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#### 1.1 Acknowledgements

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All involved parties were supportive of the plant training standard and their help, advice, guidance, and expertise in the development of this publication has been invaluable and will be of great benefit to the construction industry.

#### **CITB NI**

April 2024



#### 1.2 Introduction

As the standard setting body for the Construction Industry in Northern Ireland, CITB NI has produced this training standard as a recommendation regarding the training of persons operating, and supervising plant and equipment in the construction industry and to the persons that provide the training of plant operators.

The target audience and recommendations of this document are for NI Employers, Supervisors, Training Providers and Plant Operatives.

#### Legislation

In accordance with Health and Safety legislation, all plant operators and those supervising plant operators must receive adequate training in the safe use of work equipment and be provided with such information, instruction, training and supervision as is necessary to ensure their health and safety at work. It is therefore essential that plant operators are given sufficient training and information to enable them to operate and maintain plant and equipment correctly.

### Construction Industry Training Board (NI)

CITB NI is the standard setting body for the Construction Industry in Northern Ireland and under the 1984 Industrial Training Order it shall consider employments and publish recommendations with regard to the nature and length of training, the education to be associated with the training, the persons by and to whom the training ought to be given, the standards to be attained as a result of the training and the methods of ascertaining whether those standards have been attained.

Disclaimer: This construction plant training standard has been designed to provide the minimum recommended general knowledge and understanding regarding; the training of persons operating, and supervising plant and equipment in the construction industry and to the persons that provide the training of plant operators. It is recommended that this is used in accordance with the 2016 Northern Ireland Health and Safety Construction Design and Management Regulations. Some of which have been mentioned in Appendix 1 but please note this is not an exhaustive list.



#### 1.3 Plant Operator Training

In accordance with the Health and Safety legislation, the employer must ensure, so far as is reasonably practicable, that employees receive "such information, instruction, training and supervision as is necessary to ensure" their health and safety at work. (See Appendix 1 for further details)

The following should be implemented by companies that own or hire contractor's plant in relation to the training of operators. All new plant operators should receive two stages of training:

- 1. Basic Foundation Training
- 2. Specific Job Training and Familiarisation

#### **Basic Foundation Training**

All new operators of contractor's plant must receive adequate basic training. Plant operators with some experience but no formal training should be profiled against the terminal objective or national occupational standard to determine if they have a current training need, a training programme can then be tailored to the individuals needs.

Operators or potential operators will require different periods and stages of training depending on experience and machine knowledge.

### **Specific Job Training and Familiarisation**

After completing basic foundation training all new operators and those with limited experience should receive specific job training under supervision in relation to the actual machine/s operated, the products handled by those machines and the environment where the machine/s will be used. The operator also needs job familiarisation training to also cover these areas without direct supervision but through observation.

Job specific training should also cover quick hitches, attachments and any other specialist equipment that is required to be used. If an operator has not operated a machine for some time then they may require refresher training or time on the machine to adapt before operating in live situations, this would also apply to operating a different make of machine which may require a form of conversion training or time to read through the operator's handbook to familiarise themselves with the machine differences before attempting live work.

### Authorisation to Operate Equipment

If the company is satisfied with the standard of the operator who will use the equipment, then authorisation to drive these machines should be given. Please note that authorisation should be given for a specific period and should include the make and model of machine that can be operated by the operator, this authorisation should be withdrawn by the company if they are not satisfied with the continuing competence of the operator.

All authorisations to drive equipment should preferably be in writing. Those people who are authorised to use equipment should be displayed on a register, issued with keys from a recorded system or machines could be fitted with immobiliser that prevents non-authorised driver usage.

#### 1.4 Plant Instructor Training

The training of plant operators needs to be delivered by a competent plant instructor and it is up to the company or individuals to ensure that the person delivering the training is competent and they can verify the persons experience and suitability for the task. Plant instructors should be able to plan, prepare and present, both practical skill and knowledge training in order to train others.

A plant instructor should have previous construction plant operating experience relevant to the category of plant they wish to instruct on. They must be able to operate the machine with safety and skill to a high standard and have achieved an advanced skill test on the category of machine.

A plant instructor will need to have completed a recognised plant instructor training programme that provides adequate training in all aspects of the role, The plant instructor needs to be able to pass on knowledge to candidates but to also be a skills trainer and have the ability to demonstrate the plant operator skills required and to then guide learners to develop that skill.

A plant instructor needs to be able to develop training programmes and lesson plans and understand how candidates learn and how to adapt to different learning styles. They need to effectively manage the learners whilst they are training and set objectives and realistic assessments to measure the training outcomes.

The plant instructor will need to deliver a set of objectives so that they know when the candidates have achieved them.

The training content should relate to each of the objectives and the training process needs to be interesting and interactive so that learners feel engaged and that the training makes an effective contribution to their development.

A plant instructor should be able to identify the training needs of the candidate and be able to write aims and objectives and deliver the course content dependent upon those needs. They will be required to train on a one to one or small group basis using appropriate demonstrations and provide constructive feedback. They will need to facilitate a training session which uses activities such as role play, simulation and discussion and assess and evaluate candidates immediate learning and provide constructive feedback.



## 1.5 Health & Safety, Site Supervision and Management of Plant & Equipment

#### **Site Supervisor**

The safe operation of contractor's plant starts with site management. The decision to buy or provide a specific machine may well have been made as a corporate decision, or the equipment hired in, but it is the site management who are ultimately responsible for it being put into use. The site management must therefore ensure that the operation to be carried out has been effectively planned to take into consideration all the safety issues which can arise. To help prevent unsafe acts it is essential that supervision is effective. The supervisor therefore needs to:

Check that the Method Statement, which should be based on the risk assessment, is being worked to check that the method is as safe as possible:

- Check that people are kept clear of hazardous areas
- Check that machines are being used correctly
- Check that tasks are only carried out by authorised people
- Challenge unsafe practices
- Record and arrange for the repair of any damage they see or have reported to them
- Have the authority and ability to stop a task if they feel it is unsafe
- Report and record unsafe behaviour (including near misses)

#### The Site Supervisor must complete

Pre-work reviews

Before using a machine, the operator's training and experience must be checked to assess their competency. Training must include adequate familiarisation on the specific equipment to be used and formal certification of training together with entries in the operator's logbook countersigned by their supervisor/manager may assist in this assessment.

Observation of a new operator or an operator using new equipment should be done in a safe location away from other personnel, this will also help those making the competency assessment. Before commencing any task for the first time the operator together, with other relevant parties must receive a safe system of work briefing from the supervisor. Immediately following this briefing, the operator and others involved should be closely monitored to ensure they understand and are working to the safe system of work.

As machines come in a variety of shapes and sizes with significant differences in operating controls and characteristics. It is therefore essential that operators are given adequate familiarisation before they begin operations if they are operating an unfamiliar type or model of machine or attachment. The employer of the machine operator is responsible for ensuring that adequate familiarisation is provided.

#### The Site Supervisor must ensure

Operators should be able to:

- Communicate effectively with other workers and line managers
- Interpret relevant information and follow given instructions
- Organise the work activity or part of the work activity with others
- Select and/or request resources and additional equipment required
- Carry out the checks and pre-use inspections that are required on a daily and/or weekly basis as required
- Attach and detach an attachment in the prescribed manner
- Carry out checks to ensure the attachment has been correctly engaged
- Operate the machine according to manufacturer's requirements and safe working practices
- Raise and address issues confidently and not be afraid of conflict or of stopping work when necessary to ensure safety
- Evidence of LOLER & PUWER
   Certification (See legislation in Appendix

#### **Planning**

Site Supervisors must prepare an operations plan. All operations on construction sites should be planned to ensure that they are carried out safely and that all foreseeable risks have been considered. Poor planning is one of the major causes of accidents arising from the use of construction plant. The employer should ensure that they identify a person who is competent to undertake the planning and give them that duty.

The planning process should identify the task to be undertaken, identify the hazards associated with that task, carry out a risk assessment, identify control measures, develop the method to be used, record the planning in a method statement, communicate the plan to all those involved in the task and review the plan before the job starts.



Where cranes are lifting suspended loads, additional planning is required by a person competent to undertake the task. Additional planning is also required for other nonstandard lifting operations such as unusual loads, or circumstances, loads with large wind areas, confined spaces, and in constricted areas where contact with other structures could be hazardous.

It is important that the use of construction plant is subject to regular review and constant monitoring by Management to ensure that tasks are being carried out as planned, that supervisors and operators have the necessary competences and that planning is effective.

Employers have legal obligations to plan and control the operation of construction plant on site.

Operators and contractors need to be made aware of site hazards which could affect the safe use of the machine. Particular attention should be paid to traffic management, and sites should be arranged so that wherever possible pedestrians and vehicles are adequately separated. This is best achieved by establishing:

- Pedestrian only areas from which vehicles are completely excluded
- Safe designated pedestrian routes to work locations
- ► Vehicle only areas, especially where space is limited, or traffic is heavy
- Safe vehicle routes around the site
- BS 7121 Crane operations British Standard, Appendix for further guidelines. Appointed person should be developing a lift plan.

#### **Site Conditions**

The maintenance of site conditions is the responsibility of the Site Supervisor. The work site should be fully secured to prevent unauthorised access. Parked machines (and their keys) should be secured and immobilised to prevent unauthorised cab access and use of the machine, and also to help prevent plant vandalism and theft.

Only trained and competent operators should operate plant on site. Operators should also receive induction training before they are authorised to operate plant on site. As a minimum requirement, this should include emergency procedures, traffic management and pedestrian/vehicle segregation, access and egress from site, safe use of a bank's person, hazard management, working alone and safety signage. Transport routes should be positioned at a safe distance from open excavations to prevent excavation collapse and where possible excavations should be suitably supported. Painted timber, concrete baulks, barriers and so forth should be used to keep vehicles at a safe distance away from excavation edges. Pedestrian workers should be segregated from traffic routes by using safe zones or one-way systems, the use of mobile phones by pedestrians needs to be reviewed and measures implemented to prevent injury from reversing vehicles.

Where there are specific hazards, such as open excavations, then the movement of machines should be strictly controlled by competent vehicle marshaller. The vehicle marshaller must be excluded from the 'operational area' of the machine and a risk assessment will be required to determine the safe area and distance around the machine – if in any doubt, the plant should be segregated from the vehicle marshaller and other workers.

#### 1.6 **Plant Maintenance**

The Site Supervisor is responsible for ensuring plant is maintained. Any item of mechanical plant or equipment will remain safe to operate only if it is properly maintained in good condition. A programme of regular, preventative maintenance should be established to ensure that all plant and equipment is systematically inspected, serviced, maintained and repaired as necessary. Responsibility for taking this action should be clearly identified.

A safe system of work must be maintained during all maintenance and repair operations and, where necessary, a permit to work system, (e.g. a lock-off system), should be established to ensure that no part of the machinery is accidentally set into motion whilst work on it is being carried out.

While personnel are carrying out inspection, maintenance or repair tasks, raised attachments bodies, cabs, etc. should be securely propped to prevent accidental lowering.

The appropriate manufacturer's repair and

#### Inspection

Every employer shall ensure that work equipment exposed to conditions causing deterioration which is liable to result in dangerous situations is inspected at suitable intervals; and each time those exceptional circumstances which are liable to jeopardise the safety of work equipment have occurred. Employer must ensure that health and safety conditions are maintained, and that any deterioration can be detected and remedied in good time.

Inspection should be completed whilst undertaking maintenance. The results of scheduled maintenance, operator shift maintenance and inspection activities should be recorded in full and safely stored. This will include details regarding who conducted the maintenance, when the maintenance occurred (time and date), what parts and consumables were used, and the faults found.



An item of plant, equipment or machinery should not leave the depot unless appropriate maintenance and a thorough inspection have been conducted. The effective maintenance of contractor's plant is an essential part of safe operation. All machines will wear, deteriorate and can suffer damage over time. The maintenance process, including checks and inspections, monitors, prevents and rectifies this deterioration. It is important that the personnel asked to carry out these tasks have the necessary machine-specific training, experience and competence in both periodic and breakdown maintenance.

All plant requires the manufacturer's preventative maintenance instructions to be strictly complied with, if safety is to be maintained in use. Checks and inspections should be carried out taking account of the frequency of use of the machine and the environmental conditions in which it works.

Both the user and owner of a machine have a responsibility to ensure that they are maintained in a safe working condition including any attachments used with it, If the operator is considered to be competent to carry out routine pre-use and weekly checks, they may be authorised to do so. The employer of the person carrying out these checks should ensure that the machine is taken out of use for the period of time required to complete the checks. Also, the employer or authorised person carrying out the checks should ensure that a safe system of work is in place to prevent personnel from being exposed to risk, for example from the inadvertent operation of the equipment.

Basic checks and inspections should be carried out in accordance with company instructions and the manufacturer's recommendations: Daily Pre-use Checks - these are carried out at the start of every shift (or day) and include checks for damage and correct functioning of the machine.

Weekly Inspections – these are additional inspections to the pre-use checks. These checks and inspections should be recorded. If there is a defect that affects the safe operation of the machine it must be reported, and the machine taken out of service immediately. If it does not affect the immediate safe operation of the machine the defect should be reported to the supervisor so that repairs may be carried out in a timely manner.

#### **Lifting Equipment**

The Lifting Operations and Lifting Equipment Regulations (LOLER) require that all lifting equipment is thoroughly examined by a competent person at specified intervals.

#### **Reporting of Defects**

There must be provision for the operator(s) of machines to make reports of defects or observations immediately they are identified. The written report should be to a pre-defined format, which requests details of the defect or observation and supporting information such as date, time, machine identification, circumstances, etc., and must be reported at least daily.

All the defect reports should be forwarded to the owner, (or the delegated person), who is in a position to make an informed decision about a planned response to the report. A copy of the original report should be retained by the operator. Once the defect/observation has been responded to and cleared this should then be recorded with supporting information on the original defect report. The machine should have the keys removed and a label or sign fitted warning that the machine should not be used.

#### **Modifications**

Contractor's plant should not be modified without the express written permission of the machine manufacturer. Unauthorised modifications will affect the warranty, invalidate the CE marking and may compromise safety.

#### **Scheduled Lubrication**

Operators may be required to carry out lubrication of certain items, such as the greasing of sliding parts, at specified intervals. They should only undertake such tasks if they are competent to do so and should be provided with the necessary equipment and instructions to carry this out safely.

Scheduled Maintenance It is the responsibility of the site management to ensure that all machines are adequately maintained in efficient working order and in a state of good repair.

A scheduled preventative maintenance program helps to meet these requirements. Where a machine is hired out on the basis that the owner is responsible for carrying out maintenance, the owner should inform the hirer, at the start of the hire, that their maintenance staff will require access to the machine at specified intervals. The hirer should be advised of the frequency and length of time required for maintenance operations.

#### **Breakdowns**

Breakdowns should be minimised by adequate inspection and preparation of the machine prior to delivery on site. Repairs on site should only be undertaken following a thorough job and site-specific risk assessment and the implementation of a safe system of work, including inspection of the work following completion.

**Maintenance Records** 

Comprehensive maintenance records are essential to the safe, efficient and economical operation of all contractor's plant. They provide a complete "cradle to grave" history of the individual machine giving the following benefits:

- Identification of component failure trends for feedback to the manufacturer
- Evidence of adequate maintenance to the Enforcing Authorities in the event of an incident
- Enabling the performance of the machine to be reviewed over time to inform future purchases



#### 1.7 The Delivery of Plant Operator Training

#### **Operator Routes of Entry**

There are two routes of entry.

#### They are:

- Candidate without previous experience (Full Foundation Training)
- Candidate with previous experience (Profiled Route)

#### **Requirements**

- Candidates without previous experience shall undertake a full training programme on the category of plant, covering all aspects of the terminal objective for that machine.
- Candidates with verifiable previous experience on a specific category of plant should be profiled by the Plant Trainer to determine what length of training is required. The candidate must have completed a plant safety awareness course within the last 6 months before any practical training commences.

#### **Foundation Training Route**

The CITB NI Training Standard specifies that all applicants with no prior experience shall undertake and complete foundation training using the CITB NI terminal objective.

Training will be followed by a category end test; this will be a requirement for all candidates.

Foundation training shall be based upon a training programme that incorporates the category specific CITB NI terminal objective.

#### **Training Area and Facilities**

- Training Providers shall produce the appropriate risk assessments prior to commencement of foundation training.
- Where training is being delivered at a construction site, the training area must be totally separated from the normal working area and exclude all other personnel and activities that are not part of the training programme.
- ► The Training Provider must ensure that the ratios of instructor to trainees do not exceed 1 instructor to 2 trainees.
- Machines used for foundation training must meet classification type and legislative requirements that include copies of the appropriate certification.
- All courses require an adequate area of hard standing for carrying out machine maintenance and cleaning. Additionally, adequate equipment for servicing and maintaining machines shall be provided.
- Training Providers should ensure that the training area meets current health, safety and welfare legislative requirements.

Classrooms must be suitable to meet training ratios and have adequate seating, writing facilities, and meet current workplace regulations.



#### **Equipment**

Training aids shall include computerised presentations, flip chart, demonstration models, examples of damaged or defective, etc.

Information shall be provided to include operator manual, appropriate certification, Health and Safety Executive NI information sheets, Approved Codes of Practices, British Standards, training hand-outs etc.

Appropriate Personal Protective Equipment shall be issued and worn.

#### **Plant Trainer Requirements**

A plant trainer delivering foundation training must have the following:

- Have achieved a recognised plant/forklift instructor programme
- Have been employed as a plant operator on the specific category of plant for which they are providing training for at least 2 years
- Have received authorisation to operate a specific category of plant from the company and hold a valid recognised assessor qualification
- ► Hold a recognised H & S qualification

#### **Documentation**

The Training Provider shall ensure that the plant trainer will use the correct documentation in order to meet this standard:

- Category terminal objective
- ▶ Training programme
- End test criteria and marking sheet

#### **Profiled Route**

#### **Policy**

Candidates with prior experience may undertake the profiled route using the terminal objectives.

Candidates applying through the profiled route must provide evidence of operating the specific item of plant for a minimum of three months and provide evidence of the work undertaken when using that machine. A supporting letter will be required from the candidate's employer or work supervisor.

#### **Training Area and Facilities**

- Training Providers shall produce the appropriate risk assessments prior to commencement of training.
- ► The training ratio for trainer: trainee: and machine must not exceed 1:2:1.
- Machines used for training must be free from defect and must meet the classification type and legislative requirements that include copies of the appropriate certification.
- An adequate area of hard standing for carrying out machine maintenance shall be provided. Additionally, materials and equipment needed for pre-start checking shall be provided.
- Training Providers shall ensure that the area meets current health, safety and welfare legislative requirements.
- Classroom must be suitable to meet testing ratios and have adequate seating, writing.
- facilities, and meet current workplace regulations.

#### **Terminal Objectives** 1.8

Terminal objectives should be available for each category of plant.

The Terminal objective contains:

- What training is to be provided
- What the individual will do
- The standard required to be delivered

Provider to ensure that the plant trainer conducting either foundation training or the profiled route, is fully aware of the requirements of the appropriate category terminal objective and the subsequent training programme.

#### **Some Examples of Terminal Objectives:**

- > 360° Excavator Above 10 Tonnes
- Forward Tipping Dumper
- Telescopic Handler
- **Dump Truck Above 10 Tonnes**

This is not an Exhaustive Plant list but reviews general examples of some plant It will be the responsibility of the Training machinery regularly used within the NI construction industry.

# **360° Excavator Above 10 Tonnes**

**Terminal Objective** - On successful completion of the training programme the individual will be able to operate the item of plant to the required standard and in accordance with the manufacturer's requirements.

### With a 360° Excavator Above 10 Tonnes the individual will be able to:

- Identify and comply with manufacturer's instructions in accordance with the operator's handbook, applicable regulations and legislation
- Carry out all pre-use and running checks
- Configure the excavator for travel
- Travel the machine over varying types of terrain including rough undulating ground and substantial inclines
- Manoeuvre the excavator in confined areas
- Set the machine to excavate
- Excavate below ground level
- Place spoil into dump truck vehicle and forward tipping dumper
- Grade spread and level different types of terrain
- Fit, operate and remove attachments
- Explain the loading and unloading procedures on and off a transporter
- Park, shut down and secure the machine
- Ensure safe and efficient operation of the equipment throughout



### **Forward Tipping Dumper**

**Terminal Objective** - On successful completion of the training programme the individual will be able to operate the item of plant to the required standard and in accordance with the manufacturer's requirements.

### With a Forward Tipping Dumper the individual will be able to:

- Identify and comply with manufacturer's instructions in accordance with the operator's handbook, applicable regulations and legislation
- Carry out all pre-use and running checks
- Set the dumper for site travel
- Travel over differing types of terrain, including rough undulating ground, both in a loaded and unloaded state
- Travel up and down substantial inclines in a loaded and unloaded state
- Manoeuvre in confined areas using forward and reverse direction, in a loaded and unloaded state
- Position the dumper to receive loads
- Comply with loading procedures
- Ensure load integrity and security
- Discharge loads into trenches or over edges
- Park shut down and secure the machine
- Explain the loading and unloading procedures on and off a transporter
- Ensure safe and efficient operation of the equipment throughout



### **Telescopic Handler**

**Terminal Objective** - On successful completion of the training programme the individual will be able to operate the item of plant to the required standard and in accordance with the manufacturer's requirements.

### With a Telescopic Handler the individual will be able to:

- Identify and comply with manufacturer's instructions in accordance with the operator's handbook, load charts, applicable regulations and legislation
- Carry out all pre-use and running checks
- Configure the telescopic handler for travel
- Set the telescopic handler in order to lift and transport various loads
- Travel over differing types of terrain, including rough undulating ground and substantial inclines, both with and without a load
- Manoeuvre in confined areas using forward and reverse direction, both with and without a load
- Lift and place various loads accurately within the full working range of the telescopic handler
- Ensure load integrity and security
- ► Keep within safe working parameters
- Fit, operate and remove attachments
- Explain the loading and unloading procedures on and off a transporter
- Park, shut down and secure the machine
- Ensure safe and efficient operation of the equipment throughout



### **Dump Truck Above 10 Tonnes**

**Terminal Objective** - On successful completion of the training programme the individual will be able to operate the item of plant to the required standard and in accordance with the manufacturer's requirements.

### With an Articulated Dump Truck Above 10 Tonnes the individual will be able to:

- Identify and comply with manufacturer's instructions in accordance with the operator's handbook, applicable regulations and legislation
- Carry out all pre-use and running checks
- Set the dump truck for site travel
- Travel over differing types of terrain, including rough undulating ground, both in a loaded and unloaded state
- Travel up and down substantial inclines in a loaded and unloaded state
- Manoeuvre in confined areas using forward and reverse direction, in a loaded and unloaded state
- Position the dump truck to receive loads
- Comply with loading procedures
- Ensure load integrity and security
- Discharge loads into trenches or over edges
- Park, shut down and secure the machine
- Explain the loading and unloading procedures on and off a transporter
- Ensure safe and efficient operation of the equipment throughout



#### 1.9 Appendix

For specific legislation and regulations, it is recommended to follow; the Statutory rules of Northern Ireland 2016 No. 146 Health and Safety Construction (design & management regulations NI 2016).

Some important and relevant information has been gathered below but again, is in no way considered an exhaustive list.

#### **General duties:**

- An employer, contractor, training provider shall have the skills, knowledge and experience to fulfil the role that they are appointed to undertake, in a manner that secures the health and safety of any person involved.
- 2. An employer, contractor, training provider shall not accept an appointment to a project unless they fulfil the general duties in point (1).
- 3. A person who is responsible for appointing an employer, contractor, training provider to carry out work on a project shall take reasonable steps to satisfy themselves that they fulfil the general duties in point (1).
- 4. A person with a duty under these regulations shall cooperate with any other person working on or in relation to a project, at the same or an adjoining construction site, to the extent necessary to enable any person to fulfil that duty or function.
- 5. A person working on a project under the control of another shall report to that person anything they are aware of in relation to the project which is likely to endanger their own health or safety or that of others.
- 6. Any person who is required by these regulations to provide information or instruction shall ensure it is comprehensible and provided as soon as is practicable.
- To the extent that they are applicable to a domestic client, the general duties in points (3), (4) & (6) shall be carried out by the person specified in general duties in point (1).

# Other important documentation published by the Health and Safety Executive (HSE) to consider;

- ▶ **HSG 47:** Provides comprehensive guidance on safely managing the risks associated with work near underground services, such as pipes, cables, and other utilities. The document aims to prevent accidents and injuries resulting from contact with underground services during excavation, construction, and maintenance activities.
- HSG 150: Provides comprehensive guidance on health and safety practices within the construction industry. It covers various aspects of construction work, including planning, management, and execution, with the aim of promoting safe working practices and reducing accidents and injuries on construction sites. It is specifically recommended to pay close attention to the guidance on the training and competency requirements for personnel involved in construction work.
- ▶ GS6: Guideline specific to the safe management and operation of equipment and activities near overhead power lines. It's important to consult applicable regulations, guidelines, and industry best practices specific to your jurisdiction and type of work to ensure compliance with safety requirements when working near overhead power lines. Additionally, seeking guidance from qualified professionals or utility companies can help ensure that safety measures are effectively implemented.
- BS 7121: Crane operations British Standard provides recommendations for the safe use of mobile cranes. It covers various aspects related to crane operations, including planning, management, and execution. Please refer to this code of practice for the safe use of cranes.

For more info please visit the www.hse.gov.uk website.

**Disclaimer:** This is not an exhaustive list and those involved in plant training should be mindful of all the relevant regulations applicable to the training/machinery involved.

#### Other useful Guidance/Resources to consider:

LOLER stands for the Lifting Operations and Lifting Equipment Regulations 1998. These regulations apply to businesses and organisations in the United Kingdom, including Northern Ireland, and they aim to ensure the safe use of lifting equipment. This disclaimer should be reviewed and customised to fit the specific context and requirements of your lifting equipment training program and the LOLER regulations applicable to your jurisdiction.

PUWER stands for the Provision and Use of Work Equipment Regulations 1998. These regulations apply in the United Kingdom, including Northern Ireland, and they aim to ensure that work equipment is suitable, maintained, and used safely. This disclaimer should be reviewed and customised to fit the specific context and requirements of your work equipment training program and the PUWER regulations applicable to your jurisdiction.

A banksman plays a crucial role in ensuring the safe movement and operation of vehicles and machinery on construction sites. It is recommended for training similar to NPORS (National Plant Operators Registration Scheme) Excavation Marshall Banksperson training course: The NPORS Banksman training course is designed to provide participants with the knowledge and practical skills required to safely guide and direct the movement of vehicles and plant machinery and safely operate and manoeuvre excavating plant equipment on construction sites. This training equips individuals with the necessary competencies to effectively carry out the duties of a banksman in compliance with industry regulations and best practices. This course focuses on developing competency in manoeuvring excavators in various work environments, including confined spaces and challenging terrain.

A "permit to dig" must be considered and is a document issued by construction or utility companies to authorise excavation work at a specific location. It's a crucial part of ensuring safety and compliance with regulations on construction sites, particularly when digging near underground utilities or other potentially hazardous areas.

RAMS (Risk Assessment and Method Statement) produced for segregating mobile plant and pedestrians. When producing RAMS for mobile plant operations on construction sites, it's essential to consider the specific hazards associated with the use of mobile plant and outline the methods for mitigating these risks, on construction sites this is crucial for ensuring the safety of workers and visitors.





#### For general queries:

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