



Engineering

Technical Guideline

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**Government of
South Australia**

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Documents superseded by this standard

This is the first Version of this guideline.

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1 Introduction

SA Water is responsible for the construction and commissioning of an extensive amount of engineering infrastructure such that it is safe and functional.

This Guideline has been developed to assist in the design, maintenance, construction, and management of this infrastructure. Anonymous

1.1 Purpose

The purpose of this guideline is to detail minimum requirements to ensure that assets covered by the scope of this guideline are constructed and maintained to consistent guidelines and attain the required asset life.

1.2 Glossary

Terms and Abbreviations utilised in this Guideline are included in the following sections. The definitions presented below are to be used when interpreting this Guideline and actions undertaken in relation to this Guideline. Where a conflict exists, clarification is to be sought from SA Water.

1.2.1 Terms and Definitions

The following is a list of Terms applicable to this document:

Term	Description
Chain of Responsibility	A legal framework under the Heavy Vehicle National Law (HVNL) that ensures all parties in the supply chain, including suppliers, transport operators, drivers, and site personnel, share responsibility for ensuring the safe transport, handling, and unloading of pipe. CoR obligations include compliance with load restraint requirements, fatigue management, and ensuring the safety of all persons involved in the process.
Competent Person	A person who has acquired through training, qualification and/or experience the knowledge and skills to carry out the task.
Constructor	The organisation responsible for constructing and installing infrastructure for SA Water whether it be a third party under contract to SA Water or an in-house entity.
Contract	A set of documents supplied to Constructor as the basis for construction; these documents contain contract forms, contract conditions, specifications, drawings, addenda, and contract changes.
Crane	A crane is an item of plant intended for raising or lowering a load and moving it horizontally including the supporting structure of the crane and its foundations.
Designer	The organisation responsible for designing infrastructure for SA Water whether it be a third party under contract to SA Water or a Constructor, or an in-house entity. A Designer is a person who effects design, produces designs or undertakes design activities as defined in the <i>Work Health and Safety Act 2012 (SA)</i> .
Dogger	A High-Risk Work licensed (DG) person with the qualifications to conduct dogging work. Dogging work includes the application of slinging techniques, including the selection and inspection of lifting gear, to safely sling a load. It also includes directing a plant operator in the movement of a load when the load is out of the operator's view.
Hazard	A situation or thing that has the potential to harm a person.

Term	Description
Heavy Vehicle National Law	A set of laws that govern the use of heavy vehicles with a gross vehicle mass exceeding 4.5 tonnes in Australia.
Informative	Means “provided for information and guidance”.
Load Restraint	The process of securing a load to a vehicle to prevent movement during transport. Load restraint must comply with the <i>National Heavy Vehicle Regulator Load Restraint Guide</i> and ensure that pipes are secured using appropriate equipment (for example, straps, chains, chocks, cradles, or pipe racks) to prevent shifting, rolling, or falling during transit. Proper load restraint is critical to ensuring the safety of workers, the public, and the load itself.
Manufacturer	A person that manufactures plant/equipment or structure that is to be used or could reasonably be expected to be used at a workplace.
Must	‘Must’ indicates a legal requirement exists that must be complied with.
National Heavy Vehicle Regulator	Administers the Heavy Vehicle Nation Law.
Person Conducting a Business or Undertaking	Is a broad, mandatory duty holder for the health and safety in any business.
Person/s	Each word implying a person, or persons shall, where appropriate, also be construed as including corporations.
Personal Protective Equipment	Any clothing or equipment a worker uses or wears to minimise health and safety risks.
Pipe Handling	Work involving the transport, unloading, storage, or internal movement of cylindrical items such as rolls, reels, coils, drums, pipes, tubes, rods, and bars. This includes activities to secure, stabilise, and safely release restraints to prevent uncontrolled movement
Pipes	Pipes refers to those used in SA Water wastewater, treated water and distribution infrastructure include Ductile Iron Pipes (DICI), Polyethylene Pipes (PE/HDPE), PVC Pipes, Reinforced Concrete Pipes (RCP), Steel Pipes, Glass Reinforced Plastic (GRP) Pipes, and Copper Pipes.
Plant	Plant includes machinery, equipment, appliance, container, implement and tool components or anything fitted or connected to those things. This includes, but is not limited to- a. Forklifts, cranes, and hoists. b. Rated stanchions, scalloped dunnage, chocks, cradles, or pipe racks. c. Load restraint devices such as straps, chains, and tensioners. d. Lifting slings and spreader bars.
Principal Contractor	Is a specific, single entity appointed to manage and control projects.
Qualified Person	A person that has completed training and are competent in the use of equipment.
Risk	The possibility harm (death, injury, or illness) might occur when exposed to a hazard.
SA Water Representative	The SA Water representative with delegated authority under a Contract or engagement, including (as applicable): • Superintendent’s Representative (for example AS 4300 and AS 2124 etcetera) • SA Water Project Manager • SA Water nominated contact person

