

A low-angle, close-up photograph of a worker in profile, wearing a white hard hat with a red logo and a high-visibility yellow-green safety vest over a dark long-sleeved shirt. The worker is positioned next to a piece of heavy machinery, with a vertical metal bar in the foreground. The background is a clear blue sky. The overall lighting is bright, suggesting an outdoor setting.

# Safety handbook drilling and drop bury services

**Kickstreet**



# Table of Contents

<b>1.</b>	<b>Introduction</b> <ul style="list-style-type: none"><li>- Purpose of the Handbook</li><li>- Scope and Applicability</li><li>- Safety Culture and Commitment</li></ul>	<b>7.</b>	<b>Accident Prevention and Reporting</b> <ul style="list-style-type: none"><li>- Identifying Potential Hazards</li><li>- Incident and Near-Miss Reporting</li><li>- Root Cause Analysis and Corrective Actions</li></ul>
<b>2.</b>	<b>General Safety Guidelines</b> <ul style="list-style-type: none"><li>- Personal Protective Equipment (PPE)</li><li>- Safety Training Requirements</li><li>- Emergency Response Plan</li></ul>	<b>8.</b>	<b>Emergency Procedures</b> <ul style="list-style-type: none"><li>- First Aid and Medical Response</li><li>- Fire Safety and Evacuation Plan</li><li>- Spill and Leak Containment</li></ul>
<b>3.</b>	<b>Pre-Operation Procedures</b> <ul style="list-style-type: none"><li>- Site Assessment and Planning</li><li>- Utility Locating and Marking</li><li>- Permits and Approvals</li><li>- Equipment Inspection and Maintenance</li></ul>	<b>9.</b>	<b>Health and Wellness</b> <ul style="list-style-type: none"><li>- Heat Stress and Cold Stress Management</li><li>- Fatigue Management</li><li>- Mental Health Resources</li></ul>
<b>4.</b>	<b>Directional Drilling Safety</b> <ul style="list-style-type: none"><li>- Equipment Setup and Operation</li><li>- Drill Path Planning and Monitoring</li><li>- Managing Drill Fluids and Cuttings</li><li>- Handling Drill Rods and Pipe</li><li>- Communication Protocols</li></ul>	<b>10.</b>	<b>Communication and Documentation</b> <ul style="list-style-type: none"><li>- Heat Stress and Cold Stress Management</li><li>- Fatigue Management</li><li>- Mental Health Resources</li></ul>
<b>5.</b>	<b>Drop Bury Safety</b> <ul style="list-style-type: none"><li>- Trenching and Plowing Procedures</li><li>- Soil and Ground Conditions</li><li>- Backfilling and Compaction</li><li>- Cable Handling and Placement</li><li>- Traffic and Pedestrian Control</li></ul>	<b>11.</b>	<b>Safety Audits and Inspections</b> <ul style="list-style-type: none"><li>- Regular Safety Inspections</li><li>- Compliance Audits</li><li>- Continuous Improvement Plans</li></ul>
<b>6.</b>	<b>Environmental and Hazardous Conditions</b> <ul style="list-style-type: none"><li>- Identifying and Mitigating Environmental Hazards</li><li>- Weather-Related Safety Procedures</li><li>- Hazardous Materials Handling and Disposal</li></ul>	<b>12.</b>	<b>Appendices</b> <ul style="list-style-type: none"><li>- Safety Checklists</li><li>- Emergency Contact Numbers</li><li>- Training Records and Logs</li></ul>

# 1.

## Introduction

### **Purpose of the Handbook**

The purpose of this Safety Handbook is to ensure a safe working environment for all employees involved in cable directional drilling and drop bury services. This handbook provides comprehensive safety guidelines to prevent accidents, injuries, and incidents on the job site.

### **Scope and Applicability**

This handbook applies to all employees, contractors, and visitors involved in the operations of directional drilling and drop bury services. It is mandatory to adhere to the safety protocols outlined herein.

### **Safety Culture and Commitment**

Our company is committed to fostering a culture of safety where every individual takes responsibility for their own safety and the safety of others. We believe that every accident is preventable and strive for zero incidents on all job sites.

# 2.

## General Safety Guidelines

### Personal Protective Equipment (PPE)

- Hard hats, safety glasses, gloves, steel-toed boots, and high-visibility vests are mandatory.
- Additional PPE, such as hearing protection and respiratory masks, may be required based on specific job tasks.
- Inspect PPE before each use and replace damaged or worn-out equipment immediately.

### Safety Training Requirements

- All employees/contractors must complete mandatory safety training before commencing work.
- Regular refresher courses and specialized training sessions will be provided.
- Training topics include hazard recognition, emergency response, equipment operation, and specific job-related procedures.

### Emergency Response Plan

- A detailed emergency response plan must be in place for each job site.
- All employees/contractors must be familiar with emergency procedures, including evacuation routes and assembly points.
- Regular emergency drills should be conducted to ensure preparedness.

# 3.

## Pre-Operation Procedures

### Site Assessment and Planning

- Conduct a thorough site assessment to identify potential hazards and environmental conditions.
- Develop a site-specific safety plan addressing identified risks.
- Consider factors such as soil type, weather conditions, and proximity to utilities and structures.

### Utility Locating and Marking

- Utilize utility locating services to identify and mark all underground utilities before drilling or trenching.
- Adhere to local regulations and guidelines for utility marking.
- Maintain clear and updated records of utility locations.

### Permits and Approvals

- Obtain all necessary permits and approvals from local authorities before commencing work.
- Ensure compliance with local, state, and federal regulations.
- Keep copies of all permits and approvals on-site.

### Equipment Inspection and Maintenance

- Perform regular inspections and maintenance on all equipment.
- Document and report any defects or malfunctions immediately.
- Follow manufacturer guidelines for maintenance and repairs.

# 4.

## Directional Drilling Safety

### Equipment Setup and Operation

- Ensure proper setup of drilling equipment according to manufacturer guidelines.
- Only trained and authorized personnel should operate drilling equipment.
- Conduct pre-operation checks to ensure all systems are functioning correctly.

### Drill Path Planning and Monitoring

- Develop a detailed drill path plan, including entry and exit points.
- Continuously monitor the drilling process to ensure accuracy and safety.
- Use electronic tracking and monitoring systems to maintain drill path precision.

### Managing Drill Fluids and Cuttings

- Use appropriate drilling fluids and manage cuttings to prevent environmental contamination.
- Properly dispose of drill fluids and cuttings according to regulations.
- Implement containment measures to prevent spills and leaks.

### Handling Drill Rods and Pipe

- Use proper lifting techniques and equipment to handle drill rods and pipe.
- Inspect all drill rods and pipe for defects before use.
- Store drill rods and pipe safely to prevent damage and accidents.

### Communication Protocols

- Establish clear communication protocols between all team members.
- Use radios or other communication devices to maintain constant contact.
- Conduct regular briefings to update the team on progress and any changes to the plan.

# 5.

## Drop Bury Safety

### Trenching and Plowing Procedures

- Follow safe trenching and plowing procedures to prevent cave-ins and accidents.
- Ensure trenches are properly shored or sloped according to safety guidelines.
- Monitor trench stability throughout the work process.

### Soil and Ground Conditions

- Assess soil and ground conditions before starting work.
- Implement measures to stabilize the ground if necessary.
- Use soil testing to identify potential issues such as high-water tables or unstable soil.

### Backfilling and Compaction

- Proper backfill and compact trenches to prevent settlement and ground instability.
- Use appropriate compaction equipment and techniques.
- Verify compaction levels to ensure compliance with specifications.

### Cable Handling and Placement

- Handle cables with care to prevent damage and injury.
- Ensure proper placement and securing of cables in trenches.
- Protect cables from sharp edges and crushing forces.

### Traffic and Pedestrian Control

- Implement traffic and pedestrian control measures to ensure safety around the work area.
- Use barriers, signage, and flaggers as needed.
- Coordinate with local authorities to manage traffic flow effectively.

# 6.

## Environmental and Hazardous Conditions

### **Identifying and Mitigating Environmental Hazards**

- Identify potential environmental hazards, such as wetlands, water bodies, and protected areas.
- Implement measures to mitigate environmental impact.
- Follow environmental regulations and obtain the necessary permits.

### **Weather-Related Safety Procedures**

- Monitor weather conditions and adjust work plans accordingly.
- Implement safety measures for extreme weather conditions, such as lightning, high winds, and heavy rain.
- Establish weather-related work stoppage criteria and communicate them to the team.

### **Hazardous Materials Handling and Disposal**

- Handle hazardous materials with care and according to safety guidelines.
- Properly dispose of hazardous materials to prevent environmental contamination.
- Maintain Material Safety Data Sheets (MSDS) for all hazardous materials on-site.

# 7.

## Accident Prevention and Reporting

### Identifying Potential Hazards

- Conduct regular hazard assessments to identify potential risks.
- Implement measures to mitigate identified hazards.
- Encourage employees to participate in hazard identification and reporting.

### Incident and Near-Miss Reporting

- Encourage employees to report all incidents and near-misses.
- Investigate and document all incidents and near-misses to prevent recurrence.
- Provide feedback to employees on the outcomes of investigations and corrective actions.

### Root Cause Analysis and Corrective Actions

- Conduct root cause analysis for all incidents and near-misses.
- Implement corrective actions to address identified root causes.
- Monitor the effectiveness of corrective actions and make adjustments as necessary.

# 8.

## Emergency Procedures

### **First Aid and Medical Response**

- Provide first aid kits and ensure they are accessible on all job sites.
- Train employees in basic first aid and CPR.
- Establish protocols for contacting emergency medical services.

### **Fire Safety and Evacuation Plan**

- Develop a fire safety plan and ensure all employees are familiar with it.
- Conduct regular fire drills and evacuation exercises.
- Maintain fire extinguishers and ensure they are readily accessible.

### **Spill and Leak Containment**

- Implement spill and leak containment measures for hazardous materials.
- Train employees in spill response procedures.
- Maintain spill kits and ensure they are accessible on all job sites.

# 9.

## Health and Wellness

### **Heat Stress and Cold Stress Management**

- Implement measures to protect employees from heat stress and cold stress.
- Provide access to drinking water and rest breaks in hot weather.
- Ensure employees have appropriate clothing and shelter in cold weather.

### **Fatigue Management**

- Monitor work hours and ensure employees have adequate rest periods.
- Implement shift rotations to prevent fatigue.
- Encourage employees to report signs of fatigue and take breaks as needed.

### **Mental Health Resources**

- Provide access to mental health resources and support services.
- Encourage open communication about mental health and well-being.
- Implement stress management programs and initiatives.

# 10.

## Communication and Documentation

### Daily Safety Briefings

- Conduct daily safety briefings to discuss job-specific hazards and safety measures.
- Encourage employee participation and feedback during briefings.
- Use briefings to update the team on any changes to the work plan or safety protocols.

### Safety Signage and Labels

- Use clear and visible safety signage and labels to communicate hazards and safety requirements.
- Ensure signage is compliant with regulatory standards.
- Regularly inspect and maintain signage to ensure visibility and accuracy.

### Documentation and Record Keeping

- Maintain accurate records of safety training, inspections, and incidents.
- Ensure documentation is accessible and up-to-date.
- Use records to track safety performance and identify areas for improvement.

# 11.

## Safety Audits and Inspections

### Regular Safety Inspections

- Conduct regular safety inspections of job sites and equipment.
- Document and address any safety concerns identified during inspections.
- Use inspection findings to improve safety practices and prevent incidents.

### Compliance Audits

- Perform compliance audits to ensure adherence to safety regulations and standards.
- Address any non-compliance issues promptly.
- Use audit findings to identify gaps in safety procedures and implement corrective actions.

### Continuous Improvement Plans

- Develop and implement continuous improvement plans for safety practices.
- Encourage employee feedback and suggestions for improving safety.
- Regularly review and update safety policies and procedures to reflect best practices and regulatory changes.

# 12.

## Appendices

### **Safety Checklists**

- Include safety checklists for various tasks and procedures.
- Ensure checklists are used consistently and updated as needed.

### **Emergency Contact Numbers**

- Provide a list of emergency contact numbers for quick reference.
- Ensure contact information is up-to-date and accessible.

### **Training Records and Logs**

- Maintain training records and logs for all employees.
- Use training records to track employee qualifications and compliance with training requirements.