



CONTROLLED DOCUMENT

METHOD STATEMENT FOR PIPING FABRICATION AND INSTALLATION

Civil Engineering Works

Field	Details
Document Reference	HSE-MS-XXX-001
Revision / Date	Rev. 01 / [Insert Date]
Project	Civil Engineering Project — [Insert Project Name]
Client / Principal Contractor	[Client / Principal Contractor]
Company	[Insert Company Name]
Industry	Civil Engineering
Classification	CONTROLLED DOCUMENT — HSE / Quality Department
Applicable Standards	ISO 45001:2018, ISO 9001:2015
Edition	International Edition

TABLE OF CONTENTS

TABLE OF CONTENTS.....	1
SECTION 1 — DOCUMENT INFORMATION & DISTRIBUTION.....	1
1.1 Document Attributes.....	1
1.2 Authorship & Review.....	1
1.3 Distribution List.....	1
1.4 Revision History.....	1
SECTION 2 — SCOPE OF WORKS.....	1
2.1 Purpose.....	1
2.2 Activity Description.....	1
2.3 Location & Interfaces.....	1
2.4 Equipment & Materials.....	1
2.5 Exclusions.....	1
2.6 Related Documents.....	1
SECTION 3 — APPLICABLE STANDARDS & LEGISLATION.....	1
3.1 International Standards.....	1
3.2 National / Regional Legislation.....	1
3.3 Industry Codes.....	1
3.4 Client Requirements.....	1
SECTION 4 — ROLES & RESPONSIBILITIES MATRIX.....	1
4.1 Site Manager.....	1
4.2 HSE Officer.....	1
4.3 Foreman / Supervisor.....	1
4.4 Operative (General).....	1
4.5 Welder / Pipe Fabricator.....	1
4.6 Rigger / Banksman.....	1
4.7 Plant Operator (Crane / Excavator).....	1
4.8 Permit Issuing Authority / Authorised Person.....	1
SECTION 5 — PPE & EQUIPMENT SCHEDULE.....	1
5.1 Mandatory (All Personnel).....	1
5.2 Task-Specific.....	1
5.3 Specialist Equipment.....	1
SECTION 6 — PERMIT TO WORK REQUIREMENTS.....	1
6.1 Hot Work Permit.....	1
6.2 Confined Space Permit.....	1
6.3 Electrical Isolation Permit.....	1
SECTION 7 — SEQUENCE OF WORKS (STEP-BY-STEP METHOD).....	1
Phase 1 — Pre-Fabrication Preparation, Site Set-Up & Permits.....	1
Phase 2 — Pipe Fabrication: Cutting, Beveling, Fit-Up & Welding.....	1
Phase 3 — Pipe Handling, Lifting & Transportation.....	1

Phase 4 — Pipe Installation, Alignment & Jointing	1
Phase 5 — Testing, Inspection & Handover	1
SECTION 8 — ENVIRONMENTAL CONTROLS	1
SECTION 9 — EMERGENCY RESPONSE & CONTINGENCY PLAN	1
9.1 Fire / Explosion During Hot Work	1
9.2 Confined Space Emergency (Gas Exposure / Collapse)	1
9.3 Dropped Load / Lifting Incident	1
9.4 Trench Collapse / Excavation Instability	1
9.5 Electric Shock / Arc Flash	1
9.6 Emergency Contact Summary	1
SECTION 10 — AUTHORISATION & SIGN-OFF	1

SECTION 1 — DOCUMENT INFORMATION & DISTRIBUTION

1.1 Document Attributes

Field	Value
Document Title	Method Statement for Piping Fabrication and Installation
Document Reference	HSE-MS-XXX-001
Revision	Rev. 01
Date	[Insert Date]
Status	Issued for Construction
Classification	Controlled Document — HSE / Quality Department
Owner Department	HSE Department

1.2 Authorship & Review

Role	Name	Date	Signature
Prepared By			
Reviewed By (HSE)			
Reviewed By (Technical)			
Approved By			

1.3 Distribution List

No.	Recipient / Role	Copy Type
1	Site Manager	Controlled Copy
2	HSE Officer	Controlled Copy
3	Foreman	Controlled Copy
4	Client / Principal Contractor Representative	Controlled Copy
5	Project Document Control	Master Copy
6	Site Office Notice Board	Reference Copy
7	Subcontractor Welding Team Lead	Controlled Copy