Term	Description
Safe Transportation	The process of moving pipes from one location to another while ensuring compliance with safety standards, including proper load restraint, vehicle suitability, and adherence to the Chain of Responsibility (CoR). Safe transportation involves securing pipes to prevent shifting, rolling, or falling during transit and ensuring that drivers are trained and competent in fatigue management and vehicle operation.
Safe Work Method Statements	A document prepared prior to the start of work in consultation with all relevant persons, that accounts for the workplace-specific circumstances that may affect the way in which high risk work is done.
Should	Indicates practices which are advised or recommended, but is not required
Supplier	A person, group or company that provides goods for use in SA Water infrastructure.
Technical Dispensation Request Form	This form is part of SA Water's Technical Dispensation Request Procedure which details the process by which those required to comply, or ensure compliance, with SA Water's technical requirements may seek dispensation from those requirements.
Work	Elements of a project which require design and/or construction.
Work Health and Safety	WHS Act 2012 (SA) and WHS Regulations 2012 (SA)
Worker	Worker means according to the WHS Act 2012 (SA) a person where the person carries out work in any capacity for a person conducting a business or undertaking, including work as – a. an employee; or b. a contractor or subcontractor; or c. an employee of a contractor or subcontractor; or d. an employee of a labour hire company who has been assigned to work in the person's business or undertaking.

1.2.2 Abbreviations

The following is a list of Abbreviations, Acronyms and Initialisms used in this document:

Abbreviation	Description
CoR	Chain of Responsibility
DG	Dogger as per high-risk work licence
HRWL	High Risk Work Licence
HVNL	Heavy Vehicle National Laws
NHVR	National Heavy Vehicle Regulator
NTC	National Transport Commission
PC	Principal Contractor
PCBU	Person Conducting a Business or Undertaking
PPE	Personal Protective Equipment
SA Water	South Australian Water Corporation
SWMS	Safe Work Method Statements
TDRF	Technical Dispensation Request Form
TG	SA Water Technical Guideline
WHS	Work Health and Safety
DICL	Ductile Iron Cement Lined

Abbreviation	Description
PE	Polyethylene
HDPE	High Density Polyethylene
PVC	Polyvinylchloride
GRP	Glass Reinforced Plastic

1.2.3 Terminology

The following is a list of specific interpretations for Terminology used in this guideline.

- Where an obligation is given and it is not stated who is to undertake these obligations, they are to be undertaken by the Constructor.
- Directions, instructions and the like, whether or not they include the expression "the Constructor shall" or equivalent, shall be directions to the Constructor, unless otherwise specifically stated.
- Where a submission, request, proposal is required and it is not stated who the recipient should be, it is to be provided to SA Water's Representative for review.
- Each word imparting the plural shall be construed as if the said word were preceded by the word "all".
- "Authorised", "approval", "approved", "selected", "directed" and similar words shall be construed as referring to the authorisation, approval, selection or direction of SA Water's Representative in writing.
- "Submit" mean "submit to the SA Water Representative or their nominated delegate".

Unless noted otherwise, submissions, requests, proposals are to be provided at least 10 business days prior to work commencing or material ordering (unless noted otherwise).

