. Steel /Timber Scrap Bins shall not be contaminated with general rubbish.
- k. Loose nuts and bolts shall be stored in containers, and not left lying on walkways.
- l. Cigarette butts and ear plugs shall not be thrown on the ground.
- m. The Principal may direct work groups to attend to housekeeping issues, and may stop works to correct issues where a significant safety risk is presented. A Contractor shall have no claim where housekeeping is unsatisfactory, and the Principal has provided such a direction.

## 9.15. Hazardous Chemicals

- a. All hazardous chemicals (substances and materials) shall be managed in accordance with [BZ-SEQ-S-03-116 Hazardous Chemical and Dangerous Goods Management Procedure](#).
- b. Notification and approval of all substances and materials brought to site is required prior to arrival.
- c. A Safety Data Sheet (SDS) shall be made available onsite for all hazardous substances.
- d. A risk assessment shall be carried out for the use of the hazardous substance in accordance with BlueScope form [F.BZ-SEQ-S-03-116.01 Hazardous Chemicals – Risk Assessment](#) form, or in accordance with the Contractor's equivalent hazardous chemicals risk assessment form.
- e. Where BlueScope has an additional policy on a specific chemical, the requirements specific to that policy shall also be applied. Additional policies typically include but are not limited to:
  - i. *Asbestos Management* [BZ-SEQ-S-03-117 Asbestos Management Procedure](#).
  - ii. *Management of Refractory Ceramic Fibres/ Synthetic Mineral Fibres Procedure* [BZ-SEQ-S-03-118](#)
  - iii. *Legionella Policy for Cooling Towers* [DIV-OHS-01-32](#).

## 9.16. Connection to Services

Prior to connecting to services including water (Domestic and Industrial), fire systems, sewerage, Natural gas or LPG, refer to Procedure [DIV-OHS-03-300 Requirements to Perform Plumbing Work Involving Fresh \(Domestic and Industrial\) Water, Fire Systems, Sewerage, Natural Gas or LPG](#). Inspection and approval will be required from the nominated site licensee.



## 9.17. Warning Tag and Barricading

- a. The BlueScope Steel Divisional Procedure for warning tags and barricades must be strictly adhered to:

DIV-OHS-01-13      *Warning Tag and Barricade Regulations*

- b. **Warning Tags** shall be utilised to:

- i. Prevent the operation of plant or equipment that may be faulty, damaged or out of service
- ii. Advise of non-standard settings, conditions or safety information
- iii. Provide information about hazards inside danger barricades or caution barricades.

- c. A **Danger Barricade** with Danger Flags shall be used for two primary functions:

- i. **To restrict unauthorised access to a defined area containing hazards and risks** (e.g. a hole in the ground, overhead work from which an object may fall, commissioning or testing of equipment, construction and building areas, earthworks involving mobile and other moving equipment, other risks such as chemical leaks, some areas of forklift activity, etc.).
- ii. To provide protection to those personnel working within the defined area from unauthorised access by any other person or activity (e.g. work being performed below ground, where protection is required to ensure no unauthorised activity occurs around or over the top).



- d. A **Caution Barricade** with Caution Flags shall be used for purposes other than unauthorised entry requirements, such as bringing attention to hazards, temporary separation of pedestrian ways and roadways, etc. If a higher level of control is required, a Danger Barricade shall be used.



- e. Rules for Caution Barricades:

- i. A Caution Barricade may be crossed after following Take Two principles,
- ii. Each person entering through a Caution Barricade shall stop, look, think, consider the possible hazards, and then proceed with caution, if it is safe to do so.

- f. Barricades must be planned so that the impact of access restrictions to the site is minimised and can be communicated and managed. The Work Owner is to be notified in advance of the intention to erect a barricade. Details of barricades that will remain up beyond the shift in which they are installed must be placed on the 6BFR Project Barricade Register by the Work Owner.

- g. All accesses to the area must be protected by the barricade to prevent accidental entry.

- h. Barricades must be no larger than is necessary to provide the required protection, and the onus is on the Barricade Owner to provide access around the barricade when impeding normal pedestrian access ways.

## 9.18. Confined Space

- a. Systems of work and the responsibilities relating to work in Confined and Controlled Spaces at ASP Manufacturing (NSW) sites are governed by BlueScope procedure:

DIV-OHS-06-101      *Confined and Controlled Space Procedure*

- b. The Blast Furnace department maintains:

- i. A record of all Controlled/Confined Spaces within the plant ownership of the Level 2 Operations/Project Manager
- ii. A list of people who can assess the competency of those who perform Confined Space work within the department

- iii. A list of accredited Confined Space Responsible Persons (CSRPs) who are accredited to perform confined space work within the department.
- c. For entry to any Confined Space at the Blast Furnace, the minimum training requirement for BlueScope workers is the Confined Space Awareness training, and for Contractors the equivalent or RTO-based accreditation.
- d. All CSRPs and Standby Persons must have passed a Competency Assessment in addition to the mandatory requirement for Confined Space Awareness training.
  - i. The CSRP is a person authorised by the Level 2 Operations Manager (or delegate) to identify, plan and prepare for work in Confined or Controlled Spaces
  - ii. The CSRP must also ensure the Confined Space Supervisor is suitably qualified and sufficiently aware of their responsibilities to perform this role.
- e. A written Risk Assessment shall be conducted for all Confined and Controlled Space work, and the hazards managed by applying the hierarchy of controls.
  - i. A mandatory control for work in a Confined or Controlled Space is a pre-entry review (i.e. Toolbox Talk) using this Risk Assessment
  - ii. At the pre-entry review, the CSRP or Confined Space Supervisor shall record the names and signatures of all persons who have received and accepted the information presented to them on a Confined Space Work Group List
  - iii. This list of names shall be given to the Standby Person as the only people who are allowed to enter and work in the Confined Space.

## 9.19. Working at Heights

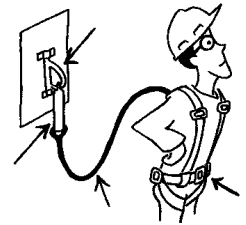
- a. Whenever a person has the potential to fall, a safe system of working shall be adopted. The BlueScope *Fall Prevention Policy* must be adhered to at all times:
 

DIV-OHS-01-04      *Fall Prevention Policy*
- b. For jobs where Working at Heights has been identified, controls must be addressed in the SWMS and JSEA.
- c. Fall Prevention hierarchy of control shall be applied:
  - i. Elimination
  - ii. Temporary Safe Work Platform
  - iii. Separation
  - iv. Positioning Systems
  - v. Fall Injury Minimisation
  - vi. Administrative Controls.
- d. A rescue plan shall also be discussed at Toolbox Talks and be built into the JSEA.
- e. No person shall work or walk within 2 metres of an unprotected edge (without fall restraint) where there is the potential to fall.
- f. For unprotected edges where the fall distance is 2 metres or greater, the minimum fall protection method shall be fall restraint, unless a fall arrest system is authorised by the Construction Manager.
- g. For a fall distance up to 2 metres, a risk assessment shall be conducted to determine the appropriate fall prevention protection method.
- h. Where a person is walking or working more than 2 metres from an unprotected edge where there is potential to fall and suffer serious injury or to fall greater than 2 metres, controls shall be implemented to ensure people cannot inadvertently or unknowingly move to within 2 metres of the unprotected edge.