1.4 Revision History

Rev	Date	Description	Prepared By	Approved By
A	[Date]	Initial draft issued for internal review	[Name]	[Name]
B	[Date]	Issued for client comment	[Name]	[Name]
01	[Date]	Issued for Construction (current revision)	[Name]	[Name]

SECTION 2 — SCOPE OF WORKS

2.1 Purpose

This Method Statement defines the safe system of work for the fabrication and installation of process/utility piping on the project, ensuring works are executed in accordance with ISO 45001:2018, ISO 9001:2015 and applicable international piping and welding codes.

2.2 Activity Description

The scope covers pipe spool fabrication (marking, cutting, beveling, fit-up and welding), lifting and transportation of fabricated spools, installation and alignment at the designated route (buried and above-ground sections), tie-in welding, hydrostatic/pneumatic testing, and final handover of the completed pipework system.

2.3 Location & Interfaces

Works are carried out within the designated fabrication yard/welding bay and along the approved pipe route/trench alignment shown on the project drawings. Interfaces exist with civil groundworks, excavation teams, electrical/instrumentation trades, and existing live services; all interfaces are coordinated through the Site Manager prior to commencement.

2.4 Equipment & Materials

- Pipe, fittings and flanges per approved material take-off (MTO) and Material Test Certificates (MTC)
- Welding plant, cutting/beveling machines, grinders, and consumables per approved Welding Procedure Specification (WPS)
- Mobile crane / excavator, rigging and lifting accessories, pipe rollers and supports
- Gas detection equipment, ventilation/extraction units, and hydrostatic test pump/pressure gauges

2.5 Exclusions

- Design and engineering of the piping system (covered under separate design documentation)
- Coating/painting and insulation works (covered under a separate Method Statement)
- Civil structural works unrelated to pipe support/trench preparation

2.6 Related Documents

- Project HSE Plan and Risk Assessment Register
- Approved Welding Procedure Specifications (WPS) and Welder Qualification Records (WQR)
- Lifting Plan and Permit to Work Procedures
- Project Quality Plan and Inspection & Test Plan (ITP)

SECTION 3 — APPLICABLE STANDARDS & LEGISLATION

3.1 International Standards

ISO 45001:2018 (Occupational Health & Safety Management Systems) and ISO 9001:2015 (Quality Management Systems) govern the overall management framework for this activity. ISO 3834 (Quality Requirements for Fusion Welding) applies to fabrication quality control.

3.2 National / Regional Legislation

This is a Global/Worldwide edition with no country-specific regulatory constraints. Where local occupational health and safety legislation exists in the host country, it takes precedence; in its absence, the most stringent applicable international provisions — including the ILO Code of Practice on Safety and Health in Construction — shall be applied.

3.3 Industry Codes

Piping fabrication and installation is executed in accordance with ASME B31.3 (Process Piping), with welding performed and qualified to ASME Section IX / AWS D1.1 as applicable to the piping class and material.

3.4 Client Requirements

All works comply with the project-specific HSE Plan, client Permit to Work procedures, and the approved Method Statement/Risk Assessment (RAMS) sign-off process prior to mobilisation.

SECTION 4 — ROLES & RESPONSIBILITIES MATRIX

4.1 Site Manager

- Overall accountability for safe execution of the piping works and compliance with this Method Statement
- Authorises mobilisation, approves resourcing, and ensures interfaces with other trades are coordinated
- Reviews and signs off permits at senior level and escalates incidents to client/principal contractor
- **Required competency/certification:** NEBOSH National General Certificate (or equivalent); CSCS Black/Gold Card

4.2 HSE Officer

- Verifies risk assessments and this Method Statement are briefed to all personnel prior to start
- Conducts site inspections, monitors compliance, and issues/validates Permits to Work
- Leads incident investigation and reporting, and maintains COSHH assessments for site chemicals
- **Required competency/certification:** NEBOSH National General Certificate; IOSH Managing Safely; CSCS Card

4.3 Foreman / Supervisor

- Supervises day-to-day fabrication and installation activities and enforces this Method Statement on the ground
- Conducts toolbox talks, confirms PPE compliance, and stops work where conditions are unsafe
- Coordinates with Welder, Rigger and Plant Operator to sequence tasks safely
- **Required competency/certification:** IOSH Managing Safely; CSCS Supervisor Card