1.3 References

1.3.1 National

The following table identifies Australian and International guidelines and other similar documents referenced in this document:

Reference	Title
	National Heavy Vehicle Regulator - Load Restraint Guide 2025
	National Heavy Vehicle Regulator - Chain of Responsibility (CoR) as part of the Heavy Vehicle National Law (HVNL)
	Work Health and Safety Act 2012 (SA)
	Work Health and Safety Regulations 2012 (SA)
	Safe Work Australia Information Sheet - Using other powered mobile plant
	Safe Work Australia Guide - Inspecting and maintaining cranes
	Safe Work Australia Guide - General guide to cranes
	SafeWork SA - Plant & Plant design registrations
	SafeWork SA Code of Practice - Managing the risks of plant in the workplace

2 Scope and application

The scope of this Technical Guideline is to provide guidance on safe work practices for identifying, assessing, and controlling risks related to handling, transporting, lifting, unloading, and moving of pipe.

This Technical Guideline applies to all Persons Conducting a Business or Undertaking (PCBU), including Constructors, in accordance with applicable work health and safety legislation in Australian states and territories.

The Technical Guideline also includes sample checklists that could be used to support risk management and safe pipe handling.

The primary types of pipes used in SA Water infrastructure include Ductile Iron Pipes (DICT), Polyethylene Pipes (HDPE), PVC Pipes, Reinforced Concrete Pipes (RCP), Steel Pipes (MSCL), Glass Reinforced Plastic (GRP) Pipes, and Copper Pipes.

2.1 Hazards

SA Water has outlined below known hazards associated with pipe handling for reference by users of this document.

Managing pipe involves the transport, unloading, storage, and movement of cylindrical items such as rolls, reels, coils, drums, pipes, tubes, rods, and bars. These activities carry inherent risks, including the potential for uncontrolled movement, which can cause injury to workers or other persons, as well as damage to property or equipment.

SA Water has specific obligations under the WHS regulations to identify, assess, and control risks associated with pipe handling. This includes implementing safe systems of work to minimise the risk of injury or harm during the handling, transport, and storage of pipes.

Hazards/risks and controls may include, but are not limited to, those listed in Table 1.

Table 1: Hazards prompts for potential for uncontrolled movement when managing pipe

Controls	Control Objective
Design and planning	To ensure pipe management is appropriately designed, planned, and managed in line with the associated risks.
Load restraint and stability	To ensure all pipes are secured, restrained, and stabilised using appropriate equipment and methods during transport, unloading, and storage (short and long-term).
Pipe Storage	Store pipes away from flood-ways, critical infrastructure, and residential areas to prevent potential hazards or damage. Stored pipes must be fundamentally stable.
Exclusion zones and restricted zones	To ensure exclusion zones are established and maintained to prevent unauthorised access during loading, unloading, and handling activities.
Lifting planning	A lift plan must be developed to minimise risks to workers, equipment, and the environment, during lifting operations, including placement of pipe. Lift plan to ensure the safe lifting and placement of pipes using appropriate: • Equipment • Methods, and • Trained personnel.
Follow CoR & HVNL restraint requirements	To ensure safe transportation of pipes, preventing uncontrolled movement and ensuring compliance with heavy vehicle laws.

3 Guidelines for handling pipes

The following sections provide guidance on how to manage the handling of pipes to mitigate risk and ensure safe work practices.

3.1 Pipe Load Management Plan

In consultation with other relevant stakeholders, the engaged Constructor should prepare a *Pipe Load Management Plan* to act as a guide for the planning documentation that should be in place prior to the handling, transport, unloading, and storage of pipes. The *Pipe Load Management Plan* should be included in a detailed *Safe Work Method Statement (SWMS)* outlining the step-by-step approach to safely handle, transport, unload, and store pipes. The plan should cover:

1. Risk assessment and planning:
 - a. Risk assessment
Perform a risk assessment covering specific risks associated with pipe handling, lifting, transport, unloading, and storage activities.
 - b. Methodology
Develop and communicate a methodology to ensure the safe transport of goods and the controlled release of restraints before unloading.
 - c. Site inspection
Identify suitable laydown areas and assess potential hazards. Consider third-party and public safety, including traffic and pedestrian interfaces, and implement appropriate controls.
 - d. Documentation
Design plans, specifications, and drawings for storage systems (for example, rated stanchions, scalloped dunnage, chocks, cradles, or pipe racks).
2. Preparation and equipment:
 - a. A description of the plant, equipment, and tools to be used for handling and unloading pipes.
 - b. Barricading and signage requirements to establish exclusion zones and prevent unauthorised access during handling and unloading activities.
3. Load restraint and transport compliance:
 - a. Confirmation of load restraint compliance in accordance with the latest version of the NHVR Load Restraint Guide.
 - b. A method for securing and stabilising pipes during transport, unloading, and storage to prevent uncontrolled movement.
4. Execution of handling activities
A clear description of the pipe handling activities being performed and how they should be executed to mitigate risks and ensure safety including:
 - a. Loading and unloading
 - b. Pipe storage (short and long-term)
 - c. Internal transportation of pipe
 - d. Pipe lifting.
5. Stop Work Authority
Process for implementing a Stop Work Authority where a load does not meet safety requirements or poses a risk, ensuring all measures are implemented before proceeding.

6. Emergency response

Emergency response and rescue procedures specific to incidents involving pipe including:

- Location and instructions for first aid and rescue equipment
- Details of trained rescuers
- Effective communication system and procedures to communicate with all workers, third parties and emergency services in event of incident or emergency.

3.2 Loading and unloading pipes

The safe loading and unloading of pipes is critical to preventing injuries, property damage, and non-compliance with legal requirements such as the *Heavy Vehicle National Law (HVNL)* and *Chain of Responsibility (CoR)* obligations.

Loading and unloading pipes involves significant risks, including uncontrolled pipe movement and falls during handling. Proper planning, communication, and the use of approved equipment and techniques are essential to safely manage these operations. Guidance on the steps, controls, and precautions to ensure the safe and compliant loading and unloading of pipes on-site is outlined below.

1. Allow for safe access/egress for vehicles and equipment to laydown areas, and ensure size, slope, and location of laydown areas are planned for safe storage.
2. Identify underground/overhead services and potential impacts from vehicles or equipment.
3. Communicate the delivery site layout, access points, loading/unloading areas, and site contact to suppliers.
4. Include a detailed map showing delivery staging, vehicle turning circles, and overhead and ground service locations.
5. Establish dedicated loading/unloading zones.
6. If unloading is unsafe, enact 'Stop Work Authority' and quarantine the vehicle.
7. Meet HVNL and CoR standards for load restraints.
8. Fall protection should be provided when working from truck beds and safe access / egress be provided.
9. Drivers should stay outside the loading/unloading zone until work is complete.
10. Consider stanchions for truck/trailer loads of pipe delivered to the site from the supplier. Where stanchions are installed (see Figure 1):
 - a. There should be a minimum of two stanchions per pipe (one at each end of the pipe)
 - b. The height of stanchions should be higher than the load.