- i. When assessing the risk of working at height, the issues to be considered shall include, but not be limited to:
  - i. Condition of work area
  - ii. Type of work being performed
  - iii. Environmental conditions
  - iv. Adjacent distractions
  - v. Complexity of task(s) being performed
  - vi. Stored energy.
- j. When working from an EWP over water, a worker's fall protection lanyards shall be disconnected from the mobile equipment to ensure they are able to escape the platform should it invert or become immersed.

## 9.20. Safety Harnesses / Fall Restraints / Static Lines

- a. Safety harnesses, fall restraints, static lines and lanyards shall be inspected and tagged in accordance with divisional procedure DIV-OHS-01-04.06 Safety Harnesses, Lanyards, Static Safety Lines and Anchorages Procedure.
- b. The preference is to provide scaffolding or EWPs for access to work faces that have a fall potential.
- c. Fall restraint systems that prevent a person from falling shall be used in preference to fall arrest systems, and the use of fall arrest as a control shall only be permitted after written approval has been granted by the Project Construction Manager or their delegate



For more complete definitions of these terms, see DIV-OHS-01-04 Fall Prevention Policy.

- d. All works requiring the use of a harness shall require that lanyard connection is 100% at all times except when working over water. This may be achieved through the use of double or twin harnesses with fall arrestors and fall restraints.
- e. The installation and use of temporary static lines (fibre rope / webbing) shall only be permitted after written approval has been granted by the project Construction Manager or his delegate.
- f. Temporary static lines are to be inspected before each use (each day) by height safety operator and 3 monthly by height safety inspector.

## 9.21. Scaffolding

6BFR-PRJ-PLN-0027 *6BFR Scaffold Management Plan* is to be used to ensure the management structures and systems are in place to manage the scaffold requirements for the duration of the 6BFR Project. The plan has been developed based on AS/NZS 1576 *Scaffolding* and AS 4576 *Guidelines for Scaffolding*.

BlueScope will provide scaffolding material.

6BFR-PRJ-PLN-0027 *6BFR Scaffold Management Plan* outlines the requirements to ensure that:

- a. Scaffolding is erected, modified, dismantled, and used in conformance with the site standard.
- b. Scaffolding is erected by authorised and qualified personnel, and Scaff tags placed to indicate that scaffolds are fit for use.
- c. If scaffold is the correct option, an assessment will be conducted by the 6BFR Scaffolding team prior to all scaffolds being erected to determine the barricading plan required, and whether scaffold mesh, kickboards, both, or another form of barrier is required to prevent tools or material falling from the working deck once the scaffold has been handed over to the client and is ready for use. For those scaffolds where this is neither practical nor feasible:

- i. The area around the scaffold shall be barricaded off using a red Danger Flag as per DIV-OHS-01-13 Warning Tag And Barricade Regulations.
- ii. Appropriate overhead protective barriers shall be installed.
- iii. Materials used to provide shelter, dropped object prevention, or otherwise that may create a sail area to the scaffold structure shall not be secured to scaffolding without written approval from 6BFR Scaffolding Superintendent. Engineering may be required to ensure stability and safety of scaffold when exposed to wind loads.

## 9.22. Falling Objects

Falling objects represent a key risk for the 6BFR Project. The falling objects risk needs to consider:

- a. Whenever work is being done at height, a falling objects plan shall be built into the SWMS and JSEA.
- b. Buckets shall be used to carry and store loose objects.
- c. Lanyards shall be used to restrain any tools or equipment that has the potential to fall.
- d. Chin-straps or other approved retaining device shall be used on safety helmets in areas where they could fall, as per Section 9.13b.
- e. Plywood, insertion rubber, tarps, Refrasil, leather Blankets, etc. shall be used to prevent small items falling from elevated work sites to areas below.
- f. Work crews shall ensure all foreign items are removed from the work site prior to signing off the SSW.
- g. Particular care shall be taken when working off gridmesh floors and platforms. The work site "floor" shall be inspected for any penetrations through which items may fall, and control measures implemented to manage the risk.
- h. Where there is a potential for items to fall from height, the area below shall be barricaded to limit access.
- i. For scaffolding see Section 9.21c. iii above.

## 9.23. Hand Safety / Lifting / No Touch / No Strike

Hand injuries contribute to a large number of incidents in BlueScope each year. Many of these injuries could have been avoided if people had taken simple precautions, such as using handrails and wearing suitable PPE to protect their hands.

The hands are one of the most complex parts of the human body. The hand is a delicate structure, and even a minor injury might take years to resolve. Hand injuries are the most common injuries referred to a plastic surgeon.

- a. Gloves shall be worn at all times by all personnel when outside office buildings and established Green Pathways. Gloves may be removed for short durations to perform low risk activities where high dexterity is required, e.g. writing, turning pages, etc. Gloves are to be donned immediately afterwards. Gloves are to be selected to provide the appropriate level of protection for the task being performed. This shall be documented in the JSEA.
- b. Beyond the wearing of PPE, Hand Protectors and No Touch Tools are important aids when using striking tools or manipulating heavy objects.
  - i. There are a variety of No Touch/No Strike tools available to workers, and it is the expectation of BlueScope that these tools be utilised for all tasks where hand safety is at risk. When striking tools (hammers) are employed, there shall be a method provided to remove the other hand or other persons' hands from the striking zone.
  - ii. Deviation from BlueScope requirements shall be identified and described in Risk Assessments, SWMSs or JSEAs.
- c. Hands are prohibited from touching loads or lifting gear whilst the load is suspended on a crane hook. No Touch Tools and tag lines shall be used for all lifts. If this is not possible, the controls must be documented in the JSEA and signed off by the Construction Manager or delegate prior to the lift being performed.

- d. It is expected that all workers on site are aware of and 100% compliant with the BlueScope *Manufacturing Hand Safety Standard* [BZ-OHS-S-03-04](#). Any tasks that require deviation from the Standard shall have a documented method, and be approved by the Construction Manager or delegate.

**SCOPE**

Applicable to all Manufacturing Sites

- Never – touch suspended loads and lifting gear under tension.**
  - You must manoeuvre loads using “no touch tools”, tag lines or protected hand holds.
  