4.4 Operative (General)

- Carries out assigned tasks strictly in accordance with the briefed method and RAMS
- Uses PPE correctly, reports hazards/near-misses immediately, and maintains good housekeeping
- Does not proceed with any activity without a valid permit where one is required
- **Required competency/certification:** CSCS Card; site-specific induction

4.5 Welder / Pipe Fabricator

- Performs cutting, beveling, fit-up and welding strictly to the approved WPS
- Verifies hot work permit is valid, fire watch is in place, and welding screens/extraction are used
- Carries out visual weld inspection and supports NDT prior to handover of each joint
- **Required competency/certification:** Welder Qualification per ASME Section IX / AWS D1.1; CSCS Card

4.6 Rigger / Banksman

- Inspects lifting accessories prior to use and rejects damaged equipment
- Directs lifting operations, maintains exclusion zones, and signals the Plant Operator
- Ensures the Lifting Plan and Permit are followed for every lift
- **Required competency/certification:** Appointed Person / Rigger Certification; CSCS Card

4.7 Plant Operator (Crane / Excavator)

- Holds a current, valid licence for the plant being operated and completes pre-use checks
- Operates strictly within the Lifting Plan and under the direction of the Banksman
- Reports plant defects immediately and takes plant out of service where unsafe
- **Required competency/certification:** Certificate of Competence (plant-specific); CSCS Card

4.8 Permit Issuing Authority / Authorised Person

- Issues, validates and closes out Hot Work, Confined Space and Electrical Isolation permits
- Confirms pre-conditions, isolations and gas testing are complete before authorising entry/work
- Retains permit records and ensures revalidation where duration is exceeded
- **Required competency/certification:** NEBOSH/IOSH qualified; Authorised Person training for isolation and confined space

SECTION 5 — PPE & EQUIPMENT SCHEDULE

5.1 Mandatory (All Personnel)

- Hard hat — EN 397 — Mandatory
- Hi-vis vest — EN ISO 20471 — Mandatory
- Safety boots — EN ISO 20345 (S3) — Mandatory
- Gloves (general handling) — EN 388 — Mandatory
- Safety glasses — EN 166 — Mandatory

5.2 Task-Specific

- Welding helmet with auto-darkening filter — EN 175 — Mandatory for welding/cutting
- Welding gauntlets and FR coveralls — EN 12477 / EN ISO 11612 — Mandatory during hot work
- Hearing protection — EN 352 — Mandatory in high-noise zones (grinding, plant operation)
- Respiratory protection (fume mask/RPE) — EN 149 — Mandatory during welding and confined space entry
- Cut-resistant gloves — EN 388 (Level C+) — Mandatory during pipe/spool handling

5.3 Specialist Equipment

- Fall arrest harness and lanyard — EN 361 — Mandatory where work at height is involved
- Portable multi-gas detector — Mandatory for confined space entry
- Tripod, winch and retrieval line — Advisory (as per confined space risk assessment)
- Certified lifting slings, shackles and spreader beams — Mandatory for all lifting operations

SECTION 6 — PERMIT TO WORK REQUIREMENTS

No high-risk activity described in Section 7 shall commence without a valid, signed Permit to Work displayed at the work location. Permits are issued only by the Authorised Person following verification of pre-conditions.

6.1 Hot Work Permit

- Issuing Authority: Permit Issuing Authority / Authorised Person, countersigned by HSE Officer
- Pre-conditions: fire watch assigned, extinguishers in place, combustibles cleared 10 m radius, gas cylinders inspected
- Duration / Revalidation: valid for single shift; revalidated if conditions change or work extends beyond shift
- Colour Code: Red
- Close-out: fire watch maintained 30 minutes post-completion; area inspected and signed off by Authorised Person

6.2 Confined Space Permit

- Issuing Authority: Permit Issuing Authority / Authorised Person, countersigned by HSE Officer
- Pre-conditions: atmosphere tested (O₂, LEL, toxic gases), isolation/lock-out of adjacent lines, ventilation running, rescue plan in place
- Duration / Revalidation: valid for single entry period; gas re-tested and permit revalidated every 4 hours or on re-entry
- Colour Code: Yellow
- Close-out: entrant log confirmed all personnel out; space secured and permit formally closed