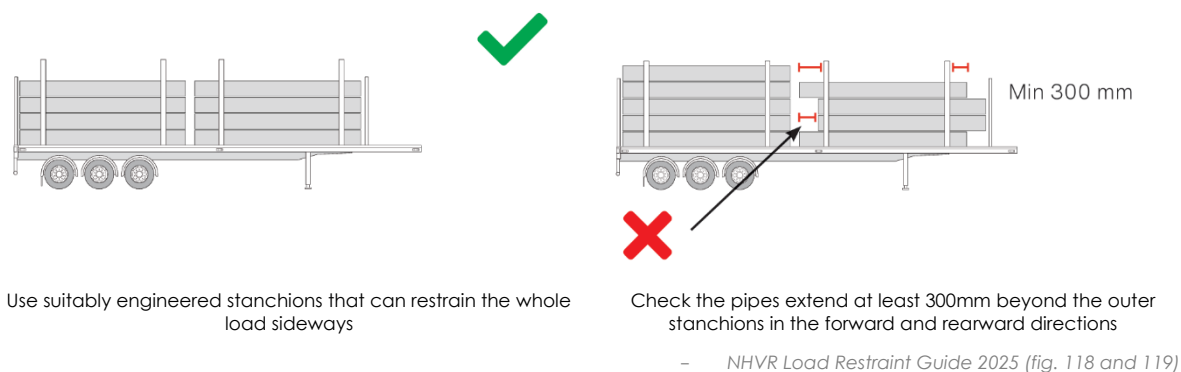


Figure 1: Loose lengths between stanchions

3.3 Pipe storage (short- and long-term)

Correct storage of pipes is essential to prevent uncontrolled movement, damage, and safety hazards. Both short-term and long-term storage should be carefully planned and executed to ensure the stability and security of stored materials and minimise risks to workers, equipment, and surrounding infrastructure. Guidance for selecting suitable storage areas, implementing effective controls, and adhering to best practices for inspecting and maintaining stored pipes is outlined below.

1. Plan and approve secure, level laydown areas.
2. Work crews should complete training in pipe handling and storage.
3. Check supports are compliant with the manufacturer's specifications and requirements.
4. Inspect all stored pipes regularly, to ensure they are in good condition and stored safely.
5. Conduct a risk assessment to identify potential hazards associated with uneven ground and implement additional barriers or controls to ensure stability and safe storage conditions.
6. The Constructor should assess the suitability of the local storage area to account for uncontrolled movement of the pipes on: roadways, public and residential land, and overhead and underground essential infrastructure.
7. Conduct a risk assessment before relocating stored pipes to the installation alignment and record the implemented control measures to prevent uncontrolled movement of pipes at the work zone.

3.4 Transporting pipes

Transporting of pipes involves a number of different parties who should all take steps to ensure the safe transportation of pipes through adherence with relevant requirements and appropriate risk mitigation measures. All parties should:

1. Adhere to CoR and HVNL load restraint requirements.
2. Implement appropriate traffic management measures for transportation along public roadways.
3. Develop and utilise a Vehicle Movement Plan to ensure safe and efficient movement of vehicles and site traffic.
4. Ensure that only trained and competent personnel are responsible for securing and restraining loads.

3.5 Pipe lifting

Correct pipe lifting is essential to mitigate the risk of lift failure and associated hazards to people and property. The below section outlines a recommended approach to manage pipe lifting activities.

1. Pre-lift planning
 - a. Conduct a pre-lift meeting to assign roles, discuss the lifting plan, and identify hazards.
 - b. Develop a *Safe Work Method Statement* (SWMS) prior to any pipe lifting activities.
2. Operators
 - a. Operators must hold relevant *High Risk Work Licences* (HRWL) for crane operations or earthmoving equipment used for lifting, as required by legislation.
 - b. Operators should be familiar with the manufacturer's operating manuals and load charts for the equipment.

3. Doggers

- a. Doggers must hold a Dogging HRWL to:
- b. select and inspect lifting gear (for example, slings, chains, clamps)
- c. direct crane or earthmoving equipment operators during lifting operations

4. ensure loads are balanced and safely secured.

- a. Lifting with plant and earthmoving equipment
- b. Plant used as a crane (for example, excavators, telehandlers, or other machinery equipped with lifting points) should comply with the following requirements:
 - The plant should be fitted with certified lifting points that are rated for the load being lifted.
 - Operators should ensure the plant is used within its lifting capacity and operating limits as specified by the manufacturer.

5. Lifting equipment

All slings, chains, and lifting accessories should:

- a. be rated for the load
- b. be inspected for wear, damage, or defects prior to use
- c. comply with relevant specifications and standards
- d. have equipment inspection and maintenance records made available upon request.

4 Contractor management

Contractors engaged in undertaking pipe handling activities, including but not limited to transportation, lifting and placing, and storage, should comply with all legislative requirements, and have a current safe system of work; inclusive of procedures and work instructions, in safely handling and management of pipe.

Contractors should work according to SA Water Contractor Management requirements.

5 Responsibilities

Contracting parties involved in pipe handling have responsibilities to manage risks and ensure mitigation measures are in place. Responsibilities for different roles may differ across organisations, the responsibilities in the Table 2 provides general guidance.