- Never – place your hands in the line of fire where they can be hit by striking tools.**
  - You must use the right tool for the task, tool hold extensions or protect your hands from the strike
  
- Never – place your hands in the line of fire where they can be pinched or crushed.**
  - You must stay clear of nip points, moving machinery and equipment with the potential to release stored energy.
    - When manoeuvring bins/trolleys/platforms keep your hands clear of created pinch points.
    - Only touch heavy moving objects using the protected hand holds.
  
- Never – use your bare hands to handle objects with sharp edges or make contact with hot materials and chemicals.**
  - You must use tools where possible otherwise wear the appropriate gloves for the task.
    - PPE is the last line of defence, so handle these objects as if your hands were unprotected.
  
- Never – use your hands to pick up Heavy Chain sets (lifting link >5kg, or where the portion of the chain set being lifted is > 15kg) to place on (or off) crane hooks.**
  - You must use a dedicated storage rack to attach/detach the chain set to the crane hook.
    - If a chain set is not in a rack You must use a **documented, approved**, lifting method.



**9.24. Hand and Workshop Tools**

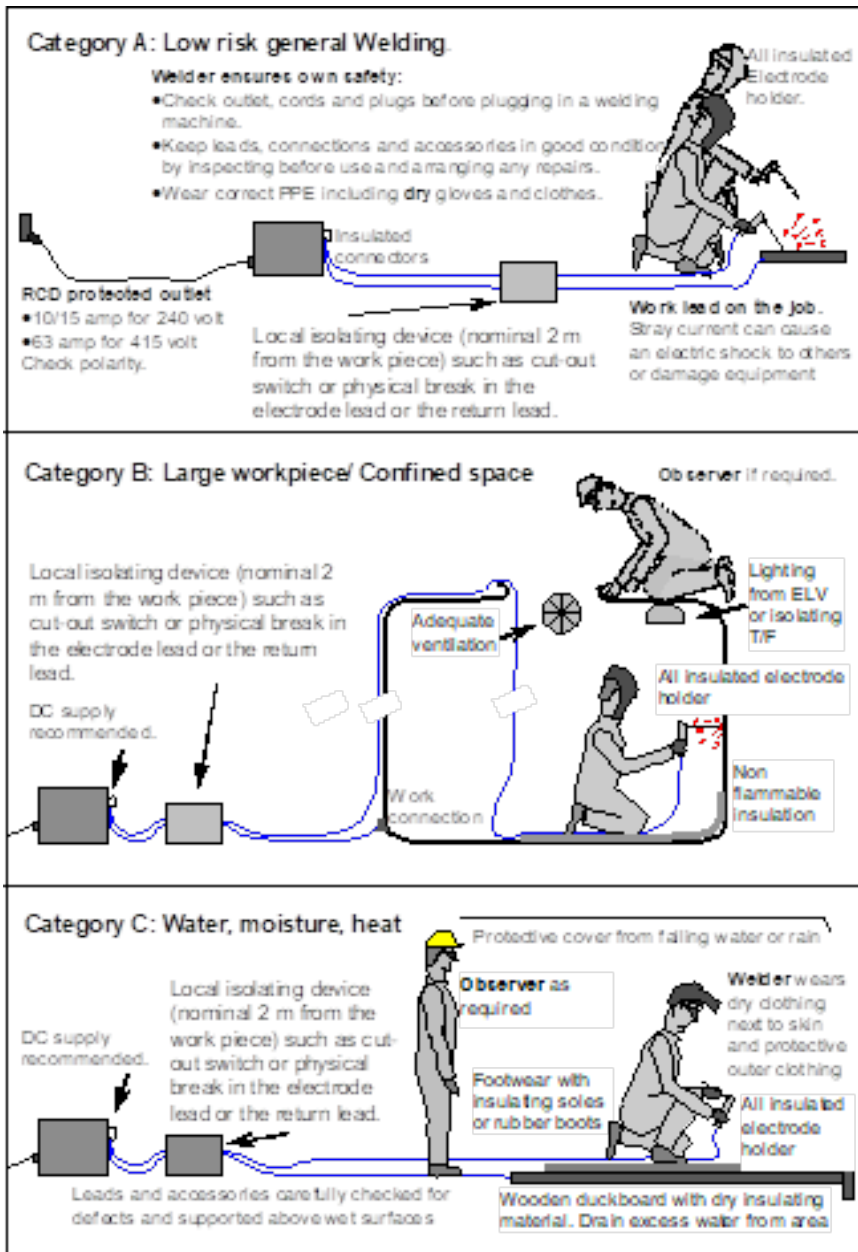
- a. Due to their hazardous nature, use of some tools and equipment is banned/restricted/preferred on ASP sites.
  - i. These are listed in [DS.BZ-SEQ-S-10-241.01 Restricted Equipment List](#).
  - ii. The process to manage equipment restrictions is described in [BZ-SEQ-S-10-241 Hand and Workshop Tools Standard](#). This document provides general safety guidance for the use of common hand and workshop tools/trolleys.
  
- b. BlueScope document [BSL-OHS-C-03-30 Manual Tasks Code of Practice](#) is available, and in addition to risks associated with musculoskeletal disorder type injuries (e.g. sprains and strains), this Code of Practice also addresses the risks associated with lacerations, contusions, crushes and fractures associated with the use of hand tools and manual handling tasks.
  
- c. Where possible, the use of battery-powered tools is preferred over the use of 240V, hydraulic or pneumatic hand tools.
  
- d. When grinders, concrete saws or impacting tools where material can be ejected are used, a face shield is to be worn in addition to glasses or goggles.



## 9.25. Welding Safety

- a. All welding operations shall conform to Australian Standard AS 1674.2 *Safety in Welding and Allied Processes*.
- b. Before welding commences, the work area shall be assessed, and the welding environment classified for risk of electric shock in accordance with environment category A, B, C:
  - i. Category A – Low risk general welding
  - ii. Category B – Large work piece / Confined Space
  - iii. Category C – Water, Moisture, Hot Humid areas.
- c. Prior to commencing welding the crew shall set up the area to protect other people from weld flash including the use of screens as per DIV-OHS-06-219 Hot Work Procedure.
- d. Whilst carrying out Manual Metal Arc Welding (MMAW) on the Port Kembla site, the relevant safe working procedures shall be observed:
  - i. Only DC machines with Voltage Reduction Devices (VRDs) fitted shall be used.
  - ii. Whilst changing electrodes, the circuit shall be “De-energised” so there is no power to the electrode holder (e.g. Safety cut-out switch, on/off switch on caddie, RCD portable protected outlets).
  - iii. Observer shall be in place, whilst welding in Category B and Category C (refer AS 1674.2 for definition of Observer).
  - iv. When welding, welding gloves shall be worn by both the Welder and their Assistant (e.g. Assistant is holding a bracket). When not using welding gloves, the glove policy reverts to the project standard of wearing gloves appropriate for the task.
  - v. Welding gloves are to be gauntlet style that provide protection to the wrist and forearm, and shall be in good condition, dry and used on both hands. Riggers gloves are not suitable for welding.
  - vi. The welder shall be insulated from the exposed parts of the work piece.
  - vii. Contact with damp surfaces shall be controlled via leather cushions, rubber or wooden duckboards.
  - viii. Dry fireproof clothing shall be worn that covers legs and arms, as well as rubber soled footwear and no bare steel toe caps.
  - ix. All Assistants shall comply with these requirements when working with Welders.

**Note: Excess degreaser must not be present where hot works are being carried out. Failure to ensure this will almost certainly result in a serious fire. Any excess degreaser shall be cleaned up prior to commencement.**
- e. Refer to Maintenance Standard Practice (MSP) Sheets No. 265 to 285 for valuable information on welding safety that will assist in avoiding any possible risk. Below is the *Welding Safety Risk Control Guide*.



## 9.26. Hot Work

Hot work involves the use of any tool that may produce heat, sparks or open flame. This includes processes such as welding, gas cutting and grinding.

- Hot work tasks shall have controls in place to eliminate/mitigate the risk of fire. BlueScope divisional procedure [DIV-OHS-06-219 Hot Work Procedure](#) shall be followed for all hot work on the 6BFR Project, including the use of [F.DIV-OHS-06-219.01 Hot Work Checklist](#).
- Good housekeeping and attention to hazards and risks associated with hot work in the planning and execution phase are the main mitigation controls that may be applied to fire prevention.
- During the construction and commissioning phases, fire prevention and control strategies shall be an integral part of the JSEA process, and shall be regularly audited by the 6BFR Project Team.
- The 6BFR Project will provide fire extinguishers for use by Contractors on site. A system for the issue, refilling and testing of fire extinguishers shall be established by the 6BFR Project Team.

- e. Any use of a fire extinguisher and/or other means to extinguish or control a fire shall be reported in the incident reporting system.

## 9.27. Manual Handling

- a. The scope of the 6BFR Project means there will be a significant amount of manual handling involved to complete the Project.
- b. Examples of manual handling tasks include erection and dismantling of scaffolding, positioning pipework for welding, and moving equipment around the site.
- c. Strategies shall be put in place to manage the risk of manual handling injuries. These shall be determined through the use of the Hierarchy of Control.

## 9.28. Personal Safety

- a. Personal Safety shall be addressed with all employees in the JSEA and at Toolbox Talks.
- b. Personal safety shall also be reviewed whenever work changes from the original plan. In which case, it includes checking the following:
  - i. Has permission to work been received?
  - ii. Is there an isolation procedure for this job?
  - iii. Can I fall or can something fall on me?
  - iv. Are safety signs required (e.g. flags, flashing lights, safety person)?
  - v. Is the area well-ventilated? Could fumes or dust be a hazard?
  - vi. Do I need to take special precautions (e.g. acids, etc.)?
  - vii. Do I need personal protective equipment or clothing?
  - viii. Are fire precautions required (e.g. fire hoses and extinguishers on site, etc.)?
  - ix. Have I personally locked out all relevant isolation points?
  - x. Has all possibility of movement, including stored energy, been eliminated (e.g. electrical, hydraulics, pneumatics, steam, pressurised fluids, gases, suspended weight, etc.)?
  - xi. Can movement of surrounding equipment endanger me (e.g. table rolls, overhead cranes, mobile equipment, etc.)?
  - xii. Housekeeping, before, during and after the job.

## 9.29. Environmental

- a. Environmental hazards and risks shall be identified prior to project construction. However, introduced and task-related environmental hazards shall be identified and controlled through the JSEA process, and shall be documented.
- b. When identifying environmental hazards, all aspects including Land, Air, Waste, Water, Noise and Energy & Greenhouse Gases (LAWWNE) shall be considered.
- c. During the 6BFR Project, one of the main concerns is liquid going to drain. It is critical that when working on the plant, any liquids generated due to work are collected.
  - i. Any spills shall be cleaned up immediately
  - ii. All work that involves liquids MUST have all surrounding drains banded with sand bags
  - iii. Sand bags shall be removed at the completion of the work.

- d. Environmental incidents shall be reported as detailed in the “Incident Management” section, as well as notifying the BlueScope Environment Officer on-call as soon as practicably possible.
- e. The BlueScope Steel Occupational Hygiene Department shall be utilised to monitor and assess any identified hazards including heat, dust, and noise.

Position	Name	Contact
Environmental Duty Officer	Duty Officer	Request via BlueScope switch on [9] or [4275 7522]
Occupational Hygienist	Frances Evans	[02 4275 4230] or [0417 450 972]

### 9.30. Excavation / Penetrations

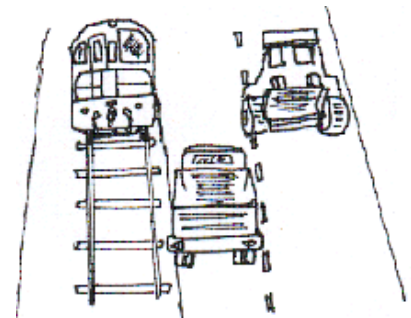
- a. All excavation and penetration works associated with the 6BFR Project shall be completed in accordance with DIV-ES-ADM-033 Excavation and Penetration Procedure.
- b. The preparation and issue of all excavation and penetration permits shall be coordinated through the Engineering Manager.
- c. Excavated spoils shall be tested prior to disposal elsewhere on or off the BlueScope site.
- d. All excavations shall be carried out in accordance with SafeWork NSW *Code of Practice for Excavations* as a minimum.

### 9.31. Safety Watchers

- a. The Contractor shall provide safety watchers where required to manage construction activity related hazards. Watchers must understand their role, be available and aware, positioned appropriately and be in positive communication with the work team. Watchers shall be provided;
  - i. when it is not possible to provide exclusion zones for mobile equipment
  - ii. as required under the confined space procedures
  - iii. for EWP as per 6BFR-GEN-POL-0001 *6BFR Spotters and Safe Use of EWPs Policy*
  - iv. In any other circumstances where required by BlueScope procedures or nominated as a control in the JSEA or work procedure.

### 9.32. Transport / Driving

- a. All access to the BlueScope Steel Port Kembla Steelworks site shall be in accordance with DIV-OHS-01-40 Road Safety and Site Access Procedure and 6BFR-PRJ-PLN-0021 *6BFR Logistics Management Plan* for deliveries where applicable.
- b. Due to the limited parking areas on site, consideration should be given by Contractors to transport workers to and from their work sites by the Contractor. Buses shall not be allowed to park on the site.
- c. Task-related vehicles and delivery vehicles shall be permitted on site whilst they are required for the task at hand only. At all other times these vehicles must be parked in designated car parks.
- d. Delivery vehicles shall comply with the TfNSW requirements for load restraints when delivering equipment to the 6BFR Project site and/or lay down areas.
  - i. It is the responsibility of the person who organised the delivery to ensure that all drivers have the correct PPE for the area they are entering and are aware of the site requirements.



- ii. This includes providing an escort from the PKSW boundary if the driver is not BlueScope General and Road and Rail inducted.
- e. JSEA lift studies for the loading and unloading of vehicles shall be performed and applied.
- f. Unloading of trucks shall also be governed by DIV-OHS-01-04 Fall Prevention Policy.
- g. All persons working on the 6BFR Project shall be notified of the most appropriate route to take to access the work site.

### 9.33. Inclement Weather

- a. Inclement weather includes extreme wind, temperature, rain, lightning or other weather condition that can cause a risk to people and/or plant if suitable controls are not put in place. If inclement weather conditions are experienced or forecast, the Work Owner and Person in Charge should put suitable controls in place. Refer to 6BFR-PRJ-PLN-0037 *6BFR Lighting - Trigger, Action, Response Plan* and to 6BFR-PRJ-PLN-0038 *6BFR Wind - Trigger, Action, Response Plan* for guidance.
- b. All personnel must comply with the Original Equipment Manufacturer (OEM) for weather conditions, for example maximum wind speed that cranes can operate in.
- c. For people working outside, sun safety must be included in the JSEA.

### 9.34. Smoking

- a. Smoking includes cigarettes, pipes, vaping, and electronic cigarettes.
- b. Smoking is only allowed in the designated areas. There is no smoking allowed within the construction or laydown areas.

### 9.35. Metal Strapping

- a. When cutting off or applying metal strapping, the following additional PPE must be considered, relevant to the type of strapping and the number of straps to be cut, prior to starting the task:
  - i. Face shield; may be clear or mesh.
  - ii. Gloves that are cut rated 3 or greater.
  - iii. Arm guards, Kevlar shirt sleeves, or extra-long gloves that are cut rated 3 or greater and reach the elbows.
- b. The JSEA or procedure for the job must also include a consideration of the stored energy in the strapping, and the position of the person's hands and body.

### 9.36. Working Hours and Fatigue Management

During the life of the Project, persons may be potentially exposed to working excessive hours. These conditions are most likely to occur during the submission process, construction, commissioning, and where tasks are critical to the project schedule. Excessive hours of work can increase fatigue levels and hence greatly increase the risk of injury.

- a. The maximum planned working hours on site for the project are 58 hours/week for trades and 64 hours/week for supervisors and coordinators recognising the need for planning and reporting. Approval needs to be obtained from the Construction Manager to exceed these limits.
- b. No individual is to exceed a total of 72 hours of work during any 7-day period without approval from the Project Manager.
- c. No individual should work greater than 16 hours in a single shift unless there is an emergency. In the case of an emergency, the following processes should be undertaken:
  - i. A Risk Assessment shall be completed on the individual

- ii. Permission shall be sought from the Project Manager, or their Area Manager or Functional Manager
  - iii. An incident shall be entered into the incident reporting system, with all details including reasoning
  - iv. The individual shall be supervised or monitored by a person who has worked less than 16 hours.
- d. In the case of mobile or other equipment drivers where Government Legislation exists, Legislation shall be adhered to.

## 9.37. Demolition

- a. Demolition involves work to demolish or dismantle a structure or part of a structure that is load-bearing or otherwise related to the physical integrity of the structure.
- b. A restricted licence is required to carry out demolition work on a structure or part of a structure that:
  - i. is between 6 metres and 15 metres in height,
  - ii. will affect its load-bearing capacity or structural integrity,
  - iii. involves the use of load shifting machinery on a suspended floor.
- c. An unrestricted licence is required to carry out work on a structure or part of a structure that:
  - i. is over 15 metres in height,
  - ii. is a chemical installation,
  - iii. involves a tower crane,
  - iv. involves a mobile crane with a rated capacity of more than 100 tonnes,
  - v. has structural components that are pre-tensioned or post-tensioned,
  - vi. involves floor propping,
  - vii. involves explosives.
- d. Before any removal or dismantling work is undertaken, it will be assessed against the above criteria. Any work that is identified as demolition will be supervised by a person who holds the required licence, with the project team typically engaging a company that has the licence.

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## 10. INSPECTION AND TESTING

### 10.1. Incoming Material, Products, Substances and Equipment

- a. Incoming materials, products, substances and equipment that may affect health, safety or the environment shall be raised as a topic for review in the relevant design, procurement or construction reviews. BlueScope document [BZ-SEQ-S-03-116 Hazardous Chemical and Dangerous Good Management Procedure](#) shall be used as the guideline for control of these substances.
- b. No hazardous substances shall be brought onto site without approval from the Construction Manager or HSE Manager and, as a minimum, materials and hazardous substances shall be handled in accordance with the requirements of the relevant Safety Data Sheet (SDS).
- c. A copy of SDSs shall be provided to the HSE Manager or their representative at least one (1) week prior to bringing the material, product or substance onto the 6BFR Project site, for assessment and maintenance of the 6BFR Project SDS master file, which is kept on the BlueScope ChemAlert system.
- d. A copy of the SDS shall be provided with the JSEA, and reviewed with the work crew before work commences.

- e. During the construction review process, Contractors will also be asked whether any of their work requires the use of hazardous substances or requires special requirements for storage, packaging or handling of goods and materials. Where identified, Contractors will be asked to develop work procedures to control these hazards.
- f. A risk assessment shall be carried out for the use of the hazardous substance in accordance with BlueScope form F.BZ-SEQ-S-03-116.01 Hazardous Chemicals – Risk Assessment form or in accordance with the Contractor's equivalent hazardous chemicals risk assessment form.
- g. For non-hazardous substances, a review of the SDS shall also be conducted to determine whether there are potential adverse health effects that may arise from the use of these substances. Where this is identified, a risk assessment shall also be conducted.

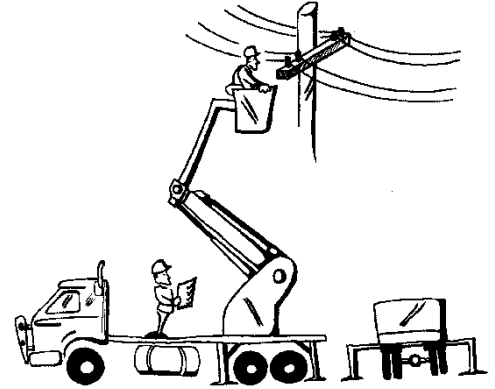
## 10.2. Construction Equipment

- a. All equipment introduced to the 6BFR Project site shall meet BlueScope Requirements.
- b. Rigging Equipment such as slings, hoists, rigging and lifting equipment and fall prevention equipment tools shall meet the requirements specified in 6BFR-PRJ-PLN-0036 *6BFR Lift Management Plan*.
- c. All scaffolding shall meet the requirements of 6BFR-PRJ-PLN-0027 *6BFR Scaffold Management Plan*.
- d. Portable hydraulic power equipment shall have hoses protected with burst protection sleeving where hoses are frequently handled and are in close proximity to workers whilst pressurised.
- e. Equipment listed as "Banned" in DS.BZ-SEQ-S-10-241 *Restricted Equipment List* shall not be introduced to site. Equipment listed as "Restricted" must have formal authorisation from the Construction Manager prior to being introduced and used on the Project site.
- f. Equipment introduced to site must be inspected prior to use, and only used where the equipment is safe to use and OEM instructions are followed regarding its use and maintenance.
  - i. This inspection process shall be included in the monthly audit schedule to ensure compliance, and any equipment that does not meet the required standard shall be taken out of service until rectified.
  - ii. The Principal shall routinely audit the Contractor's equipment management system including evidence of maintenance and certifications, and the Contractor shall furnish the Principal's Construction Manager and their representatives with access to this information.

## 10.3. Mobile Cranes, EWP's and Forklifts

- a. Mobile Cranes and lifting generally must follow processes described in 6BFR-PRJ-PLN-0036 *6BFR Lift Management Plan*.
- b. Hire of EWP's and Forklifts must follow processes described in 6BFR-PRJ-PLN-0039 *6BFR Equipment Hire Management Plan*.
- c. The Contractor shall obtain approval from the Construction Manager or their delegate for the use of mobile cranes, elevating work platforms and forklifts on site.
- d. The SWMS/JSEA shall include and reference the hazard/risk associated with the use of such equipment, and the controls to mitigate these risks.
- e. Cranes shall be registered and tagged for use within BlueScope.
  - i. Cranes shall have complying inspection certificates issued by 'CraneSafe' or BlueScope crane inspectors.
- f. In accordance with DIV-ENG-11 *Hire a Mobile Crane Procedure*, all crane lifts must have a crane lift study completed as part of the planning process, utilising DS.DIV-ENG-11.01 Mobile Crane Lift Study form. All lifts need to consider the location and affected areas of the plant when the lift is taking place.

- g. All mobile equipment shall comply with BSL-OHS-C-03-03 Mobile Equipment Code of Practice and with DS.BSL-OHS-C-03-03.01 Mobile Equipment Code of Practice Technical Guidelines.
- h. The 6BFR Project construction site requires significant levels of movement of cranes, forklifts and EWP's to enable the work to be executed. This may preclude the usual separation of mobile equipment and people by barricading as required by the code of practice.
- i. In cases where it is not possible to separate mobile equipment and people, a safety watcher shall be used to control the interactions and movements of mobile equipment.
- i. When EWP's are required, the JSEA shall address rescue and recovery methods and shall comply with 6BFR-GEN-POL-0001 *6BFR Spotters and Safe Use of EWP's Policy*.



## 10.4. Powered Plant

- a. Any diesel, petrol, LPG or pneumatic power plant shall be supplied with evidence that the machines have been regularly maintained and comply with statutory requirements. This includes mobile and static powered plant.
- i. For work inside buildings, the preference is to use electric powered equipment.
- b. The Contractor shall include in the JSEA details of how the following issues will be managed in relation to power plant to be used on site:
- Level of fumes
  - Exhausting of fumes and ventilation that may be required
  - Noise levels
  - Risk of spillage or leakage of lubricants
  - Refuelling methods and spillage mitigation measures
  - Location of fire extinguishers and rescue equipment
  - Earthing requirements.

## 10.5. Electrical Equipment

- a. All electrical equipment brought to site shall be inspected and tagged in accordance with industry requirements and with BlueScope requirements outlined in MA.DIV-ENG-ET-004-01 *Electrical Safety Manual Part 1 – BlueScope Common Section* and MA.DIV-ET-004-02 *Electrical Safety Manual Part 2 – Site-Specific Reference Supplement*.
- b. All temporary electrical leads and lines shall be routed on insulated hooks or supports off the ground and out of damp environments.
- c. All electrical equipment shall be maintained in good condition and inspected, tested and tagged ~~monthly~~ before use and as part of a maintenance cycle by qualified personnel.
- d. All Low Voltage electrical equipment (240V) shall appear in a register with an approved inspection schedule. For office base equipment this will be 1 or 5 years. For site equipment this will be 3 months
- e. The Electrical Equipment Register is to be kept up to date by the Contractor and a copy issued to their area Electrical Construction Co-ordinator every 3 months after the 3 monthly inspections have been carried out.
- f. Site audits are to be carried out on all 240VAC or 415VAC electrical equipment to ensure all equipment test tags are in date by the Contractor.



- g. Equipment to be tested and tagged includes – RCDs, battery chargers, drills, grinders, extension leads, welders, plasma cutters.
- h. Untagged or out of date equipment is to be removed from use until it is checked and tagged fit for duty.
- i. All RCD units are to be pushbutton tested before use, and electrically trip tested every 3 months with the trip times recorded in the Electrical Equipment Register.
- j. Containers or Site Sheds brought to site are to be inspected by an Electrical Construction Co-ordinator before they are energised.
- k. Battery operated equipment does not need to be tested and tagged but should be regularly checked as fit for duty and purpose before use – Batteries should be safely stored and not left in equipment when not in use.

## 10.6. Explosive Blasting

- a. No explosive blasting shall be carried out on site unless approved by the Construction Manager and Project Manager in writing. It is envisaged explosive blasting may be required for removing the remaining iron skull from inside the furnace.

## 10.7. Explosive Power Tools

- a. Explosive power tools are not permitted on site unless approved in writing by the Construction Manager and the Project Manager.

## 10.8. Mobile Phones & Personal Electronic Devices

- a. The use of Mobile Phones and Personal Electronic Devices must be as per the site-specific policy 6BFR-GEN-POL-0002 *6BFR Mobile Phones & Personal Electronic Devices - Use on Construction Sites Policy*.

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# 11. HANDLING, STORAGE, PACKAGING & DELIVERY

- a. Methods of unloading and loading (handling) heavy equipment shall be identified in the JSEA.
- b. Where specific manual handling risks are identified, specific manual handling risk assessments shall be conducted and documented.
- c. Manual handling shall be a topic for review at the design and construction safety review meetings.
- d. Procedures shall be developed and documented by Contractors where special storage facilities, packaging or delivery requirements are required for products that require protection.
- e. Sites shall be reserved for the Project as lay-down areas. Access controls to these sites shall be established when required.

## APPENDIX A. REFERENCE DOCUMENTS

- a. The following is a general list of documents that shall be referenced and used, where applicable, in individual work packages.
- b. These documents are regularly reviewed and subject to document control through the BlueScope document control and compliance system, which maintains a compliance register to ensure that all relevant changes to legislation are captured and incorporated into the procedures.

Document No.	Title
<b>6BFR Project Documents</b>	
6BFR-PRJ-PLN-0015	6BF Reline Commissioning Management Plan
6BFR-PRJ-PLN-0027	6BF Reline Scaffold Management Plan
6BFR-PRJ-PLN-0036	6BF Reline Lift Management Plan
6BFR-PRJ-PLN-0037	6BFR: Lighting - Trigger, Action, Response Plan
6BFR-PRJ-PLN-0038	6BFR: Wind - Trigger, Action, Response Plan
6BFR-GEN-POL-0001	6BFR Spotters and Safe Use of EWP's Policy
<u>6BFR-GEN-POL-0002</u>	6BFR Mobile Phones & Personal Electronic Devices - Use on Construction Sites Policy
6BFR-GEN-PRE-0034	6 Blast Furnace Reline Visitors Induction
<b>BlueScope Company Documents</b>	
<u>BSL-MS-P-01</u>	BlueScope Health, Safety, Environment and Community (HSEC) Policy
<u>BSL-CAP-G-02-03</u>	BlueScope Steel Project Safety Management Plan Guidelines
<u>BSL-HSE-M-01-01</u>	BlueScope Steel Health, Safety & Environment Standards
<u>BSL-HSE-S-03-01</u>	BlueScope HSE Risk Management Standard
<u>BSL-HSE-SD-12-01</u>	BlueScope HSE Incident Management Standard
<u>BSL-HSE-C-S-03-23</u>	BlueScope Process Safety Code of Practice
<u>BSL-OHS-P-04-01</u>	BlueScope Alcohol and Other Drugs Policy
<u>BZ-SEQ-S-04-04</u>	Alcohol and Other Drugs Procedure
<u>BZ-SEQ-S-11-03</u>	Emergency Management Plan
<u>BSL-HSE-C-08-01</u>	HSE Aspects to Contractor Safety Management Code of Practice
<u>DS.BSL-HSE-C-08-01.01</u>	HSE Aspects to Contractor Safety Management Technical Guideline
<u>BSL-OHS-C-03-03</u>	Mobile Equipment Code of Practice
<u>DS.BSL-OHS-C-03-03.01</u>	Mobile Equipment Code of Practice Technical Guideline
<u>BSL-OHS-C-03-11</u>	Load Restraint Code of Practice
<u>DS.BSL-OHS-C-03-11.01</u>	Load Restraint Code of Practice Technical Guideline
<u>BSL-OHS-C-03-16</u>	Traffic Management Code of Practice
<u>DS.BSL-OHS-C-03-16.01</u>	Traffic Management Code of Practice Technical Guideline
<b>Work Health Safety and Risk</b>	
<u>DIV-OHS-01-04</u>	Fall Prevention Policy
<u>F.DIV-OHS-01-04.01</u>	Fall Prevention First Aid and Rescue Checklist
<u>DIV-OHS-01-04.02</u>	Operating and Working with Mobile Elevating Work Platforms (MEWP) Procedure
<u>DIV-OHS-01-04.03</u>	Fall Prevention Whilst Working on Powerlines Procedure
<u>DIV-OHS-01-04.04</u>	Fall Prevention Whilst Working on Roofs Procedure



Document No.	Title
<a href="#">DIV-OHS-01-04.05</a>	Scaffolding Safety Procedure (Manufacturing sites)
<a href="#">DS.DIV-OHS-01-04.05.04</a>	Electrical Hazards Associated with Scaffolding Data Sheet
<a href="#">DS.DIV-OHS-01-04.05.04.05</a>	Use of Scaffold Service Tag Coach and Audit Data Sheet
<a href="#">DIV-OHS-01-04.06</a>	Safety Harnesses, Lanyards, Static Safety Lines and Anchorages Procedure
<a href="#">DIV-OHS-01-04.09</a>	Working with Ladders Procedure
<a href="#">DIV-OHS-01-04.10</a>	Objects Falling from Above Procedure
<a href="#">DIV-OHS-01-04.11</a>	Industrial Rope Access & Suspension Work Procedure
<a href="#">DIV-OHS-01-05</a>	Smoking – No Smoking Policy
<a href="#">DIV-OHS-01-09</a>	Clothing and PPE Procedure (Manufacturing sites)
<a href="#">DIV-OHS-01-11</a>	Isolation Regulations
<a href="#">DIV-OHS-01-13</a>	Warning Tag and Barricade Regulations
<a href="#">DIV-OHS-01-14</a>	Department Access Control Procedure
<a href="#">DIV-OHS-01-21</a>	Guidelines for Registering, Inspection and Tagging of Lifting Equipment
<a href="#">DIV-OHS-01-32</a>	Legionella Policy for Cooling Towers
<a href="#">DIV-OHS-01-40</a>	Road Safety and Site Access Procedure
<a href="#">DIV-OHS-03-205</a>	Management of Change Procedure
<a href="#">DIV-OHS-03-300</a>	Requirements to Perform Plumbing Work Involving Fresh (Domestic & Industrial) Water, Fire Systems, Sewerage, Natural Gas Or LPG
<a href="#">DIV-OHS-06-01</a>	Manual Handling and Physical Ergonomics Procedure
<a href="#">DIV-OHS-06-101</a>	Confined and Controlled Space Procedure
<a href="#">DIV-OHS-06-219</a>	Hot Work Procedure
<a href="#">F.DIV-OHS-06-219.01</a>	Hot Work Checklist
<a href="#">DIV-OHS-06-220</a>	Working Beneath Overhead Refractory Linings Principles and Practices
<a href="#">MA.DIV-ENG-ET-004-01</a>	Electrical Safety Manual Part 1 – BlueScope Common Section
<a href="#">MA.DIV-ENG-ET-004-02</a>	Electrical Safety Manual Part 2 – Site-Specific Reference Supplement
<a href="#">BSL-OHS-C-03-30</a>	Manual Tasks Code of Practice
<a href="#">BZ-OHS-S-03-01</a>	Safe System of Work Procedure
<a href="#">BZ-SEQ-S-03-322</a>	Noise Management Procedure
<a href="#">CH.BZ-SEQ-S-03-10.01</a>	Minimum Personal Protective Equipment Chart
<a href="#">BZ-SEQ-S-03-11</a>	Respiratory Procedure (ASP sites)
<a href="#">BZ-SEQ-S-03-116</a>	Hazardous Chemical and Dangerous Goods Management Procedure (ASP sites)
<a href="#">F.BZ-SEQ-S-03-116.01</a>	Hazardous Chemicals – Risk Assessment form
<a href="#">BZ-SEQ-S-03-117</a>	Asbestos Management Procedure (ASP sites)
<a href="#">BZ-SEQ-S-03-118</a>	Management of Refractory Ceramic Fibres/ Synthetic Mineral Fibres Procedure (ASP sites)
<a href="#">BZ-OHS-S-03-02</a>	Stairs Safety Standard (Manufacturing sites)
<a href="#">BZ-OHS-S-03-04</a>	Manufacturing Hand Safety Standard
<a href="#">BZ-SEQ-S-04-05</a>	Injury Management Procedure (ASP sites)
<a href="#">BZ-SEQ-S-04-10</a>	Fatigue Management Procedure
<a href="#">BZ-SEQ-S-10-241</a>	Hand and Workshop Tools Standard
<a href="#">DS.BZ-SEQ-S-10-241.01</a>	Restricted Equipment List



Document No.	Title
SP-BF6-O-A-SAF-10	6BF Gas Monitoring Requirements Procedure
<b>Environment</b>	
<a href="#">BZ-ENV-S-11-04</a>	BlueScope Steel Pollution Incident Response Management Plan - Port Kembla Steelworks (PKSW) Epl6092
<b>Energy Services</b>	
<a href="#">DIV-ES-ADM-033</a>	Excavation and Penetration Procedure
<a href="#">DIV-ES-PC-001</a>	Access Requirements for Work on High Voltage Equipment
<b>Construction Services</b>	
<a href="#">DIV-CAP-PRO-211</a>	Construction Hazard Assessment and Implication Review (CHAIR) Guidelines
<a href="#">DIV-ENG-CS-001</a>	De-Commissioning of Plant and Equipment Procedure
<a href="#">DIV-ENG-CS-002</a>	Demolition Procedure
<b>Engineering Services</b>	
<a href="#">DIV-ENG-11</a>	Hire a Mobile Crane Procedure
<a href="#">F.DIV-ENG-11.01</a>	Form - Mobile Crane Lift Study form
<a href="#">DS.DIV-ENG-11.01</a>	Crane Lift Requirements / Risk Assessment (Considerations) Data Sheet
<a href="#">DIV-ENG-12</a>	Pipe and Vessel Colour Coding Policy
<a href="#">DS.DIV-ENG-12.01</a>	Standard Identification Colours for Pipe and Vessels
<a href="#">DIV-ENG-13</a>	Technical Risk Management Guidelines
<a href="#">DIV-ENG-16</a>	Fire System Impairment Procedure
<a href="#">DIV-ENG-17</a>	HAZOP Study Procedure
<a href="#">DIV-ENG-20</a>	Pressure Testing Guidelines
<a href="#">DIV-ENG-038</a>	PCB Identification, Handling and Disposal Procedure
<a href="#">MA-ENG-106</a>	Oxy Fuel Gases Safety Manual
<a href="#">SP-ENG-DES-001</a>	Design Control Procedure
<b>Engineering Technology</b>	
<a href="#">MA-ENG-INS-001</a>	Electrical Installation Manual – Port Kembla Steelworks
<a href="#">MA-DIV-ENG-ET-004.01</a>	Electrical Safety Manual Part 1 – BlueScope Common Section
<a href="#">MA-DIV-ENG-ET-004.02</a>	Electrical Safety Manual Part 2 – Site-Specific Reference Supplement
<a href="#">DIV-ENG-ET-003</a>	Access to Electrical Stations Procedure (switch rooms)
<a href="#">DIV-ENG-ET-008</a>	Electrical Station and Field Panel Safety Procedure
<b>Alliances &amp; Recycling</b>	
<a href="#">DIV-AR-RO-02</a>	Procedure for Working on or Near BlueScope Port Kembla Steelworks Roads
<a href="#">DIV-AR-RO-03</a>	Obtain Authorisation to Close a Road and Notify Relevant Departments of the Closure - Procedure
<a href="#">F.DIV-AR-RO-03.01</a>	Form - Request for Road Closure
<a href="#">DIV-AR-RO-04</a>	Oversize Vehicle / Loads - Escorting Procedure for Port Kembla Steelworks
<a href="#">F.DIV-AR-RO-04.01</a>	Form - Request for Road Access by Oversize Vehicles or Loads
<a href="#">DIV-AR-RS-01</a>	Management of Waste Material Procedure

## APPENDIX B. TERMINOLOGY

Acronym / Abbreviation	Meaning
5BF	No 5 Blast Furnace
6BF	No 6 Blast Furnace
6BFR	No. 6 Blast Furnace Reline
ASP	BlueScope Australian Steel Products
BFG	Blast Furnace Gas
BOF	Basic Oxygen Furnace
BOS	Basic Oxygen Steelmaking
BSL	BlueScope Steel Limited
CHAIR	Construction Hazard Assessment Implication Review
CHAZOP	Control Hazard and Operability Study
COG	Coke Ovens Gas
CSRP	Confined Space Responsible Person
DC	Direct Current
DEC	Department Emergency Controller
EEO	Equal Employment Opportunity
EWP	Elevating Work Platform
HAZAN	Hazard Analysis
HAZOP	Hazard and Operability Study
HRF	High-Risk Facilities
HSE	Health, Safety & Environment
ICAM	Incident Causation Analysis Method
JSEA	Job Safety Environmental Analysis
LPG	Liquid Petroleum Gas
LTI	Lost Time Injury
LTIFR	Lost Time Injury Frequency Rate
MAE	Major Accident Event
MARS	Managing All Risks incident and risk management system, replaced by an alternative incident reporting system
MTEC	Manuals, Training, Equipment and Commissioning
MTI	Medically Treated Injury
NG	Natural Gas
NZ	New Zealand
OEM	Original Equipment Manufacturer
PI	Pacific Islands
PIC	Person In Charge
PKSW	Port Kembla Steelworks
PPE	Personal Protective Equipment
RCD	Residual Current Device



Acronym / Abbreviation	Meaning
RTO	Registered Training Organisation
RTW	Return To Work
SDS	Safety Data Sheet
SSW	Safe System of Work
SWMS	Safe Work Method Statement ("Swims")
TfNSW	Transport for NSW (formerly Roads and Maritime Services)
TARP	Trigger Action Response Plan
TRI	Total Recordable Injury
TRIFR	Total Recordable Injury Frequency Rate
WHS	Work Health & Safety