6.3 Electrical Isolation Permit

- Issuing Authority: Authorised Person (electrical), countersigned by Site Manager
- Pre-conditions: point of isolation identified, lock-out/tag-out applied, absence of voltage proven by test
- Duration / Revalidation: valid until work completion for that isolation; revalidated if isolation point changes
- Colour Code: Blue
- Close-out: isolation removed only by the Authorised Person who applied it, following confirmation work is complete

SECTION 7 — SEQUENCE OF WORKS (STEP-BY-STEP METHOD)

Works are executed across five sequential phases. Step numbering resets to 1 at the start of each phase. All steps are subject to the general PPE and Permit to Work requirements in Sections 5 and 6.

Phase 1 — Pre-Fabrication Preparation, Site Set-Up & Permits

Establishes the fabrication area, verifies materials, and secures the necessary permits and briefings before any cutting or welding begins.

1. Site Mobilisation & Work Area Establishment

Establish and barrier off the fabrication yard and installation route, position welfare and material laydown areas.

- **Responsible Role:** Site Manager, Foreman
- **Key Equipment:** Barriers, signage, welfare units
- **Main Hazards:** Uncontrolled access, vehicle/pedestrian conflict
- **Control Measures:** Elimination: segregate work area; Administrative: signage and access control; PPE: hi-vis, hard hat
- **Verification Checkpoint:** Site Manager confirms area set-up against site layout drawing

2. Toolbox Talk, RAMS Briefing & Permit Issue

Brief all personnel on this Method Statement, associated risk assessments, and issue relevant permits before work starts.

- **Responsible Role:** HSE Officer, Foreman
- **Key Equipment:** RAMS documents, permit forms
- **Main Hazards:** Miscommunication of hazards, unbriefed personnel starting work
- **Control Measures:** Administrative: mandatory signed briefing register; permits issued only post-briefing
- **Verification Checkpoint:** HSE Officer verifies signed attendance register and valid permits

3. **Material Verification, Inspection & Traceability Check**

Verify pipe, fittings and consumables against MTO and Material Test Certificates prior to release for fabrication.

- **Responsible Role:** Foreman, Operative
- **Key Equipment:** MTC records, callipers, marker
- **Main Hazards:** Incorrect/substandard material entering fabrication
- **Control Measures:** Elimination: reject non-conforming material; Administrative: traceability log
- **Verification Checkpoint:** Foreman signs material release note

4. **Set-Up of Fabrication Area, Welding Bay & COSHH Storage**

Position welding equipment, extraction units, and store COSHH-controlled substances (degreasers, flux) in a designated ventilated area.

- **Responsible Role:** Foreman, Welder
- **Key Equipment:** Welding sets, fume extraction, COSHH cabinet
- **Main Hazards:** Fume inhalation, chemical spillage
- **Control Measures:** Engineering: local exhaust ventilation; Administrative: COSHH assessments displayed; PPE: RPE
- **Verification Checkpoint:** HSE Officer inspects COSHH storage and extraction before work start

 **WARNING:** Ensure fume extraction is operating and tested before any welding commences in the bay.

Phase 2 — Pipe Fabrication: Cutting, Beveling, Fit-Up & Welding

Covers shop/yard fabrication of pipe spools from marking through to weld inspection, performed strictly to the approved WPS.

1. **Pipe Marking, Measurement & Cutting**

Mark pipe to isometric dimensions and cut to length using mechanical saw or oxy-fuel/plasma cutting equipment.

- **Responsible Role:** Welder/Fabricator
- **Key Equipment:** Cutting machine, tape, marker
- **Main Hazards:** Cuts/lacerations, hot slag, noise
- **Control Measures:** Engineering: machine guarding; PPE: cut-resistant gloves, safety glasses, hearing protection
- **Verification Checkpoint:** Foreman checks cut length and squareness against isometric

2. **Edge Preparation / Beveling**

Prepare weld bevels to the WPS-specified angle using beveling machine or grinder.

- **Responsible Role:** Welder/Fabricator
- **Key Equipment:** Beveling machine, angle grinder
- **Main Hazards:** Flying particles, hand-arm vibration
- **Control Measures:** Engineering: guarded grinder; PPE: safety glasses, gloves; Administrative: vibration exposure time limits

- **Verification Checkpoint:** Fabricator verifies bevel angle with gauge

3. Fit-Up & Alignment of Pipe Spools

Align pipe sections and fittings using clamps/line-up equipment to the tolerances specified in the WPS.

- **Responsible Role:** Welder/Fabricator, Operative
- **Key Equipment:** Line-up clamps, tack welding set
- **Main Hazards:** Trapped fingers, misalignment leading to rework
- **Control Measures:** Engineering: mechanical clamps; Administrative: fit-up inspection before tack
- **Verification Checkpoint:** Foreman/QC inspects fit-up and tack welds prior to full welding

4. Welding (Root, Fill, Cap Passes) per WPS

Complete the weld in sequence (root, fill, cap) strictly per the approved WPS by a qualified welder, under a valid Hot Work Permit.

- **Responsible Role:** Welder/Fabricator
- **Key Equipment:** Welding plant, electrodes/wire, screens
- **Main Hazards:** Arc flash, burns, fume inhalation, fire
- **Control Measures:** Elimination: qualified welder only; Engineering: fume extraction, welding screens; PPE: welding helmet, gauntlets, FR coveralls
- **Verification Checkpoint:** Hot Work Permit displayed and fire watch maintained throughout

 **CRITICAL:** Hot Work Permit must be valid and fire watch in place at all times during welding — no exceptions.

5. Visual Inspection & NDT of Welds

Carry out visual inspection of completed welds and coordinate non-destructive testing (radiography/ultrasonic) per the ITP.

- **Responsible Role:** Welder, QC Inspector, HSE Officer
- **Key Equipment:** Visual gauges, NDT equipment
- **Main Hazards:** Radiation exposure (if radiography used)
- **Control Measures:** Administrative: controlled exclusion zone for radiography, per RPS procedure
- **Verification Checkpoint:** QC Inspector signs off weld inspection report before release to next phase

Phase 3 — Pipe Handling, Lifting & Transportation

Moves fabricated spools from the fabrication area to the installation point under a controlled lifting operation.

1. Lifting Plan Review & Rigging Equipment Inspection

Review the Lifting Plan for the spool weight/geometry and inspect all rigging accessories before use.

- **Responsible Role:** Rigger/Banksman, Foreman
- **Key Equipment:** Slings, shackles, load charts
- **Main Hazards:** Use of damaged/uncertified lifting gear
- **Control Measures:** Elimination: reject damaged gear; Administrative: current inspection certificates checked
- **Verification Checkpoint:** Rigger confirms lifting gear certification and Lifting Plan sign-off

2. Loading & Securing Fabricated Spools

Load spools onto transport cradles/trailers and secure with rated restraints.

- **Responsible Role:** Rigger, Operative
- **Key Equipment:** Cradles, restraint straps
- **Main Hazards:** Load shift in transit, crush hazard
- **Control Measures:** Engineering: rated cradles; Administrative: load securement checklist

- **Verification Checkpoint:** Foreman inspects load security before transport departs

3. 🚚 Transport to Installation Point

Transport secured spools along the designated site route to the installation location.

- **Responsible Role:** Plant Operator, Banksman
- **Key Equipment:** Transport vehicle/trailer, banksman signals
- **Main Hazards:** Vehicle/pedestrian collision, uneven ground
- **Control Measures:** Administrative: designated haul route, banksman-directed movement
- **Verification Checkpoint:** Banksman confirms clear route before each movement

4. 🚧 Positioning & Temporary Support at Installation Location

Lift spool into position at the installation point and place on temporary supports pending final alignment.

- **Responsible Role:** Rigger, Plant Operator, Foreman
- **Key Equipment:** Mobile crane, temporary pipe stands
- **Main Hazards:** Dropped load, suspended load over personnel
- **Control Measures:** Elimination: no personnel under suspended load; Engineering: rated temporary supports; Administrative: exclusion zone
- **Verification Checkpoint:** Banksman confirms exclusion zone clear before lift

Phase 4 — Pipe Installation, Alignment & Jointing

Covers final placement, alignment, tie-in and, where buried, reinstatement of the pipeline.

1. 🚧 Trench/Support Preparation & Excavation Permit Check

Verify trench condition, shoring/battering, and confined space classification before personnel enter for installation.

- **Responsible Role:** Foreman, HSE Officer, Authorised Person
- **Key Equipment:** Gas detector, shoring equipment
- **Main Hazards:** Trench collapse, engulfment, confined space atmosphere
- **Control Measures:** Elimination: shored/battered trench only; Engineering: gas monitoring; Administrative: Confined Space Permit
- **Verification Checkpoint:** Authorised Person confirms permit and atmosphere test before entry

🔴 **CRITICAL:** No entry into any trench or chamber classified as confined space without a valid Confined Space Permit and continuous gas monitoring.

2. 🚧 Pipe Lowering, Alignment & Bedding

Lower the spool into the trench/support and align to the design invert level and bedding material.

- **Responsible Role:** Rigger, Plant Operator, Operative
- **Key Equipment:** Crane, laser level, bedding material
- **Main Hazards:** Dropped load, manual handling strain
- **Control Measures:** Engineering: mechanical lowering aids; Administrative: banksman-controlled lift; PPE: gloves, boots
- **Verification Checkpoint:** Foreman/Surveyor confirms alignment and level against design

3. ⚡ Final Tie-In Welding / Jointing & Electrical Bonding

Complete final tie-in welds/joints and install cathodic protection or electrical continuity bonding where specified.

- **Responsible Role:** Welder/Fabricator, Electrician
- **Key Equipment:** Welding plant, bonding cable, isolation equipment
- **Main Hazards:** Electric shock, arc flash, hot work near live services

- **Control Measures:** Elimination: isolate adjacent live services; Engineering: bonding per design; PPE: insulated tools where required
- **Verification Checkpoint:** Electrical Isolation Permit verified before bonding work; weld re-inspected per Phase 2 Step 5

⚠ **WARNING:** Confirm Electrical Isolation Permit is valid before any bonding or tie-in work near live electrical services.

4. 🚧 Backfill & Reinstatement

Backfill the trench in compacted layers per specification and reinstate the surface where the pipeline is buried.

- **Responsible Role:** Operative, Plant Operator
- **Key Equipment:** Excavator, compactor
- **Main Hazards:** Plant-pedestrian interface, manual handling
- **Control Measures:** Administrative: exclusion zone around plant; PPE: hi-vis, hearing protection
- **Verification Checkpoint:** Foreman confirms compaction test results before reinstatement sign-off

Phase 5 — Testing, Inspection & Handover

Confirms system integrity through pressure testing and closes out documentation for handover to the client.

1. 🧪 Hydrostatic / Pneumatic Pressure Testing

Pressure test the completed pipework to the design test pressure per the approved test procedure.

- **Responsible Role:** QC Inspector, Foreman, HSE Officer
- **Key Equipment:** Test pump, pressure gauges, barriers
- **Main Hazards:** Sudden pressure release, projectile fittings
- **Control Measures:** Elimination: pneumatic testing avoided where hydrostatic is feasible; Engineering: pressure relief; Administrative: exclusion zone during test
- **Verification Checkpoint:** HSE Officer confirms exclusion zone enforced before pressurisation begins

🔴 **CRITICAL:** Personnel must remain outside the test exclusion zone during pressurisation and hold periods.

2. 🧪 Final Inspection, NDT Review & Punch List Close-Out

Carry out final walk-down inspection, review outstanding NDT results, and close out punch list items.

- **Responsible Role:** QC Inspector, Foreman
- **Key Equipment:** Inspection checklist, NDT records
- **Main Hazards:** Undetected defects if inspection rushed
- **Control Measures:** Administrative: independent QC sign-off required before close-out
- **Verification Checkpoint:** QC Inspector issues final inspection certificate

3. 📄 Documentation Handover & Permit Close-Out

Compile as-built records, test certificates and weld traceability documentation, and formally close all outstanding permits.

- **Responsible Role:** Site Manager, HSE Officer
- **Key Equipment:** Handover documentation package
- **Main Hazards:** Incomplete records causing downstream compliance gaps
- **Control Measures:** Administrative: documentation checklist verified before sign-off
- **Verification Checkpoint:** Site Manager and Client Representative co-sign handover certificate

SECTION 8 — ENVIRONMENTAL CONTROLS

- **8.1 Waste Management:** Segregate metal offcuts, packaging and general waste at source for licensed recycling/disposal; maintain a waste transfer log.
- **8.2 Spill Prevention:** Store fuels, oils and welding consumables in bunded containers within the designated COSHH area; spill kits are located at the fabrication bay and installation front.
- **8.3 Noise & Vibration:** Limit grinding and cutting to permitted working hours; rotate operatives on vibrating tools to stay within exposure action values.
- **8.4 Dust / Airborne Emissions:** Use local exhaust ventilation and RPE during grinding/welding; dampen exposed ground during excavation if dust is generated.
- **8.5 Water & Drainage Protection:** Prevent hydrostatic test water and wash-down water from entering watercourses or drains without authorised discharge; test water is contained and disposed of per local requirements.
- **8.6 Ecology:** Where the pipe route passes through or near sensitive habitats, works are fenced to the approved boundary and an ecological watching brief is maintained during excavation.
- **8.7 Incident Reporting:** Any environmental incident (spill, discharge, ecological disturbance) is reported immediately to the HSE Officer and recorded in the project incident register.

SECTION 9 — EMERGENCY RESPONSE & CONTINGENCY PLAN

The following scenarios address the principal emergency risks associated with piping fabrication and installation. All personnel are briefed on these procedures prior to mobilisation.

9.1 Fire / Explosion During Hot Work

- **Immediate Actions:** Stop work, raise alarm, use nearest extinguisher if safe, evacuate area if fire is not immediately controllable
- **Responsible Role:** Welder/Fabricator raises alarm; Foreman directs evacuation
- **Escalation Route:** Foreman → Site Manager → Emergency Services
- **Assembly Point:** Designated Muster Point

9.2 Confined Space Emergency (Gas Exposure / Collapse)

- **Immediate Actions:** Do not enter unprotected; raise alarm; activate rescue plan using retrieval line/tripod from outside the space
- **Responsible Role:** Standby Person raises alarm; Authorised Person directs rescue
- **Escalation Route:** Standby Person → HSE Officer → Emergency Services (specialist rescue)
- **Assembly Point:** Designated Muster Point

9.3 Dropped Load / Lifting Incident

- **Immediate Actions:** Stop the lift, secure the area, do not approach the load until confirmed stable, provide first aid if required
- **Responsible Role:** Banksman halts operation; Foreman secures area
- **Escalation Route:** Foreman → Site Manager → Emergency Services (if injury)
- **Assembly Point:** Designated Muster Point

9.4 Trench Collapse / Excavation Instability

- **Immediate Actions:** Evacuate the trench immediately, do not enter to attempt rescue, raise alarm and call for specialist rescue
- **Responsible Role:** Nearest Operative raises alarm; Foreman controls area
- **Escalation Route:** Foreman → Site Manager → Emergency Services (trench rescue)
- **Assembly Point:** Designated Muster Point

9.5 Electric Shock / Arc Flash

- **Immediate Actions:** Isolate the electrical source before touching the casualty, raise alarm, commence first aid/CPR by a trained first aider
- **Responsible Role:** Nearest trained First Aider; Foreman isolates source
- **Escalation Route:** First Aider → HSE Officer → Emergency Services
- **Assembly Point:** Designated Muster Point

9.6 Emergency Contact Summary

Role / Function	Contact Name	Contact Number
Site Emergency Coordinator	[Placeholder]	[Placeholder]
HSE Officer	[Placeholder]	[Placeholder]
Client Contact	[Placeholder]	[Placeholder]
Emergency Services	[Placeholder]	[Placeholder]
Nearest Hospital	[Placeholder]	[Placeholder]
Muster Point	[Placeholder]	N/A

SECTION 10 — AUTHORISATION & SIGN-OFF

This Method Statement requires formal authorisation from all signatories below prior to commencement of works on site.

Field	Details	Signature	Date
Prepared By	[Name / Position]		
Reviewed By (HSE)	[Name / Position]		
Reviewed By (Technical)	[Name / Position]		
Approved By	[Name / Position]		
Client / Principal Contractor Representative	[Name / Position]		

This document is valid only when all signatures above have been obtained prior to commencement of works.