Table 2: Responsibilities Guide

Role	Responsibilities
Designers and Suppliers	- Verify the hierarchy of controls is applied during the design of plant, equipment, and storage systems to minimise risks to health and safety during the handling, transport, and unloading of pipe. - Provide specific information, testing, and analysis about the equipment, storage systems, or structures used for pipe management. - Ascertain that transport/storage systems (for example, rated stanchions, scalloped dunnage, chocks, cradles, or pipe racks) are designed to prevent product movement during transport and unloading.
Executives / Officers of the business	- Confirm business units are appropriately resourced and have established safety management systems and processes to eliminate or minimise risks associated with pipe management. - Ensure that procurement processes include safety expectations for suppliers regarding the delivery and unloading of pipes. - Ensure programs meet legislative and industry standards. - Keep records of training and competency for involved workers.
Project Managers	- Ensure they are familiar with the provisions in the Technical Guideline. - Ensure that respective principal contractors use the Technical Guideline in conjunction with designs and project instructions.
Site owners / Work activity owner / contractor managing and control of the site	- Ensure laydown areas are identified and prepared with appropriate control measures to prevent uncontrolled movement of pipe during storage or handling. - Confirm site-specific risks related to pipe loads (for example, third-party, or public interfaces) are identified and managed.
People leaders / Supervisors / Superintendents	- Ensure operational procedures and work instructions for pipe management are in place and regularly reviewed. - Confirm that these procedures and work instructions are followed within their area of responsibility. - Ensure that suppliers provide safety documentation (for example, sequencing methodology, load restraint compliance) and that it is reviewed by a competent person. - Ensure that adequate and appropriate training for pipe handling is in place and regularly reviewed. - Manage and investigate incidents involving pipe. - Confirm record-keeping requirements for pipe management are met. - Consult, cooperate, and coordinate with workers and other duty holders about health and safety risks in pipe handling. - Ensure periodic monitoring and reviewing of performance against this technical guideline is undertaken including audits using the tool provided in Appendix A.
Workers	- Fulfil required training and demonstrate competency in emergency procedures. - Hold valid licenses for any plant or equipment used. - Follow all relevant procedures and policies. - Take reasonable care for their own and others' safety. - Report hazards or incidents to supervisors.

6 Training and competency

As a guide, people leaders and workers involved in managing and handling pipe should ensure they have adequate training and competency to manage risks and complete work safely. The table below outlines recommended training and competencies.

Table 3: Training and competency guide

Role	Training/competency
Supervisors and Project Managers	• Awareness of the information in this Technical Guideline. • Trained and competent in their obligations under the CoR to ensure that all parties involved in the transport, handling, and lifting of pipes comply with safety and legal requirements. • Understand and ensure compliance with exclusion zone management, load restraint guidelines, emergency response procedures, and pipe lifting operations. • Familiarity with the NHVR Load Restraint Guide, which outlines best practices for securing loads and safe lifting operations.
Person Business Conducting or Undertaking (PCBU) and workers	• Understand their responsibilities for the safe handling, transport, unloading, storage, and lifting of pipes, including familiarity with the NHVR Load Restraint Guide, which outlines best practices for securing loads. • Trained and competent in their obligations under the CoR, including ensuring that loads are secured, transported, unloaded, and lifted safely and in compliance with legal requirements. • Trained and competent in SA Water's Fitness for Work, Fatigue Management, Working Outdoors, and Drug and Alcohol procedures. • Trained and competent in the correct use, wearing, storage, inspection, and maintenance of PPE supplied for pipe handling and lifting operations. • Hold valid licenses and competencies for the mobile plant and equipment they are required to operate during pipe handling and lifting activities. • Trained and competent in emergency response and rescue procedures specific to incidents involving pipe handling and lifting. • Understand the procedures for reporting incidents, hazards, or unsafe conditions related to pipe handling and lifting. • Trained and competent in safe lifting operations, including the use of earthmoving equipment for lifting and the development of lifting plans. • Understand and follow exclusion zone management, load restraint guidelines, and communication protocols during lifting operations.

7 Monitor and review

To ensure continued management of risks and safety, ongoing monitoring and reviewing of pipe handling activities should be undertaken. (see appendix A)

- **First delivery of cylindrical pipe**

When unloading the first delivery of cylindrical pipes at a site, the checklist should be completed to ensure all controls are in place and risks are adequately mitigated.

- **New or alternative transport delivery provider**

If the transport delivery provider is new or has changed or if a different type of truck is being used (for example, flatbed truck, box truck with curtains, tilt tray truck, semi-trailer, or crane truck), the checklist should be completed to verify compliance with safety requirements and ensure proper handling procedures are followed.

- **Unloading outside of designated unloading area**

If unloading is conducted outside the designated unloading area, the checklist should be completed to assess site-specific risks and implement appropriate controls.

- **Alternative lifting method from agreed plan**

If an alternative lifting method is used that deviates from the agreed lifting plan, the checklist should be completed to ensure the new method is safe and compliant with procedures.

Additional to monitoring and review authority to pause can be established conducted at any risk level to address specific site conditions, changes in the environment, or other safety concerns.

Evaluation and audit

A sample audit tool is provided in Appendix A.

Any issues identified during inspections or audits should be documented and addressed promptly.

Corrective actions should be implemented to ensure compliance and to mitigate risks associated with pipe handling and transport.

Follow-up inspections or audits may be required to verify that corrective actions have been effectively implemented.

A Sample Audit Tool

Audit Record Information

Workplace/ Project:		Audit Date:		Audit No:	
Lead Auditor:		Audit Team Members:			

Other Audit Information

Safe Work Method Statement Name & No.:		Work Description/ Location:	
Subcontractor Name:		Relevant Supervisor / Leading Hand:	

Element Requirements	Auditor Findings / Comments	Audit Finding	Project Actions Required	Business Actions Required
What are the requirements as per legislation, as well as internal Pipe Management Procedure (IMS)?	- Was the requirement achieved as planned? - How was success enabled? - How was success hindered? - Is there anything you would do differently next time if you had more time, resources, and less restrictions? - Was the outcome achieved?	- Conforms - Non-conformance - Requirement for Improvement - Leading practice / Innovation	- Non-conformance - Requirement for Improvement - Leading Practice / Innovation – system improvement or share learnings / information	- Non-conformance - Requirement for Improvement - Leading Practice / Innovation – system improvement or share learnings / information
1. Has a Pipe Load Management Plan been developed for the workplace and communicated to all relevant stakeholders?				

Element Requirements	Auditor Findings / Comments	Audit Finding	Project Actions Required	Business Actions Required
2. Is there evidence that the Pipe Management Procedure has been communicated to relevant personnel, including workers, contractors, and suppliers, and that they understand their roles and responsibilities under the procedure?				
3. Have pipe handling, transport, unloading, and storage activities and associated risks been identified and documented in a Risk Assessment?				
4. Have appropriate controls been selected to adequately mitigate the risks associated with pipe handling in accordance with the Pipe Management Procedure? E.g. a. Identification of hazards such as uneven ground, overhead powerlines, and pedestrian or third-party interfaces? b. Controls for maintaining exclusion zones during unloading and loading? c. Procedures for ensuring load stability and safe release of restraints? d. Planning for safe vehicle entry, exit, and movement within the site?				
5. Is the way the pipe handling task was planned consistent with how it is being executed on-site?				
6. Are laydown and storage areas for pipes clearly identified, prepared, and maintained with appropriate controls to ensure stability and prevent hazards such as rolling, shifting, or unauthorised access?				
7. Are pipe handling inspections being conducted in accordance with the workplace's risk profile (for example, Pipe Management Risk Matrix and Monitoring Requirements) to confirm that controls are effective?				

Element Requirements	Auditor Findings / Comments	Audit Finding	Project Actions Required	Business Actions Required
8. Are all personnel involved in pipe handling trained, and do they hold valid licenses for operating equipment used in these activities?				

Actions Required

Action No:	Action Required	Action By	Action Priority	Sign-off & Date
Lead Auditor:		Signature:		Date: