Lift Truck and Construction Category List

Earthmoving Machinery	
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N725	Tipping Bodies Including Demountables

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Learning Outcomes for N016
Micro Excavator 360° up to 1 Tonne

Learning Outcome	Instructor Notes
Have a basic understanding of the industry, the dangers of working in the industry and their responsibilities as a plant operator	Explain the structure of the course and the need to comply with your instructions at all times • Explain that the industry is very dangerous and that only safe working practices will be adopted throughout the course • Personal safety is not just the absence of physical injury, can be affected by noise, vibration, dust and can lead to serious illness, death, lost time, lost income, expense for the employer, etc • Explain Health & Safety at Work Act 1974, Restraining systems in accordance with risk assessment, PUWER, LOLER, CDM, CPA guidance documents, Road Traffic Act, risk assessment, method statement, Codes of Practice and other relevant legislation • Remind learners that operators have moral obligations, legal obligations and environmental obligations • Explain reporting structures, the importance of good communication on site (colleagues, management, and other workers on site)
Have a working knowledge of the manufacturer's handbook for the particular machine to be used	Explain the importance of the manufacturer's handbook and that it will be used throughout the course. Stress that it has to be used in alliance with all relevant legislation
Be able to locate and identify the major components of the machine and explain their functions	Explain the different types of components • Explain the function of the components and how they all contribute to the safety and operational integrity of the machine • Explain, power units, hydraulic systems, undercarriage, wheels / tracks, booms, dipper arms, buckets, slewing, swing frame, adjustable tracks, stability, ground pressures, ROPS, FOPS, attachments and safety systems etc
Be able to locate and identify steering, driving and braking controls and explain their functions	Explain the different controls and their functions • Explain how correct and sympathetic use of the controls can ensure safety and stability of the machine and help prolong machine life by reducing wear and tear • Refer to the manufacturer's handbook, codes of practice, decals
Identify and maintain PPE appropriate for use	Explain that PPE should include the following: Suitable safety boots, ear defenders, face / eye protection, dust mask if appropriate, suitable gloves, overalls, hard hat etc
Conduct all pre-operational checks in accordance with manufacturer's and legislative requirements	Explain the importance of pre-operational checks and legal implications of using a machine without having checked it. Go through the sequence of checking, use manufacturer's handbook, check sheet, defect reporting procedure etc

Learning Outcomes for N016
Micro Excavator 360° up to 1 Tonne

Learning Outcome	Instructor Notes
Safely mount and dismount the machine	Explain the following fully: • Correct mounting procedure, observations, use of safe hand holds • Working at height awareness, slips trips and falls • Correct dismounting procedure • Observations • Use of safe hand holds
Start and stop the machine and safely move the machine off and stop it safely	Explain and demonstrate the following: • Correct starting and stopping procedure in accordance with manufacturer's recommendations • Correct procedure for moving off and stopping and travel position
Configure the machine for travel and manoeuvre it safely across varying terrain in open and confined areas.	Explain the following fully: • Safe use of steering, driving and braking controls, travel position • Position of Drive sprockets and the reasons of importance • Good visibility, slopes / inclines, ground conditions, height restrictions, hill starts • Selection of attachments • Travel around site, possible road travel
Conduct all necessary safety checks at the work area	Explain how to carry out pre excavation safety checks, including: • Vehicles • Ground conditions • Overhead obstructions • Power lines • Buried services • Other workers
Manoeuvre the machine to the work area and correctly configure in readiness to carry out excavating tasks	Explain all safety procedures to be adopted including: • Observations to be made prior to and during manoeuvring machine • Minimise Damage • Correct machine set up • Check ground type work specification • Placement of spoil • Segregation of materials • Positioning of vehicles for loading
Carry out excavating tasks	Explain procedures to be adopted including: • Different types of excavations • Method statements, job specifications, risk assessments, permits to dig • Types of buried services and how they are identified • Reporting procedures if services are damaged • Minimum clearance • Placement or disposal of spoil • Segregation of materials • Measuring techniques and devices • Environmental issues

Learning Outcomes for N016
Micro Excavator 360° up to 1 Tonne

Learning Outcome	Instructor Notes
Load material onto transporting vehicles or into containers	Explain procedures to be adopted including: • Clear visibility, machine positioning • Communication system – signals etc • Vehicle positioning, soil segregation, productive cycles • Maintaining safety and stability of vehicle during loading • Safe positioning of vehicle driver • Load stability and position, clean area
Reinstate excavation, grade and level ground	Explain procedures to be adopted including: The importance of ground compaction and settlement, grading, spreading • Job specification • Measuring levels and centres • Method statements • Risk assessments • Attachments etc
Fit and remove attachments	Explain procedures to be adopted including: • Prepare machine and attachment • Different bucket types, Manufacturer's handbook • Other types of attachments / Manual handling issues • LOLER • Quick hitch attaching systems – manual, semi-automatic, fully automatic • Security of attachment – checks to be made • Codes of Practice and industry best practice
Carry out all end of shift and shut down procedures	Explain and demonstrate procedures to be adopted including: • Safe parking, positioning • Shut down procedures and machine security

The learning outcomes listed should not be considered in isolation and may be added to in order to accurately reflect the learner's duties and working environment

Learning Outcomes for N020 Tiltrotator System

Learning Outcome	Instructor Notes
Have a basic understanding of the industry, the dangers of working in the industry and their responsibilities as a plant operator	Explain the structure of the course and the need to comply with your instructions at all times • explain that the industry is very dangerous and that only safe working practices will be adopted throughout the course • personal and others safety is not just the absence of physical injury, can be affected by noise, vibration, dust and can lead to serious illness, death, lost time, lost income, expense for the employer etc • explain Health & Safety at Work Act 1974, PUWER Regulations, LOLER Regulations, construction (Design and Management) Regulations, Management of Health and Safety at Work Regulations, risk assessments, method statements, and other relevant legislation • discuss relating publications from CPA, HSE, OPERC, BS-EN 474-1 etc. Remind learners that operators have moral obligations, legal obligations and environmental obligations • explain reporting structures, the importance of good communication on site (colleagues, management, and other workers on site)
Have a working knowledge of the manufacturer's handbook for the tiltrotator	Explain the importance of the manufacturer's handbook and that it will be used throughout the course. Stress that it has to be used in alliance with all relevant legislation
Be able to locate and identify the major components of the tiltrotator and explain their functions	Explain the different types of components • explain the function of the components and how they all contribute to the safety and operational integrity of the tiltrotator • explain hydraulic systems, grease points, safety security indicators, ram, retaining latch mechanism, sprung latch mechanism, jaw, front pivot pin, rear pivot pin, hydraulic hoses, warning alarms, securing switches / devices / alarms etc
Identify and maintain PPE appropriate for tiltrotator use	Explain that PPE should include the following: Suitable safety boots, ear defenders, face / eye protection, dust mask if appropriate, suitable gloves, overalls, hard hat etc
Be able to explain the different types of tiltrotator	Explain the different types of tiltrotator devices: Explain in detail the various different versions on the market. Explain the tiltrotator, its suitability and different characteristics. Explain that familiarisation training and the manufacturer's instructions are essential if using a new type of tiltrotator

Learning Outcomes for N020
Tiltrotator System

Learning Outcome	Instructor Notes
Conduct all pre-operational checks in accordance with manufacturer's and legislative requirements	Explain and demonstrate the importance of pre-operational checks and legal implications of using a tiltrotator without having checked it. Go through the sequence of checking, use manufacturer's handbook, check sheet, defect reporting procedure etc
Conduct all necessary safety checks at the designated change over exclusion zone	Explain the importance of a segregated exclusion zone when changing attachments using the tiltrotator: Explain the dangers involved including other workers • pedestrians • vehicles • overhead obstructions • buried services etc
Fit and remove attachments safely and efficiently	Explain procedures to be adopted including: machine and attachment compatibility • different bucket types • manufacturer's recommendations • other types of attachments • manual handling issues • LOLER Regulations • codes of practice and industry best practice • security of attachment – checks to be made • placement of removed attachments • importance of ground conditions etc • access etc
Demonstrate and explain checks for attachment security	Explain that the operator should take full responsibility of the attachment security and not to rely on others. Demonstrate how to fully test the security of the attachment by exercising all movements vigorously and exerting pressure on the ground to ensure the attachment is fully secure. Explain that a physical and visual check of the attachment should also be completed. Explain how fitting an attachment on to a tiltrotator alters the working radius and the SWL of the machine and the possible dangers involved
Environmental considerations	Explain and demonstrate procedures to be adopted including: Clear visibility • communication system – signals etc • noise • dust • vibration • debris • fuel / oil spills • ground contamination / damage
Carry out all end of shift and shut down procedures	Explain and demonstrate procedures to be adopted including: Safe parking, positioning • shut down procedures and machine and attachment security

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Learning Outcomes for N021
Suction Excavator

Learning Outcome	Instructor Notes
Have a basic understanding of the industry, the dangers of working in the industry and their responsibilities as a suction excavator operator	Explain the structure of the course and the need to comply with your instructions at all times • Explain that the industry is very dangerous and that only safe working practices will be adopted throughout the course • Personal safety is not just the absence of physical injury, can be affected by noise, vibration, dust and can lead to serious illness, death, lost time, lost income, expense for the employer etc • Explain Health & Safety at Work Act 1974, Restraining systems in accordance with risk assessment, PUWER Regulations, LOLER Regulations, CDM, RIDDOR, PPE Regs, Manual handling Regs, Working at Height Regs Vibration at Work, HSG 47, Road Traffic Act, Safety zones, Risk assessment, Method statement • Safe Systems of Work (SSOW) • Environmental issues and other relevant legislation • Remind learners that operators have moral obligations, legal obligations and environmental obligations • Explain reporting structures, the importance of good communication on site (colleagues, management, and other workers on site)
Have a working knowledge of the manufacturer's handbook for the particular suction excavator to be used	Explain the importance of the manufacturer's handbook and that it will be used throughout the course. Stress that it has to be used in alliance with all relevant legislation
Be able to locate and identify the major components of the machine and explain their functions	Explain the different types of components • Explain the function of the components and how they all contribute to the safety and operational integrity of the machine • Explain Power units, Vacuum hoses, Telescopic boom, Pneumatic arm system, High pressure water / air system, Spoil tank, Compressor, Skip, Remote control, Filters, Separation chambers, Intake nozzle, Separation chambers, Different attachments and their uses and safety systems etc
Conduct all pre-operational checks in accordance with manufacturer's and legislative requirements	Explain the importance of pre-operational checks and legal implications of using a machine without having checked it. Go through the sequence of checking, use manufacturer's handbook, check sheet, defect reporting procedure etc
Identify and maintain PPE appropriate for suction excavator	Explain that PPE should include the following: Suitable safety boots, ear defenders, face protection, dust mask, suitable anti- vibration gloves, overalls, hard hat, coveralls etc
Explain the various types of suction excavator, their advantages and disadvantages when excavating material	Explain different variations of suction excavators e.g. Large, Mega, Medium, Midi, Mini, Micro, Static silo type, Remote controlled, Wheeled, Tracked etc. Their uses and limitations

Learning Outcomes for N021
Suction Excavator

Learning Outcome	Instructor Notes
Safely mount and dismount the machine	Explain the following fully: Correct mounting procedure, observations, use of safe hand holds • Working at height awareness, slips trips and falls • Correct dismounting procedure • Observations • Use of safe hand holds
Start and stop the engine, compressor and suction hose safely and efficiently	Explain and demonstrate the following: Establish Safe Working Zone • SSOW • Correct starting and stopping procedure in accordance with manufacturer's recommendations • Incorporating the correct procedure for carrying out an emergency stop
Be able to demonstrate how to safely and efficiently use the remote control	Explain the different remote controls and their functions • Explain how correct and sympathetic use of the controls can ensure safety and stability of the machine and help prolong machine life by reducing wear and tear • Explain the safe working zone and where the operator must stand to reduce the chance of an accident • Refer to the manufacturer's handbook, and safety decals
Configure the machine for travel and manoeuvre it safely to the work position in open and confined areas	Explain the following fully: SSOW • Traffic management • Safe use of steering, driving and braking controls, suction hose travel position • Position of the suction hose in preparation for excavating and the reasons of importance • Good visibility, ground conditions, weight restrictions, height restrictions, ground stability etc
Conduct all necessary safety checks at the work area	Explain how to carry out pre-excavation safety checks, including: Method statement • Risk assessment • SSOW • Walking the work area and identifying and removing hazards • Confined spaces, Other vehicles • Ground conditions • Overhead obstructions • Power lines • Buried services • Other workers • Check exclusion zones and signage
Manoeuvre the machine to the work area and correctly configure in readiness to carry out excavating tasks	Explain all safety procedures to be adopted including: Method statement • Risk assessment • SSOW • Observations to be made prior to and during manoeuvring machine • Minimise damage • Correct machine set up • Check ground type work specification • Segregation of materials • Positioning of vehicles • Check exclusion zones and signage
Demonstrate an emergency stop explaining all relevant safety precautions	Explain the procedures to be adopted including: • Communication and signals • Emergency stop locations • Un-blocking procedures • Manufacturer's instructions • Emergency services etc

Learning Outcomes for N021
Suction Excavator

Learning Outcome	Instructor Notes
Carry out suction excavating tasks	Explain procedures to be adopted including: The use of non-conductive nozzles or air lances in certain excavations • Different types of excavations • Method statements, Job specifications, Risk assessments, permits to dig, SSOW • Types of buried services and how they are identified • Reporting procedures if services are damaged • Minimum clearance • Placement or disposal of spoil • Segregation of materials • Measuring techniques and devices • Environmental issues
Fit and remove different attachments	Explain procedures to be adopted including: Prepare machine and attachment • Different intake nozzle types • Manufacturer's handbook • Other types of attachments / Manual handling issues • Security of attachment – checks to be made
Explain and demonstrate how to deposit material from the suction excavator safely and efficiently	Explain procedures to be adopted including: Safe tipping procedures • contaminated material • Level surface • Material segregation • Material placement etc
Environmental considerations	Explain and demonstrate procedures to be adopted including: Clear visibility • Communication system – signals etc • Noise • Dust • Vibration • Debris • Fuel / oil spills • Ground contamination / damage
Carry out all end of shift and shut down procedures	Explain and demonstrate procedures to be adopted including: Safe parking, positioning • Shut down procedures and machine security

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Learning Outcomes for N030
Machine Control Systems

Learning Outcome	Instructor Notes
Have a basic understanding of the industry, the dangers of working in the industry and their responsibilities as an operator	Explain the structure of the course and the need to comply with your instructions at all times • Explain that the Industry is very dangerous and that only safe working practices will be adopted throughout the course. Personal and others safety is not just the absence of physical injury, can be affected by noise, vibration, dust and can lead to serious illness, death, lost time, lost income, expense for the employer, etc • Explain Health & Safety at Work etc. Act 1974, PUWER Regulations, LOLER Regulations, Construction (Design and Management) Regulations, Management of Health and Safety at Work Regulations, risk assessments, method statements, and other relevant legislation • Discussing related publications from CPA, HSE, OPERC, BS-EN 474-1 etc. Remind learners that operators have moral obligations, legal obligations and environmental obligations • Explain reporting structures, the importance of effective communication on site (colleagues, management, and other workers on site)
Be able to explain the different types of Machine Control Systems	Explain the different types of Machine Control Systems: Explain in detail the various versions on the market • Explain the Machine Control System, its suitability and different characteristics • Explain that familiarisation training and the manufacturer's instructions are essential if using a new type old system
Have a working knowledge of the manufacturers handbook for the relevant machine control system	Explain the importance of the manufacturers handbook and that it will be used throughout the course. Stress that it has to be used in alliance with all relevant legislation
Conduct system self-check at start up in accordance with manufacturers requirements allowing operating modes to be activated	Explain and demonstrate the importance of pre-operational checks and legal implications of using a Machine Control System without having checked it. Go through the sequence of checking, use manufactures handbook, check sheet if applicable and defect reporting procedure etc. Ensure testing and diagnostics of the system are covered. Also ensure function test of Beacon, LED and internal / external alarms where fitted
Have a working knowledge of daily, monthly and yearly checks that must be carried out to ensure safe operation including diagnostic function tests	As discussed under learning outcomes 3 and 4 plus discussion of alterations or modifications and their effects on the system. The checking of the display, safety controller, sensors and sensor cabling including internal and external connections

Learning Outcomes for N030
Machine Control Systems

Learning Outcome	Instructor Notes
Be able to understand system messages during operation	As discussed under learning outcomes 3 and 4 plus discussion of alterations or modifications and their effects on the system. The checking of the display, safety controller, sensors and sensor cabling including internal and external connections
Be able to use the key override and be aware of the Supervisors key and its functions	Explain system functions and how to select limits menu, lifting menu and carry out testing and diagnostics
Be able to identify, locate and use the display module and relevant functions specific to that model/device operations	Explain the function of the display including multi-functionality of the buttons, purpose of icons and colours including the help screen, selection of the display machine, Day and night mode and language selection
Be able to use the Top menu, Sub menu's and tool / product selection menus where applicable	Explain system functions and how to select limits menu, lifting menu and carry out testing and diagnostics
Demonstrate and explain how the Machine Control System works in relation to; Operation within the SWL, Approach to overload, Stability indication overload, Hydraulic limit indication and Stability control overload dependent on the features of model fitted to the trainee's machine	Explain how safety functions are achieved through real time monitoring of some or all the machines moving parts and actively determining the safety of the current operation where appropriate limits have been set • Ensure operators are aware of the differences between an RCI and an RCC and how they impact on the operation of the machine
Demonstrate and explain how the Machine Control System works in relation to; Operation within height limits, Radius limits, Low limits, Slew limits, Virtual wall, Twin virtual wall and Multipoint wall restrictions	Explain how safety functions are achieved through real time monitoring of some or all the machines moving parts and actively determining the safety of the current operation where appropriate limits have been set. Ensure operators know the combination of these functions and how they can be identified on the display including when the function is not available
Carry out all end of shift and shut down procedures	Explain and demonstrate procedures to be adopted including: safe parking and positioning, shut down procedures and machine and attachment security

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Learning Outcomes for N116 Dragline

Learning Outcome	Instructor Notes
Have a basic understanding of the industry, the dangers of working in the industry and their responsibilities as an operator	Explain the structure of the course and the need to comply with your instructions at all times • Explain that the industry is very dangerous and that only safe working practices will be adopted throughout the course • Personal safety is not just the absence of physical injury, can be affected by noise, vibration and can lead to lost time, lost income, expense for the employer etc • Explain Health & Safety at Work Act 1974, PUWER Regulations, MHSWR, COSHH, Noise at Work, Work at Height Regulations, CDM Regulations, Vibration at Work Regulations, risk assessments, method statements, and other relevant legislation • Remind learners that operators have moral obligations, legal obligations and environmental obligations • Explain reporting structures, the importance of good communication on site (colleagues, management, and other workers on site)
Have a working knowledge of the manufacturer's handbook for the particular machine to be used	Explain the importance of the manufacturer's handbook and that it will be used throughout the course. Stress that it has to be used in alliance with all relevant legislation
Be able to locate and identify the major components of the machine and explain their functions	Explain the different types of components • Explain the function of the components and how they all contribute to the safety and operational integrity of the machine • Ground suitability • Explain power units • Hydraulic systems • Hoisting gear / ropes • Safety locking devices and pins • Guards • Rams • Jibs / buckets • Boom • Drag chain / cable • Fairlead • Hoist cable • Dump cable • Suspension ropes • Undercarriage • Tracks • Slewing arrangements • ROPS / FOPS • Emergency stops and other safety systems etc
Be able to locate and identify key controls and explain their functions	Explain the different controls and their functions • Explain how correct and sympathetic use of the controls can ensure safety of the machine and help prolong machine life by reducing wear and tear • Refer to the manufacturer's handbook, codes of practice, decals etc
Conduct all pre-operational and running checks in accordance with manufacturer's and legislative requirements	Explain the importance of pre-operational and running checks and legal implications of using a machine without having checked it. Go through the sequence of checking. Maintenance procedures in line with manufacturer's handbook, check sheet, defect reporting procedure, relevant documentation including the inspection certificate / certificate of conformity

Learning Outcomes for N116 Dragline

Learning Outcome	Instructor Notes
Identify and maintain PPE appropriate for dragline use	Explain that PPE should include the following: Impervious safety boots, ear defenders, face / eye protection, dust mask if appropriate, impervious gloves, hard hat overalls etc
Conduct all necessary safety checks at the work area and set for excavating duties	Explain and demonstrate the following fully: Walk the site and highlight or remove any hazards • Underground hazards • Overhead cables • Ground conditions • Confirm that the condition of the site is safe to work in • Machine positioning • Equipment / size of bucket / type • Spoil placing / segregation • Drag clevis position • Placement of loading vehicle • Report any hazards that cannot be removed • Set out warning signs and barriers • Exclusion zones • Working positions • Eliminate reversing tasks
Prepare the dragline for travel / use and operate machinery safely and efficiently	Explain and demonstrate all safety procedures to be adopted including: • Correct starting procedure • Mount and dismount the machine • Travel controls and position • Visibility • Identify and report any defects • Correct loading procedure • Correct procedure for adjusting / changing different attachments • Follow all safe working procedures • Set up exclusion zone around dragline • Waste Disposal arrangements • Check electrical safety • Overhead / underground services • Identify maximum outreach and stability • Radio protocol and signals
Travel over varying types of ground – uneven surfaces, inclines, rough ground	Explain and demonstrate procedures to be adopted including: • Identification of hazards • Ground conditions • Working area • Routes / direction of travel • Slopes / inclines • Traction / adhesion • Environmental considerations / minimise impact
Manoeuvre in restricted areas	Explain and demonstrate all safety procedures to be adopted including: • Negotiating tight / restricted areas • Obscured vision / blind spots • Noise / fumes • Height restrictions • Ground and vicinity protection

Learning Outcomes for N116 Dragline

Learning Outcome	Instructor Notes
Excavation of various types of ground and placement of material into hoppers and vehicles	Explain and demonstrate procedures to be adopted including: Machine positioning • Vehicle stability • Segregation / disposal of spoil • Productive stages of operation • Measuring levels / centres • Signals / communication • Loading hoppers • Overspill kept too minimum • Cleanliness of loading area
Various types of material and rope adjustment	Explain and demonstrate procedures to be adopted including: • Bucket types • Manual handling • Preparation and security • Clevis positions in relation to best practice and manufacturers recommendations
Environmental considerations	Explain and demonstrate procedures to be adopted including: Designated washout areas • Clear visibility • Communication system – signals etc. • Noise • Vibration • Ground contamination • Ground damage • Fuel spills • Fumes • Flying debris
Storage – Loading - unloading and transport of dragline and attachments	Explain and demonstrate the following: • Allow power driven implements to slow down • Check condition of hoses – attachments etc. • Correct / secure storage of attachments • Compatibility • Refer to manufacturer's handbook • Security
Carry out all end of work and shut down procedures	Explain and demonstrate procedures to be adopted including: • Shut down procedures and machine security • Clean machine thoroughly after use to avoid corrosion, facilitate maintenance, prevent personal contamination • Inspect machine for signs of wear and damage

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Learning Outcomes for N139
Forward Tipping Mini Dumper up to 1 Tonne

Learning Outcome	Instructor Notes
Have a basic understanding of the industry, the dangers of working in the industry and their responsibilities as an operator	Explain the structure of the course and the need to comply with your instructions at all times • Explain that the industry is very dangerous and that only safe working practices will be adopted throughout the course • Personal safety is not just the absence of physical injury, can be affected by noise, vibration and can lead to lost time, lost income, expense for the employer, etc • Explain Health & Safety at Work Act 1974, Restraining systems in accordance with risk assessment, PUWER Regulations, MHSAWA Regulations, CDM Regulations, Vibration at Work Regulations, HSG150, risk assessment, method statements, codes of practice and other relevant legislation • CPA Guidance • Remind learners that operators have moral obligations, legal obligations and environmental obligations • Explain reporting structures, the importance of good communication on site (colleagues, management, and other workers on site)
Have a working knowledge of the manufacturer's handbook for the particular machine to be used	Explain the importance of the manufacturer's handbook and that it will be used throughout the course • Stress that it has to be used in alliance with all relevant legislation • Explain the dangers and stability issues travelling on inclines, raising the skip and travelling over rough terrain. Explain the dangers and stability issues relating to different types of forward tipping mini dumpers
Be able to locate and identify the major components of the machine and explain their functions	Explain the different types of components • Explain the function of the components and how they all contribute to the safety and operational integrity of the machine • Explain power units, transmissions, batteries, safety locking devices, fuel tank, guards, types of skips, carrying capacities, steering, braking, tracks, tyres, safety systems etc • Restraining Systems (Safety Critical)
Be able to locate and identify key controls and explain their functions	Explain the different controls and their functions • Explain how correct and sympathetic use of the controls can ensure safety of the machine and help prolong machine life by reducing wear and tear • Refer to the manufacturer's handbook, codes of practice, decals etc
Conduct all pre-operational and running checks in accordance with manufacturer's and legislative requirements	Explain the importance of pre-operational and running checks and legal implications of using a machine without having checked it • Go through the sequence of checking, use manufacturer's handbook, check sheet, defect reporting procedure etc
Identify and maintain PPE appropriate for the forward tipping mini dumper	Explain that PPE should include the following: Suitable safety boots, ear defenders, face / eye protection, dust mask, suitable gloves, overalls, hard hat, protective clothing etc

Learning Outcomes for N139
Forward Tipping Mini Dumper up to 1 Tonne

Learning Outcome	Instructor Notes
Conduct all necessary safety checks at the work area	Explain and demonstrate the following fully: Walk the site and highlight or remove any hazards • Edge protection appropriate size, ground condition etc • Overhead cables, access and egress routes • Turning areas • Confirm that the condition of the site is safe to work in • Report any hazards that cannot be removed • Set out warning signs and barriers, exclusion zones to warn members of the public and to exclude animals
Prepare the forward tipping mini dumper for use and operate machinery safely and efficiently	Explain and demonstrate all safety procedures to be adopted including: Correct starting procedure • Correct operating procedure on slopes / inclines • Confined spaces • Identify and report any defects • Correct safe tipping procedure • Centre of gravity • Steering • Correct procedure for adjusting / changing different attachments • Follow all safe working procedures • Visibility, densities of materials • Check electrical safety types of, overhead / underground services • Types of loading vehicles • Machine suitability / capacity • Tipping on slopes • Side tipping • High tipping • Material jams • Projecting loads • Stability with raised skip etc
Attachments set correctly ready for operation	Explain and demonstrate procedures to be adopted including: Connecting procedures securing process • Implement, mini dumper, compatibility • Implement stability and security • Guarding • Starting / stopping procedures • Hazards associated with all implements • Remove and secure implements
Environmental considerations	Explain and demonstrate procedures to be adopted including: Clear visibility • Communication system – signals etc • Noise • Vibration • Ground contamination • Ground damage • Fuel spills fumes • Flying debris
Storage and transport of forward tipping mini dumper implements / attachments	Explain and demonstrate the following: Allow power driven implements to slow down • Check condition of hydraulic hoses – attachments etc • Correct / secure storage of attachments • Refer to manufacturer's handbook
Carry out all end of work and shut down procedures	Explain and demonstrate procedures to be adopted including: Shut down procedures and machine security • Clean machine thoroughly after use to avoid corrosion • Facilitate maintenance, prevent personal contamination • Inspect machine for signs of wear and damage

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Learning Outcomes for N201 Excavator 180°

Learning Outcome	Instructor Notes
Have a basic understanding of the industry, the dangers of working in the industry and their responsibilities as an operator	Explain the structure of the course and the need to comply with your instructions at all times • Explain that the industry is very dangerous and that only safe working practices will be adopted throughout the course. Personal safety is not just the absence of physical injury, can be affected by noise, vibration and can lead to lost time, lost income, expense for the employer, etc • Explain Health & Safety at Work Act 1974, Restraining systems in accordance with risk assessment, MHSWR, PUWER Regulations, LOLER Regulations, COSHH, Vibration at Work Regulations, CDM Regulations, HSG85, HSG144, HSG47, risk assessments, method statements, codes of practice and other relevant legislation • Remind learners that operators have moral obligations, legal obligations and environmental obligations • Explain reporting structures, the importance of good communication on site (colleagues, management, and other workers on site)
Have a working knowledge of the manufacturer's handbook for the particular machine to be used	Explain the importance of the manufacturer's handbook and that it will be used throughout the course • Stress that it has to be used in alliance with all relevant legislation
Be able to locate and identify the major components of the machine and explain their functions	Explain the different types of components • Explain the function of the components and how they all contribute to the safety and operational integrity of the machine • Explain power units, fuel tank, guards, transmissions, hydraulic systems, stability, ground pressure, boom, dipper, buckets, chassis, steering, brakes, ROPS, FOPS, safety systems etc
Be able to locate and identify key controls and explain their functions	Explain the different controls and their functions • Explain how correct and sympathetic use of the controls can ensure safety of the machine and help prolong machine life by reducing wear and tear • The importance of emergency stopping procedures. Refer to the manufacturer's handbook, codes of practice, decals etc
Conduct all pre-operational checks in accordance with manufacturer's and legislative requirements	Explain the importance of pre-operational checks and legal implications of using a machine without having checked it • Go through the sequence of checking, use manufacturer's handbook, check sheet, defect reporting etc
Identify and maintain PPE appropriate for excavator 180° use	Explain that PPE should include the following: Suitable safety boots, ear defenders, face / eye protection, dust mask if appropriate, suitable gloves, hard hat, overalls etc
Prepare the excavator 180° for use	Explain and demonstrate all safety procedures to be adopted including: Correct starting procedure • Mount and dismount the machine • Correct operating procedure on slopes / inclines, confined areas • Identify and report any defects • Correct procedure for adjusting / changing different attachments • Follow all safe working procedures, travel position, visibility • Adhere to Road Traffic Act where applicable • Check electrical safety, overhead / underground services • Integrity of the machine, hill starts, traction aids etc

Learning Outcomes for N201 Excavator 180°

Learning Outcome	Instructor Notes
Conduct all necessary safety checks at the work area	Explain and demonstrate the following fully: Walk the site and highlight or remove any hazards • Confirm that the condition of the site is safe to work in • Importance of ground conditions • Report any hazards that cannot be removed • Set out warning signs and barriers, exclusion zones to warn members of the public and to exclude animals
Operate machinery safely and efficiently	Explain and demonstrate all safety procedures to be adopted including: Correct starting procedure • Mount and dismount the machine • Correct operating procedure on slopes / inclines and confined spaces • Identify and report any defects • Types of ground, spoil placement, machine positioning, levels etc • Soil segregation, productive cycles, diverse types of excavations • Vehicle placement for loading • Use of the multipurpose front buckets, quick hitch systems, lifting equipment, lift planning, lifting accessories, signals, load swings and load stability / security
Environmental considerations	Explain and demonstrate procedures to be adopted including: Clear visibility • Communication system – signals etc • Noise • Dust • Vibration • Ground contamination • Ground damage • Fuel spill • Oil spills • Fumes • Flying debris
Storage and transport of Excavator 180° attachments	Explain and demonstrate the following: Allow power driven implements to slow down • Check condition of hydraulic hoses – attachments etc • Correct / secure storage of attachments • Types of transporter and compatibility to machine • Refer to manufacturer's handbook
Explain loading / unloading procedures for machine transportation	Explain and demonstrate the following: Placement on transporter, security and position • Types of transporter and compatibility to machine • Refer to manufacturer's handbook
Carry out all end of work and shut down procedures	Explain and demonstrate procedures to be adopted including: Shut down procedures and machine security • Parking procedure • Clean machine thoroughly after use to avoid corrosion, facilitate maintenance, prevent personal contamination • Inspect machine for signs of wear and damage

The learning outcomes listed should not be considered in isolation and may be added to in order to accurately reflect the learner's duties and working environment

Learning Outcomes for N202
Excavator 360°

Learning Outcome	Instructor Notes
Have a basic understanding of the industry, the dangers of working in the industry and their responsibilities as a plant operator	Explain the structure of the course and the need to comply with your instructions at all times • Explain that the industry is very dangerous and that only safe working practices will be adopted throughout the course • Personal safety is not just the absence of physical injury, can be affected by noise, vibration, dust and can lead to serious illness, death, lost time, lost income, expense for the employer, etc • Explain Health & Safety at Work Act 1974, Restraining systems in accordance with risk assessment, PUWER Regs, LOLER Regs, CDM Regs, Road Traffic Act, risk assessment, method statement, Codes of Practice and other relevant legislation • CPA Guidance Documents • Remind learners that operators have moral obligations, legal obligations and environmental obligations • Explain reporting structures, the importance of good communication on site (colleagues, management, and other workers on site)
Have a working knowledge of the manufacturer's handbook for the particular machine to be used	Explain the importance of the manufacturer's handbook and that it will be used throughout the course. Stress that it has to be used in alliance with all relevant legislation
Be able to locate and identify the major components of the machine and explain their functions	Explain the different types of components • Explain the function of the components and how they all contribute to the safety and operational integrity of the machine • Explain, power units, hydraulic systems, undercarriage, wheels / tracks, booms, dipper arms, buckets, slewing, stability, ground pressures, ROPS, FOPS, attachments and safety systems etc
Be able to locate and identify steering, driving and braking controls and explain their functions	Explain the different controls and their functions • Explain how correct and sympathetic use of the controls can ensure safety and stability of the machine and help prolong machine life by reducing wear and tear • Refer to the manufacturer's handbook, codes of practice, decals
Identify and maintain PPE appropriate for use	Explain that PPE should include the following: Suitable safety boots, ear defenders, face / eye protection, dust mask if appropriate, suitable gloves, overalls, hard hat etc
Conduct all pre-operational checks in accordance with manufacturer's and legislative requirements	Explain the importance of pre-operational checks and legal implications of using a machine without having checked it. Go through the sequence of checking, use manufacturer's handbook, check sheet, defect reporting procedure etc

Learning Outcomes for N202 Excavator 360°

Learning Outcome	Instructor Notes
Safely mount and dismount the machine	Explain the following fully: Correct mounting procedure, observations, use of safe hand holds • Working at height awareness, slips trips and falls • Correct dismounting procedure • Observations • Use of safe hand holds
Start and stop the machine and safely move the machine off and stop it safely	Explain and demonstrate the following: Correct starting and stopping procedure in accordance with manufacturer's recommendations • Correct procedure for moving off and stopping and travel position
Configure the machine for travel and manoeuvre it safely across varying terrain in open and confined areas	Explain the following fully: Safe use of steering, driving and braking controls, travel position • Position of drive sprockets and the reasons of importance • Good visibility, slopes / inclines, ground conditions, height restrictions, hill starts • Selection of attachments • Travel around site, possible road travel
Conduct all necessary safety checks at the work area	Explain how to carry out pre excavation safety checks, including: Vehicles • Ground conditions • Overhead obstructions • Power lines • Buried services • Other workers
Manoeuvre the machine to the work area and correctly configure in readiness to carry out excavating tasks	Explain all safety procedures to be adopted including: Observations to be made prior to and during manoeuvring machine • Minimise damage • Correct machine set up • Check ground type work specification • Placement of spoil • Segregation of materials • Positioning of vehicles for loading
Carry out excavating tasks	Explain procedures to be adopted including: Different types of excavations • Method statements, job specifications, risk assessments, permits to dig • Types of buried services and how they are identified • Reporting procedures if services are damaged • Minimum clearance • Placement or disposal of spoil • Segregation of materials • Measuring techniques and devices • Environmental issues

Learning Outcomes for N202 Excavator 360°

Learning Outcome	Instructor Notes
Load material onto transporting vehicles or into containers	Explain procedures to be adopted including: Clear visibility, machine positioning • Communication system – signals etc • Vehicle positioning, soil segregation, productive cycles • Maintaining safety and stability of vehicle during loading • Safe positioning of vehicle driver • Load stability and position, clean area
Reinstate excavation, grade and level ground	Explain procedures to be adopted including: The importance of ground compaction and settlement, grading, spreading • Job specification • Measuring levels and centres • Method statements, risk assessments • Attachments etc
Fit and remove attachments	Explain procedures to be adopted including: Prepare machine and attachment • Different bucket types, Manufacturer's handbook • Other types of attachments / Manual handling issues • LOLER • Quick hitch attaching systems – manual, semi-automatic, fully automatic • Security of attachment – checks to be made • Codes of practice and industry best practice
Carry out all end of shift and shut down procedures	Explain and demonstrate procedures to be adopted including: Safe parking and positioning • Shut down procedures and machine security

The learning outcomes listed should not be considered in isolation and may be added to in order to accurately reflect the learner's duties and working environment

Learning Outcomes for N203 Trencher

Learning Outcome	Instructor Notes
Have a basic understanding of the industry, the dangers of working in the industry and their responsibilities as a plant operator	Explain the structure of the course and the need to comply with your instructions at all times • Explain that the industry is very dangerous and that only safe working practices will be adopted throughout the course • Personal safety is not just the absence of physical injury, can be affected by noise, vibration and can lead to lost time, lost income, expense for the employer, etc • Explain Health & Safety at Work Act 1974, Restraining systems in accordance with risk assessment, PUWER Regulations, LOLER Regulations, risk assessments, method statements, codes of practice and other relevant legislation • Remind learners that operators have moral obligations, legal obligations and environmental obligations • Explain reporting structures, the importance of good communication on site (colleagues, management, and other workers on site)
Have a working knowledge of the manufacturer's handbook for the particular machine to be used	Explain the importance of the manufacturer's handbook and that it will be used throughout the course. Stress that it has to be used in alliance with all relevant legislation
Be able to locate and identify the major components of the machine and explain their functions	Explain the different types of components • Explain the function of the components and how they all contribute to the safety and operational integrity of the machine • Explain power units, hydraulic systems, undercarriage, chassis, transmissions, wheels / tracks, rotor housing, steering, rotor drive systems, cutting units, conveyor systems, ROPS, FOPS, ground pressure, stability, spoil discharging, attachments and all safety systems etc
Be able to locate and identify steering, driving and braking controls and explain their functions	Explain the different controls and their functions • Explain how correct and sympathetic use of the controls can ensure safety and stability of the machine and help prolong machine life by reducing wear and tear. Refer to the manufacturer's handbook, codes of practice and decals
Conduct all pre-operational and running checks in accordance with manufacturer's and legislative requirements	Explain the importance of pre-operational and running checks and legal implications of using a machine without having checked it. Go through the sequence of checking. Use manufacturer's handbook, check sheet, defect reporting procedure etc
Safely mount and dismount the machine	Explain the following fully: Correct mounting procedure, observations, use of safe hand holds • Correct dismounting procedure, observations, use of safe hand holds
Configure the machine for travel and manoeuvre it safely across varying terrain in open and confined areas	Explain the following fully: Safe use of steering, driving and braking controls, travel position • Good visibility, hill starts, slopes, inclines • Selection of attachments, stability, ground pressure • Travel around site and road travel

Learning Outcomes for N203 Trencher

Learning Outcome	Instructor Notes
Conduct all necessary safety checks at the work area	Explain how to carry out pre trencher safety checks, including: Vehicles • Ground conditions, travel routes / directions, access and egress • Vision, soil types, soil stability • Overhead obstructions, minimum distances • Power lines • Buried services • Other workers
Identify and maintain PPE appropriate for trencher use	Explain that PPE should include the following: Suitable safety boots, ear defenders, face / eye protection, dust mask if appropriate, suitable gloves, overalls, hard hat etc
Manoeuvre the machine to the work area and correctly configure in readiness to carry out trenching tasks	Explain all safety procedures to be adopted including: Observations to be made prior to and during manoeuvring machine • Correct machine set up, check ground type, work specification, placement of material etc
Carry out trencher tasks	Explain procedures to be adopted including: Different types of trenching machine / methods, job specifications, method statements, risk assessments, permits • Types of buried services and how they are identified • Reporting procedures if services are damaged • Minimum clearance • Placement or disposal of material, segregation of materials • Measuring techniques and devices • Machine positioning / levelling • Cutting speeds, lengths of cut • Clean loading area, minimum overspill and environmental issues
Load material onto transporting vehicles or into containers	Explain procedures to be adopted including: Clear visibility • Communication system – signals etc • Vehicle positioning, minimum overspill, clean loading area • Maintaining safety and stability of vehicle during loading • Safe positioning of vehicle driver
Demonstrate knowledge and understanding of loading and unloading procedures for machine transportation	Explain procedures to be adopted including: Different types of transport vehicle • Positioning of load on vehicle • Load security • Use of banksman • Environmental conditions
Environmental considerations	Explain and demonstrate procedures to be adopted including: Clear visibility • Communication system – signals etc • Noise • Fumes • Dust • Flying debris • Vibration • Disposal of material • Ground contamination • Fuel / oil spills
Carry out all end of shift and shut down procedures	Explain and demonstrate procedures to be adopted including: Safe parking • Shut down procedures and machine security

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Learning Outcomes for N204
Forward Tipping Dumper

Learning Outcome	Instructor Notes
Have a basic understanding of the industry, the dangers of working in the industry and their responsibilities as an operator	Explain the structure of the course and the need to comply with your instructions at all times • Explain that the industry is very dangerous and that only safe working practices will be adopted throughout the course • Personal safety is not just the absence of physical injury, can be affected by noise, vibration and can lead to lost time, lost income, expense for the employer, etc • Explain Health & Safety at Work Act 1974, Restraining systems in accordance with risk assessment, PUWER Regulations, MHSAWA, CDM Regulations, Vibration at Work Regulations, Road Traffic Act, HSG150, BSEN 13510 – ROPS, restraining systems in accordance with risk assessment, risk assessments, method statements, codes of practice and other relevant legislation • Remind learners that operators have moral obligations, legal obligations and environmental obligations • Explain reporting structures, the importance of good communication on site (colleagues, management, and other workers on site)
Have a working knowledge of the manufacturer's handbook for the particular machine to be used	Explain the importance of the manufacturer's handbook and that it will be used throughout the course • Stress that it has to be used in alliance with all relevant legislation • Explain travelling on inclines, stability with raised skips, excessive speed
Be able to locate and identify the major components of the machine and explain their functions	Explain the different types of components • Explain the function of the components and how they all contribute to the safety and operational integrity of the machine • Explain power units, transmissions, safety locking devices, fuel tank, guards, types of skips, carrying capacities, steering, braking, oscillating chassis, safety systems etc. • Restraining Systems (Safety Critical)
Be able to locate and identify key controls and explain their functions	Explain the different controls and their functions • Explain how correct and sympathetic use of the controls can ensure safety of the machine and help prolong machine life by reducing wear and tear • Refer to the manufacturer's handbook, codes of practice, decals etc
Identify and maintain PPE appropriate for the dumper	Explain that PPE should include the following: Suitable safety boots, ear defenders, face / eye protection, dust mask, Fall prevention systems, suitable gloves, overalls, hard hat, protective clothing etc
Conduct all pre-operational and running checks in accordance with manufacturer's and legislative requirements	Explain the importance of pre-operational and running checks and legal implications of using a machine without having checked it • Go through the sequence of checking, use manufacturer's handbook, check sheet, defect reporting procedure etc

Learning Outcomes for N204
Forward Tipping Dumper

Learning Outcome	Instructor Notes
Prepare the forward tipping dumper for use and operate machinery safely and efficiently	Explain and demonstrate all safety procedures to be adopted including: • Correct starting procedure • Mount and dismount the machine • Correct operating procedure on slopes / inclines • Confined spaces • Identify and report any defects • Correct tipping procedure • Side tipping • Centre of gravity • Articulation steering • Correct procedure for adjusting / changing different attachments • Follow all safe working procedures • visibility, densities of materials • Adhere to Road Traffic Act / site - road travel • Check electrical safety / types of, overhead / underground services • Types of loading vehicles • machine suitability / capacity • Tipping procedures moving and static • tipping on slopes • side tipping • high tipping • material jams • projecting loads • Spoil heap security • stability with raised skip etc
Conduct all necessary safety checks at the work area	Explain and demonstrate the following fully: • Walk the site and highlight or remove any hazards • Edge protection appropriate size, ground condition etc • Overhead cables, access and egress routes • turning areas • Confirm that the condition of the site is safe to work in • Report any hazards that cannot be removed • Set out warning signs and barriers, exclusion zones to warn members of the public and to exclude animals
Attach and set trailed / mounted attachment ready for work	Explain and demonstrate procedures to be adopted including: Connecting procedures • Securing process • Implement / forward tipping dumper compatibility • Hitch controls • Implement stability and security • Tipping procedure • Guarding • Starting / stopping procedures • Hazards associated with all implements • Remove and secure implements
Environmental considerations	Explain and demonstrate procedures to be adopted including: • Clear visibility • Communication system – signals etc • Noise • Vibration • Ground contamination • Ground damage • Fuel spills Fumes • Flying debris
Storage and transport of forward tipping dumper attachments	Explain and demonstrate the following: Allow power driven implements to slow down • Check condition of hydraulic hoses – attachments etc • Correct / secure storage of attachments • Refer to manufacturer's handbook
Explain loading / unloading procedures for machine transportation	Explain and demonstrate the following: • Placement on transporter, security and position • Types of transporter and compatibility to machine • Refer to manufacturer's handbook
Carry out all end of work and shut down procedures	Explain and demonstrate procedures to be adopted including: • Shut down procedures and machine security • Clean machine thoroughly after use to avoid corrosion • facilitate maintenance, prevent personal contamination • Inspect machine for signs of wear and damage

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Learning Outcomes for N205
Rear Tipping Dumper

Learning Outcome	Instructor Notes
Have a basic understanding of the industry, the dangers of working in the industry and their responsibilities as an operator	Explain the structure of the course and the need to comply with your instructions at all times • Explain that the industry is very dangerous and that only safe working practices will be adopted throughout the course • Personal safety is not just the absence of physical injury, can be affected by noise, vibration and can lead to lost time, lost income, expense for the employer, etc • Explain Health & Safety at Work Act 1974, Restraining systems in accordance with risk assessment, PUWER Regulations, LOLER Regulations, MHSAW Regulations, CDM Regulations, Vibration at Work Regulations, Road Traffic Act, HSG150, and ROPS – FOPS, Edge Protection, Quarries Regulations, risk assessments, method statements, codes of practice and other relevant legislation • Remind learners that operators have moral obligations, legal obligations and environmental obligations • Explain reporting structures, the importance of good communication on site (colleagues, management, and other workers on site)
Have a working knowledge of the manufacturer's handbook for the particular machine to be used	Explain the importance of the manufacturer's handbook and that it will be used throughout the course • Stress that it has to be used in alliance with all relevant legislation • Explain load / tare sheets and decals etc
Be able to locate and identify the major components of the machine and explain their functions	Explain the different types of components • Explain the function of the components and how they all contribute to the safety and operational integrity of the machine • Explain power units, Safety locking devices, fuel tank, guards, transmissions, chassis, steering, braking, carrying capacities, types of bodies, hydraulic systems, stability, ground pressure and safety systems etc
Be able to locate and identify key controls and explain their functions	Explain the different controls and their functions • Explain how correct and sympathetic use of the controls can ensure safety of the machine and help prolong machine life by reducing wear and tear. Refer to the manufacturer's handbook, codes of practice, decals etc
Conduct all pre-operational and running checks in accordance with manufacturer's and legislative requirements	Explain the importance of pre-operational and running checks and legal implications of using a machine without having checked it • Go through the sequence of checking, use manufacturer's handbook, check sheet, decals, defect reporting procedure etc
Identify and maintain PPE appropriate for rear tipping dumper use	Explain that PPE should include the following: Suitable safety boots, ear defenders, face / eye protection, dust mask if appropriate, suitable gloves, overalls, hard hat etc

Learning Outcomes for N205
Rear Tipping Dumper

Learning Outcome	Instructor Notes
Conduct all necessary safety checks at the work area	Explain and demonstrate the following fully: Walk the site and highlight or remove any hazards • Edge protection, stop blocks and markers etc • Overhead cables, confined areas • Ground condition – tipping edge cracks, turning areas • Confirm that the condition of the site is safe to work, travel routes • Report any hazards that cannot be removed • Set out warning signs and barriers, exclusion zones to warn members of the public and to exclude animals
Prepare the rear tipping dumpers for use and operate machinery safely and efficiently	Explain and demonstrate all safety procedures to be adopted including: Correct starting procedure • Mount and dismount the machine • Correct operating procedure on slopes / inclines, different ground conditions, confined areas, limited visibility etc • Identify and report any defects • Correct tipping procedure, speed limits, machine suitability / capacity • Correct procedure for adjusting / changing different attachments • Follow all safe working procedures, material jams, haul routes etc • Adhere to Road Traffic Act and road travel and traction aids • Discharging techniques, types of materials / segregation and carrying capacities • Haul route procedures, tipping on slopes, stability with raised bodies • Check electrical safety, overhead / underground services
Environmental considerations	Explain and demonstrate procedures to be adopted including: Clear visibility • Communication system – signals etc • Noise • Dust • Vibration • Ground contamination • Ground damage • Fuel spill • oil spills • Fumes • Flying debris
Demonstrate knowledge and understanding of loading and unloading procedures for machine transportation	Explain / demonstrate the following: Correct / secure position • All pressure released • Cleanliness and security • Refer to manufacturer's handbook
Carry out all end of work and shut down procedures	Explain and demonstrate procedures to be adopted including: Shut down procedures and machine security • Clean machine thoroughly after use to avoid corrosion, facilitate maintenance, prevent personal contamination • Inspect machine for signs of wear and damage

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Learning Outcomes for N206
Loader Compressor

Learning Outcome	Instructor Notes
Have a basic understanding of the industry, the dangers of working in the industry and their responsibilities as an operator	Explain the structure of the course and the need to comply with your instructions at all times • Explain that the industry is very dangerous and that only safe working practices will be adopted throughout the course • Personal safety is not just the absence of physical injury, can be affected by noise, vibration and can lead to lost time, lost income, expense for the employer, etc • Explain Health & Safety at Work Act 1974, Restraining systems in accordance with risk assessment, PUWER Regulations, LOLER Regulations, MHSAWA CDM Regulations , Vibration at Work Regulations, Road Traffic Act, HSG150, ROPS – FOPS, risk assessments, method statements, codes of practice and other relevant legislation • Remind learners that operators have moral obligations, legal obligations and environmental obligations • Explain reporting structures, the importance of good communication on site (colleagues, management, and other workers on site)
Have a working knowledge of the manufacturer's handbook for the particular machine to be used	Explain the importance of the manufacturer's handbook and that it will be used throughout the course. Stress that it has to be used in alliance with all relevant legislation
Be able to locate and identify the major components of the machine and explain their functions	Explain the different types of components • Explain the function of the components and how they all contribute to the safety and operational integrity of the machine • Explain power units, safety locking devices, steering, brakes, transmission, hydraulic systems, fuel tank, guards, buckets, Compressor types, hoses, attachments, ROPS, FOPS, stability, ground pressures and safety systems etc
Be able to locate and identify key controls and explain their functions	Explain the different controls and their functions • Explain how correct and sympathetic use of the controls can ensure safety of the machine and help prolong machine life by reducing wear and tear. Refer to the manufacturer's handbook, codes of practice, decals etc
Conduct all pre-operational and running checks in accordance with manufacturer's and legislative requirements	Explain the importance of pre-operational and running checks and legal implications of using a machine without having checked it. Go through the sequence of checking use manufacturer's handbook, check sheet, defect reporting procedure etc
Identify and maintain PPE appropriate for loader compressor use	Explain that PPE should include the following Suitable safety boots, ear defenders, face / eye protection, dust mask if appropriate, suitable gloves, overalls, hard hat etc

Learning Outcomes for N206
Loader Compressor

Learning Outcome	Instructor Notes
Conduct all necessary safety checks at the work area	Explain and demonstrate the following fully: Walk the site and highlight or remove any hazards • Confirm cable detection scan has been performed • Underground Hazards, travel routes, height restrictions • Overhead cables, confined spaces • Ground condition • Confirm that the condition of the site is safe to work in • Report any hazards that cannot be removed • Set out warning signs and barriers, exclusion zones to warn members of the public and to exclude animals
Prepare the loader compressor for use and operate machinery safely and efficiently	Explain and demonstrate all safety procedures to be adopted including: Correct starting procedure • Mount and dismount the machine • Correct operating procedure on slopes / inclines, hill starts • Identify and report any defects • Correct vehicle loading procedure, spoil placement / segregation, bucket type • Correct digging procedure HSG 47, tool / compressor compatibility • Check for correct air pressure, Hose lengths, types and securing methods • Correct procedure for adjusting / changing different attachments • Follow all safe working procedures • Adhere to Road Traffic Act where applicable • Check electrical safety, overhead / underground services • Ramp integrity • Explain de-pressuring and tool de- coupling methods
Environmental considerations	Explain and demonstrate procedures to be adopted including: Clear visibility • Communication system – signals etc • Noise • Dust • Vibration • Ground contamination • Ground damage • Fuel / oil spills • Fumes • Flying debris
Storage and transport of loader compressor attachments	Explain and demonstrate the following: Allow power driven implements to slow down • Check condition of air hoses – attachments etc • Drain air tanks • Correct / secure storage of hoses and attachments • Refer to manufacturer's handbook
Demonstrate knowledge and understanding of loading and unloading procedures for machine transportation.	Explain procedures to be adopted including: Different types of transport vehicle • Positioning of load on vehicle • Load security • Use of banksman • Environmental conditions
Carry out all end of work and shut down procedures	Explain and demonstrate procedures to be adopted including: Shut down procedures and machine security • Clean machine thoroughly after use to avoid corrosion, facilitate maintenance, prevent personal contamination • Inspect machine for signs of wear and damage

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Learning Outcomes for N209
Loading Shovel

Learning Outcome	Instructor Notes
Have a basic understanding of the industry, the dangers of working in the industry and their responsibilities as an operator	Explain the structure of the course and the need to comply with your instructions at all times • Explain that the industry is very dangerous and that only safe working practices will be adopted throughout the course • Personal safety is not just the absence of physical injury, can be affected by noise, vibration and can lead to lost time, lost income, expense for the employer, etc • Explain Health & Safety at Work Act 1974, Restraining systems in accordance with risk assessment, PUWER Regulations, LOLER Regulations, MHSAWA, CDM Regulations, Vibration at Work Regulations, Road Traffic Act, HSG150, ROPS – FOPS, Edge Protection, Quarries Regulations, risk assessments, method statements, codes of practice and other relevant legislation • Remind learners that operators have moral obligations, legal obligations and environmental obligations • Explain reporting structures, the importance of good communication on site (colleagues, management, and other workers on site)
Have a working knowledge of the manufacturer's handbook for the particular machine to be used	Explain the importance of the manufacturer's handbook and that it will be used throughout the course. Stress that it has to be used in alliance with all relevant legislation
Be able to locate and identify the major components of the machine and explain their functions	Explain the different types of components • Explain the function of the components and how they all contribute to the safety and operational integrity of the machine • Explain power units, hydraulic systems, transmissions, oscillating chassis, steering, brakes, safety locking devices, fuel tank, guards, buckets, ROPS, FOPS, attachments, stability, ground pressure and safety systems etc
Be able to locate and identify key controls and explain their functions	Explain the different controls and their functions • Explain how correct and sympathetic use of the controls can ensure safety of the machine and help prolong machine life by reducing wear and tear. Refer to the manufacturer's handbook, codes of practice, decals etc
Conduct all pre-operational and running checks in accordance with manufacturer's and legislative requirements	Explain the importance of pre-operational and running checks and legal implications of using a machine without having checked it. Go through the sequence of checking, use manufacturer's handbook, check sheet, defect reporting procedure etc
Identify and maintain PPE appropriate for loading shovel use	Explain that PPE should include the following: Suitable safety boots, ear defenders, face / eye protection, dust mask if appropriate, suitable gloves, overalls hard hat etc

Learning Outcomes for N209
Loading Shovel

Learning Outcome	Instructor Notes
Conduct all necessary safety checks at the work area	Explain and demonstrate the following fully: Walk the site and highlight or remove any hazards • Edge protection appropriate size • Overhead cables, confined spaces • Ground condition – tipping edge cracks • Confirm that the condition of the site is safe to work in • Report any hazards that cannot be removed • Set out warning signs and barriers, exclusion zones to warn members of the public and to exclude animals
Prepare the loading shovel for use and operate machinery safely and efficiently	Explain and demonstrate all safety procedures to be adopted including: Correct starting procedure • Mount and dismount the machine • Correct operating procedure on slopes / inclines, load integrity, hill starts, travel routes etc • Identify and report any defects, types of services • Face extraction methods, productive cycles, face / stockpile integrity, angles of repose • Correct loading procedure and traction aids • Correct procedure for adjusting / changing different attachments • Follow all safe working procedures, spoil segregation / placing • Adhere to Road Traffic Act where applicable • Check electrical safety, overhead / underground services • Ramp integrity, consolidation and incline • Material densities, ground condition, stability with raised attachments, quick hitch systems, visibility when reversing • Load documentation, different attachments • Centre of gravity
Environmental considerations	Explain and demonstrate procedures to be adopted including: Clear visibility • Communication system – signals etc • Noise • Vibration • Ground contamination • Ground damage • Fuel / oil spills • Fumes • Flying debris • Dust
Storage and transport of loading shovel attachments	Explain and demonstrate the following: Allow power driven implements to slow down • Check condition of hydraulic hoses – attachments etc • Correct / secure storage of attachments • Refer to manufacturer's handbook
Demonstrate knowledge and understanding of loading and unloading procedures for machine transportation	Explain and demonstrate the following: Different types of transport vehicle • Positioning of load on vehicle • Load security • Use of banksman • Environmental conditions
Carry out all end of work and shut down procedures	Explain and demonstrate procedures to be adopted including: Shut down procedures and machine security • Clean machine thoroughly after use to avoid corrosion, facilitate maintenance, prevent personal contamination • Inspect machine for signs of wear and damage

The learning outcomes listed should not be considered in isolation and may be added to in order to accurately reflect the learner's duties and working environment

Learning Outcomes for N212
Skid Steer Loader

Learning Outcome	Instructor Notes
Have a basic understanding of the industry, the dangers of working in the industry and their responsibilities as an operator	Explain the structure of the course and the need to comply with your instructions at all times • Explain that the industry is very dangerous and that only safe working practices will be adopted throughout the course • Personal safety is not just the absence of physical injury, can be affected by noise, vibration and can lead to lost time, lost income, expense for the employer, etc • Explain Health & Safety at Work Act 1974, Restraining systems in accordance with risk assessment, PUWER Regulations, LOLER Regulations, MHSAWA, CDM Regulations, Vibration at Work Regulations Road Traffic Act, HSG150, ROPS – FOPS, Edge Protection, risk assessments, method statements, codes of practice and other relevant legislation • Remind learners that operators have moral obligations, legal obligations and environmental obligations • Explain reporting structures, the importance of good communication on site (colleagues, management, and other workers on site)
Have a working knowledge of the manufacturer's handbook for the particular machine to be used	Explain the importance of the manufacturer's handbook and that it will be used throughout the course. Stress that it has to be used in alliance with all relevant legislation
Be able to locate and identify the major components of the machine and explain their functions	Explain the different types of components • Explain the function of the components and how they all contribute to the safety and operational integrity of the machine • Explain power units, hydraulic systems, transmissions, chassis, steering, braking, buckets and attachments, Safety locking devices, fuel tank, guards, stability, ground pressure, ROPS, FOPS, and safety systems etc
Be able to locate and identify key controls and explain their functions	Explain the different controls and their functions • Explain how correct and sympathetic use of the controls can ensure safety of the machine and help prolong machine life by reducing wear and tear. Refer to the manufacturer's handbook, codes of practice, decals etc
Conduct all pre-operational and running checks in accordance with manufacturer's and legislative requirements	Explain the importance of pre-operational and running checks and legal implications of using a machine without having checked it. Go through the sequence of checking. Use manufacturer's handbook, check sheet, defect reporting procedure etc
Identify and maintain PPE appropriate for skid steer loader use	Explain that PPE should include the following: Suitable safety boots, ear defenders, face / eye protection, dust mask if appropriate, suitable gloves, overalls, hard hat, etc

Learning Outcomes for N212
Skid Steer Loader

Learning Outcome	Instructor Notes
Conduct all necessary safety checks at the work area	Explain and demonstrate the following fully: • Walk the site and highlight or remove any hazards • Edge protection appropriate size • Overhead cables, confined spaces • Ground stability / condition, travel routes, inclines and ramps • Confirm that the condition of the site is safe to work in • Report any hazards that cannot be removed • Set out warning signs and barriers, exclusion zones to warn members of the public and to exclude animals
Prepare the skid steer loader for use and operate machinery safely and efficiently	Explain and demonstrate all safety procedures to be adopted including: • Correct starting procedure • Mount and dismount the machine • Correct operating procedure on slopes / inclines, restarting on hills • Identify and report any defects • Correct loading procedure and visibility • Correct procedure for adjusting / changing different attachments • Follow all safe working procedures, soil segregation / placement • Adhere to road traffic act where applicable • Check electrical safety, overhead / underground services, ground stability • Ramp integrity / consolidation / incline • Angle of repose, face / stockpile integrity • Productive cycles of production, machine positioning, material densities • Machine stability and Centre of gravity when loading
Environmental considerations	Explain and demonstrate procedures to be adopted including: • Clear visibility • Communication system – signals etc • Noise • Dust • Vibration • Ground contamination • Ground damage • Fumes • Fuel / oil spills • Flying debris
Storage and transport of skid steer loader attachments	Explain and demonstrate the following: • Allow power driven implements to slow down • Check condition of hydraulic hoses – attachments etc • Correct / secure storage of attachments • Refer to manufacturer's handbook
Demonstrate knowledge and understanding of loading and unloading procedures for machine transportation	Explain and demonstrate the following: • Different types of transport vehicle • Positioning of load on vehicle • Load security • Use of banksman • Environmental conditions
Carry out all end of work and shut down procedures	Explain and demonstrate procedures to be adopted including: • Shut down procedures and machine security • Clean machine thoroughly after use to avoid corrosion, facilitate maintenance, prevent personal contamination • Inspect machine for signs of wear and damage

The learning outcomes listed should not be considered in isolation and may be added to in order to accurately reflect the learner's duties and working environment

Learning Outcomes for N215 Dozer

Learning Outcome	Instructor Notes
Have a basic understanding of the industry, the dangers of working in the industry and their responsibilities as an operator	Explain the structure of the course and the need to comply with your instructions at all times • Explain that the industry is very dangerous and that only safe working practices will be adopted throughout the course • Personal safety is not just the absence of physical injury, can be affected by noise, vibration and can lead to lost time, lost income, expense for the employer, etc • Explain Health & Safety at Work Act 1974, Restraining systems in accordance with risk assessment, PUWER Regulations, LOLER Regulations, MHSAWA, CDM Regulations, Vibration at Work Regulations, HSG150, ROPS – FOPS, Edge Protection, Quarries Regulations, risk assessments, method statements, codes of practice and other relevant legislation • Remind learners that operators have moral obligations, legal obligations and environmental obligations • Explain reporting structures, the importance of good communication on site (colleagues, management, and other workers on site)
Have a working knowledge of the manufacturer's handbook for the particular machine to be used	Explain the importance of the manufacturer's handbook and that it will be used throughout the course. Stress that it has to be used in alliance with all relevant legislation
Be able to locate and identify the major components of the machine and explain their functions	Explain the different types of components • Explain the function of the components and how they all contribute to the safety and operational integrity of the machine • Explain power units, transmissions, chassis, hydraulic systems, blades, safety locking devices, fuel tank, guards, stability, ground pressure, ROPS, FOPS and safety systems etc
Be able to locate and identify key controls and explain their functions	Explain the different controls and their functions • Explain how correct and sympathetic use of the controls can ensure safety of the machine and help prolong machine life by reducing wear and tear. Refer to the manufacturer's handbook, codes of practice, decals etc
Conduct all pre-operational and running checks in accordance with manufacturer's and legislative requirements	Explain the importance of pre-operational and running checks and legal implications of using a machine without having checked it. Go through the sequence of checking, use manufacturer's handbook, check sheet, defect reporting procedure etc
Identify and maintain PPE appropriate for dozer use	Explain that PPE should include the following: Suitable safety boots, ear defenders, face / eye protection, dust mask if appropriate, suitable gloves, overalls, hard hat etc

Learning Outcomes for N215 Dozer

Learning Outcome	Instructor Notes
Conduct all necessary safety checks at the work area	Explain and demonstrate the following fully: Walk the site and highlight or remove any hazards • Edge protection appropriate size • Overhead cables • Visibility, confined spaces • Ground condition – tipping edge cracks • Confirm that the condition of the site is safe to work in • Report any hazards that cannot be removed • Set out warning signs and barriers, exclusion zones to warn members of the public and to exclude animals
Prepare the dozer for use and operate machinery safely and efficiently	Explain and demonstrate all safety procedures to be adopted including: Correct starting procedure • Mount and dismount the machine • Blade type / size, types of ground, working speeds • Spoil segregation / placement • Steering controls, travel position, blade angles • Side-cast, windrow and spreading techniques • Correct operating procedure on slopes / inclines • Different attachments and productive cycles of operation • Identify and report any defects • Correct procedure for adjusting / changing different attachments • Follow all safe working procedures, types of excavations • Check electrical safety, overhead / underground services • Ramp integrity, stability, consolidation and inclines, stockpiles • Visibility reversing
Attach and set trailed, mounted attachments ready for work	Explain and demonstrate procedures to be adopted including: Connecting procedures • Securing process • Implement / dozer compatibility • Hitch / winch controls • Implement stability and security • Tipping / dumping procedure • Guarding • Starting / stopping procedures • Hazards associated with all implements • Remove and secure implements
Environmental considerations	Explain and demonstrate procedures to be adopted including: Clear visibility • Communication system – signals etc • Noise • dust • Vibration • Ground contamination • Ground damage • Fuel spills • Fumes • Flying debris
Storage and transport of dozer attachments	Explain / Demonstrate the following: Allow power driven implements to slow down • Check condition of hydraulic hoses – attachments etc • Correct / secure storage of attachments • Refer to manufacturer's handbook

Learning Outcomes for N215 Dozer

Learning Outcome	Instructor Notes
Explain loading / unloading procedures for transportation	Explain / demonstrate the following: Correct / secure position • All pressure released • Cleanliness and security • Refer to manufacturer's handbook
Carry out all end of work and shut down procedures	Explain and demonstrate procedures to be adopted including: Shut down procedures and machine security • Clean machine thoroughly after use to avoid corrosion, facilitate maintenance, prevent personal contamination • Inspect machine for signs of wear and damage

The learning outcomes listed should not be considered in isolation and may be added to in order to accurately reflect the learner's duties and working environment

Learning Outcomes for N223 Scraper

Learning Outcome	Instructor Notes
Have a basic understanding of the industry, the dangers of working in the industry and their responsibilities as an operator	Explain the structure of the course and the need to comply with your instructions at all times • Explain that the industry is very dangerous and that only safe working practices will be adopted throughout the course • Personal safety is not just the absence of physical injury, can be affected by noise, vibration and can lead to lost time, lost income, expense for the employer, etc • Explain Health & Safety at Work Act 1974, Restraining systems in accordance with risk assessment, PUWER Regulations, LOLER Regulations, risk assessments, method statements, codes of practice and other relevant legislation • Remind learners that operators have moral obligations, legal obligations and environmental obligations • Explain reporting structures, the importance of good communication on site (colleagues, management, and other workers on site)
Have a working knowledge of the manufacturer's handbook for the particular machine to be used	Explain the importance of the manufacturer's handbook and that it will be used throughout the course. Stress that it has to be used in alliance with all relevant legislation
Be able to locate and identify the major components of the machine and explain their functions	Explain the different types of components • Explain the function of the components and how they all contribute to the safety and operational integrity of the machine • Explain power units, transmissions, steering, carrying capacities box, cushion hitch, pushing block, apron, types of bowls, ejector, wheels, hydraulic system, fuel tank, guards, ROPS, FOPS, stability, ground pressures and safety systems etc
Be able to locate and identify key controls and explain their functions	Explain the different controls and their functions • Explain how correct and sympathetic use of the controls can ensure safety of the machine and help prolong machine life by reducing wear and tear. Refer to the manufacturer's handbook, codes of practice, decals etc
Conduct all pre-operational checks in accordance with manufacturer's and legislative requirements	Explain the importance of pre-operational checks and legal implications of using a machine without having checked it. Go through the sequence of checking. Use manufacturer's handbook, check sheet, defect reporting procedure etc
Identify and maintain PPE appropriate for scraper use	Explain that PPE should include the following: Suitable safety boots, ear defenders, face / eye protection, dust mask if appropriate, suitable gloves, overalls, hard hat etc

Learning Outcomes for N223 Scraper

Learning Outcome	Instructor Notes
Prepare scraper for use	Explain and demonstrate all safety procedures to be adopted including: Correct starting procedure, hill starts • Correct compacting procedure on slopes / inclines • Follow all safe working procedures – direction of compaction etc • Check electrical safety, overhead cables / underground cables • Check fuel level • Bowl position, visibility, driving position
Conduct all necessary safety checks at the work area	Explain and demonstrate the following fully: Walk the site and highlight or remove any hazards • Confirm that the condition of the site is safe to work in • Report any hazards that cannot be removed, confined areas • Set out warning signs • Ground conditions • Check electrical safety, overhead / underground services
Operate machinery safely and efficiently	Explain and demonstrate all safety procedures to be adopted including: Correct starting procedure for single / twin engine Scrapers • Mount and dismount the machine / driver position • Correct operating procedure on slopes / inclines • Identify and report any defects • Correct procedure for adjusting dig and spread levels • Access and egress routes to the dig / fill area • Speed limits, traction, cycles of operation and feathering • Confined spaces, techniques and methods of operation • Discharging techniques on hills, pusher techniques, pusher types • Tandem pulling / pushing, material jams, signalling • Dig and spread to given dimensions, measuring equipment • Follow all safe working procedures on slopes / inclines
Environmental considerations	Explain and demonstrate procedures to be adopted including: Clear visibility • Communication system – signals etc • Noise • Vibration • Dust • Ground contamination • Fuel spills • Oil spills • Fumes
Demonstrate knowledge of loading and unloading procedures for machine transportation	Explain and demonstrate the following: Different types of transport vehicle • Positioning of load on vehicle • Load security • Use of banksman • Environmental conditions
Carry out all end of shift and shut down procedures	Explain and demonstrate procedures to be adopted including: Shut down procedures and machine security • Lower all equipment • Clean machine thoroughly after use to avoid corrosion, facilitate maintenance, prevent personal contamination • Inspect machine for signs of wear and damage

The learning outcomes listed should not be considered in isolation and may be added to, in order to accurately reflect the learner's duties and working environment.

Learning Outcomes for N224
Landfill Compactor

Learning Outcome	Instructor Notes
Have a basic understanding of the industry, the dangers of working in the industry and their responsibilities as an operator	Explain the structure of the course and the need to comply with your instructions at all times • Explain that the industry is very dangerous and that only safe working practices will be adopted throughout the course • Personal safety is not just the absence of physical injury, can be affected by noise, vibration and can lead to lost time, lost income, expense for the employer, etc • Explain Health & Safety at Work Act 1974, Restraining systems in accordance with risk assessment, PUWER Regulations, LOLER Regulations, risk assessments, method statements, codes of practice and other relevant legislation • Remind learners that operators have moral obligations, legal obligations and environmental obligations • Explain reporting structures, the importance of good communication on site (colleagues, management, and other workers on site)
Have a working knowledge of the manufacturer's handbook for the particular machine to be used	Explain the importance of the manufacturer's handbook and that it will be used throughout the course. Stress that it has to be used in alliance with all relevant legislation
Be able to locate and identify the major components of the machine and explain their functions	Explain the different types of components • Explain the function of the components and how they all contribute to the safety and operational integrity of the machine • Explain power units, steering, blades, drums, wheels, hydraulic system, chassis, wheels, transmissions, ROPS, FOPS, fuel tank, guards, stability, ground pressure, filtration systems and safety systems etc
Be able to locate and identify key controls and explain their functions	Explain the different controls and their functions • Explain how correct and sympathetic use of the controls can ensure safety of the machine and help prolong machine life by reducing wear and tear. Refer to the manufacturer's handbook, codes of practice, decals etc
Conduct all pre-operational checks in accordance with manufacturer's and legislative requirements	Explain the importance of pre-operational checks and legal implications of using a machine without having checked it. Go through the sequence of checking, use manufacturer's handbook, check sheet, defect reporting procedure etc
Identify and maintain PPE appropriate for machine use	Explain that PPE should include the following: Suitable safety boots, ear defenders, face / eye protection, dust mask if appropriate, suitable gloves, overalls, hard hat etc
Prepare landfill compactor for use	Explain and demonstrate all safety procedures to be adopted including: Correct starting procedure, hill starts • Correct compacting procedure on slopes / inclines and traction • Follow all safe working procedures – direction of compaction / travel etc • Check electrical safety, overhead cables / underground cables • Check fuel level

Learning Outcomes for N224
Landfill Compactor

Learning Outcome	Instructor Notes
Conduct all necessary safety checks at the work area	Explain and demonstrate the following fully: Walk the site and highlight or remove any hazards • Confirm that the condition of the site is safe to work in, visibility • Report any hazards that cannot be removed • Set out warning signs
Operate machinery safely and efficiently	Explain and demonstrate all safety procedures to be adopted including: Correct starting procedure • Mount and dismount the machine • Correct operating / compacting procedure on slopes / inclines • Identify and report any defects • Correct procedure for spreading cover levels, air voids • Follow all safe working procedures, levels, confined areas • Material segregation, layering and compacting techniques • Soil placing / segregation, compaction passes, cycles of operation
Environmental considerations	Explain and demonstrate procedures to be adopted including: Clear visibility • Communication system – signals etc • Noise • Dust • Vibration • Ground contamination, leptospirosis, gasses etc, Fuel / oil spills • Fumes
Demonstrate knowledge of loading and unloading procedures for machine transportation	Explain and demonstrate the following: • Different types of transport vehicle • Positioning of load on vehicle • Load security • Use of banksman • Environmental conditions
Carry out all end of shift and shut down procedures	Explain and demonstrate procedures to be adopted including: Shut down procedures and machine security • Clean machine thoroughly after use to avoid corrosion, facilitate maintenance, prevent personal contamination • Inspect machine for signs of wear and damage

The learning outcomes listed should not be considered in isolation and may be added to, in order to accurately reflect the learner's duties and working environment.

Learning Outcomes for N240 Grader

Learning Outcome	Instructor Notes
Have a basic understanding of the industry, the dangers of working in the industry and their responsibilities as an operator	Explain the structure of the course and the need to comply with your instructions at all times • Explain that the industry is very dangerous and that only safe working practices will be adopted throughout the course • Personal safety is not just the absence of physical injury, can be affected by noise, vibration and can lead to lost time, lost income, expense for the employer, etc • Explain Health & Safety at Work Act 1974, Restraining systems in accordance with risk assessment, PUWER Regs, LOLER Regs, Road Traffic Act, risk assessment, method statement, codes of practice and other relevant legislation. Remind learners that operators have moral obligations, legal obligations and environmental obligations • Explain reporting structures, the importance of good communication on site (colleagues, management, and other workers on site)
Have a working knowledge of the manufacturer's handbook for the particular machine to be used	Explain the importance of the manufacturer's handbook and that it will be used throughout the course. Stress that it has to be used in alliance with all relevant legislation
Be able to locate and identify the major components of the machine and explain their functions	Explain the different types of components • Explain the function of the components and how they all contribute to the safety and operational integrity of the machine • Explain power units, transmission, chassis, steering systems, the circle, mould board, centre shift, scarifier, ROPS, FOPS, articulation hitch wheels, hydraulic system, fuel tank, guards, stability, ground pressures and safety systems etc
Be able to locate and identify key controls and explain their functions	Explain the different controls and their functions • Explain how correct and sympathetic use of the controls can ensure safety of the machine and help prolong machine life by reducing wear and tear. Refer to the manufacturer's handbook, codes of practice, decals etc
Conduct all pre-operational checks in accordance with manufacturer's and legislative requirements	Explain the importance of pre-operational checks and legal implications of using a machine without having checked it. Go through the sequence of checking. Use manufacturer's handbook, check sheet, defect reporting procedure etc
Identify and maintain PPE appropriate for grader use	Explain that PPE should include the following: Suitable safety boots, ear defenders, face / eye protection, dust mask if appropriate, suitable gloves, overalls, hard hat etc

Learning Outcomes for N240 Grader

Learning Outcome	Instructor Notes
Prepare grader for use and operate machinery safely and efficiently	Explain and demonstrate all safety procedures to be adopted including: Correct starting procedure, hill starts • Correct travelling / grading procedure on slopes / inclines • Steering, braking, ground conditions etc • Follow safe working procedures – direction of traffic, cambers etc • Check electrical safety, overhead cables / underground cables • Check fuel level and visibility
Conduct all necessary safety checks at the work area	Explain and demonstrate the following fully: Walk the site and highlight or remove any hazards • Confirm that the condition of the site is safe to work in • Report any hazards that cannot be removed • Set out warning signs • Height restrictions, confined spaces • Travel routes, ground conditions
Operate machinery safely and efficiently	Explain and demonstrate all safety procedures to be adopted including: Mount and dismount the machine • Correct operating procedure on slopes / inclines • Identify and report any defects • Correct procedure for adjusting spread levels and feathering • Types of ground, machine positioning, soil placing / segregation • Mouldboard angles, controls, side casting, windrow techniques • Grade to required specification, batters, ditches etc • Follow all safe working speed and procedures • Check electrical safety, overhead / underground services • Cleaning work area, productive cycles
Environmental considerations	Explain and demonstrate procedures to be adopted including: Clear visibility • Communication system – signals etc • Noise • Dust • Vibration • Ground contamination • Fuel spills • Fumes
Demonstrate knowledge of loading and unloading procedures for machine transportation	Explain and demonstrate the following: Different types of transport vehicle • Positioning of load on vehicle • Load security • Use of banksman • Environmental conditions
Carry out all end of shift and shut down procedures	Explain and demonstrate procedures to be adopted including: Shut down procedures and machine security • Lower all equipment • Clean machine thoroughly after use to avoid corrosion, facilitate maintenance, prevent personal contamination • Inspect machine for signs of wear and damage

The learning outcomes listed should not be considered in isolation and may be added to, in order to accurately reflect the learner's duties and working environment

Learning Outcomes for N241
Pay Welder

Learning Outcome	Instructor Notes
Have a basic understanding of the industry, the dangers of working in the industry and their responsibilities as a plant operator	Explain the structure of the course and the need to comply with your instructions at all times • Explain that the industry is very dangerous and that only safe working practices will be adopted throughout the course • Personal safety is not just the absence of physical injury, can be affected by noise, vibration, dust and can lead to serious illness, death, lost time, lost income, expense for the employer, etc • Explain Health & Safety at Work Act 1974, PUWER Regulations, LOLER Regulations, ROPS, FOPS, Risk assessments, method statements, codes of practice and other relevant legislation • Remind learners that operators have moral obligations, legal obligations and environmental obligations • Explain reporting structures, the importance of good communication on site (colleagues, management, and other workers on site)
Have a working knowledge of the manufacturer's handbook for the particular machine to be used	Explain the importance of the manufacturer's handbook and that it will be used throughout the course. Stress that it has to be used in alliance with all relevant legislation
Be able to locate and identify the major components of the machine and explain their functions	Explain the different types of components • Explain the function of the components and how they all contribute to the safety and operational integrity of the machine • Explain power units, safety locking devices, steering, braking, transmissions, hydraulic systems, chassis, fuel tank, guards, safety storage, telescopic / luffing booms, generating capacity, air compressor, gas cylinders, ropes, hook attachments, safety systems etc
Be able to locate and identify key controls and explain their functions	Explain the different controls and their functions • Explain how correct and sympathetic use of the controls can ensure safety and stability of the machine and help prolong machine life by reducing wear and tear. Refer to the manufacturer's handbook, codes of practice, decals
Conduct all pre-operational checks in accordance with manufacturer's and legislative requirements	Explain the importance of pre-operational checks and legal implications of using a machine without having checked it • Go through the sequence of checking. Use manufacturer's handbook, check sheet, defect reporting procedure etc
Safely mount and dismount the machine	Explain the following fully: Correct mounting procedure, observations, use of safe hand holds • Working at height awareness, slips trips and falls • Correct dismounting procedure, observations, use of safe hand holds
Identify and maintain PPE appropriate for machine use	Explain that PPE should include the following: Suitable safety boots, ear defenders, face / eye protection, dust mask if appropriate, suitable gloves, hard hats, overalls etc

Learning Outcomes for N241
Pay Welder

Learning Outcome	Instructor Notes
Configure the machine for travel and manoeuvre it safely across varying terrain in open and confined areas	Explain the following fully: • Safe use of steering, driving and braking controls, travel position • Position of drive sprockets / wheels, boom / jib placement • Good visibility • Selection of attachments • Travel around site, possible road travel
Conduct all necessary safety checks at the work area	Explain how to carry out safety checks, including: Vehicles • Ground conditions, open trenches, inclines, slopes etc • Proximity, overhead obstructions • Buried services, ground pressures, stability • Other workers
Manoeuvre the machine to the work area and correctly configure in readiness to carry out welding tasks	Explain all safety procedures to be adopted including: Observations to be made prior to and during manoeuvring machine • Minimise damage • Correct machine set up • Check ground type, work specification • Placement of spoil, segregation of materials • Positioning of vehicles for lifting / supporting
Fit and remove lifting attachments	Explain procedures to be adopted including: Prepare machine • Different lifting equipment • Other types of attachments / Manual handling issues • LOLER Regulations, Manufacturer's handbook • Lifting attachments, different lifting techniques • Security of attachment / load – checks to be made • Codes of practice and industry best practice
Carry out lifting operations	Explain procedures to be adopted including: Legislation and regulations – LOLER Regulations • BS 7121, lift plans, signals, trial lifts • Supervision of lift, falls of rope • Configuration of machine • Weather conditions • Thorough examination certificates
Environmental considerations	Explain and demonstrate procedures to be adopted including: Clear visibility • Communication system – signals etc • Noise • Vibration • Ground contamination • Ground damage • Fuel / oil spills • Fumes • Flying debris
Demonstrate knowledge and understanding of loading and unloading procedures for machine transportation	Explain procedures to be adopted including: Different types of transport vehicle • Positioning of vehicle on vehicle • Load security • Use of Banksman • Environmental conditions
Carry out all end of shift and shut down procedures	Explain and demonstrate procedures to be adopted including: Safe parking • Shut down procedures and machine security

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Learning Outcomes for N601
Agricultural Tractor

Learning Outcome	Instructor Notes
Have a basic understanding of the industry, the dangers of working in the industry and their responsibilities as an operator	Explain the structure of the course and the need to comply with your instructions at all times • Explain that the industry is very dangerous and that only safe working practices will be adopted throughout the course • Personal safety is not just the absence of physical injury, can be affected by noise, vibration and can lead to lost time, lost income, expense for the employer etc • Explain Health & Safety at Work Act 1974, Restraining systems in accordance with risk assessment, PUWER Regulations, LOLER Regulations, Vibration at Work Regulations, Road Traffic Act, Risk Assessment, method statement, codes of practice and other relevant legislation • Remind learners that operators have moral obligations, legal obligations and environmental obligations • Explain reporting structures, the importance of good communication on site (colleagues, management, and other workers on site)
Have a working knowledge of the manufacturer's handbook for the particular machine to be used	Explain the importance of the manufacturer's handbook and that it will be used throughout the course. Stress that it has to be used in alliance with all relevant legislation
Be able to locate and identify the major components of the machine and explain their functions	Explain the different types of component • Explain the function of the components and how they all contribute to the safety and operational integrity of the machine • Explain power units, hydraulic systems, transmissions, PTO, chassis, steering, braking, fuel tank, guards, ROPS, FOPS, stability, ground pressure, attachments and safety systems etc
Be able to locate and identify key controls and explain their functions	Explain the different controls and their functions • Explain how correct and sympathetic use of the controls can ensure safety of the machine and help prolong machine life by reducing wear and tear. Refer to the manufacturer's handbook, codes of practice decals etc
Conduct all pre-operational and running checks in accordance with manufacturer's and legislative requirements	Explain the importance of pre-operational and running checks and legal implications of using a machine without having checked it. Go through the sequence of checking, use manufacturer's handbook, check sheet, defect reporting procedure etc
Identify and maintain PPE appropriate for agricultural tractor use	Explain that PPE should include the following: Suitable safety boots, ear defenders, face / eye protection, dust mask if appropriate, suitable gloves, overalls, hard hat etc
Conduct all necessary safety checks at the work area	Explain and demonstrate the following fully: • Walk the site and highlight or remove any hazards • Confirm that the condition of the site is safe to work in • Height restrictions, confined spaces, visibility • Report any hazards that cannot be removed • Direction of travel, routes, slopes, inclines, hill starts • Set out warning signs and barriers, exclusion zones to warn members of the public and to exclude animals

Learning Outcomes for N601 Agricultural Tractor

Learning Outcome	Instructor Notes
Prepare the agricultural tractor for use and operate machinery safely and efficiently	Explain and demonstrate all safety procedures to be adopted including: • Correct starting procedure • Mount and dismount the machine • Correct operating procedure on slopes / inclines • Identify and report any defects • Correct procedure for adjusting / changing different attachments • Follow all safe working procedures • Adhere to road traffic act where applicable • Check electrical safety, overhead / underground services • Check fluid levels • Load and unload positions, spoil location / segregation • Working procedures and efficiency
Attach and set trailed, mounted and power take off drives ready for work	Explain and demonstrate procedures to be adopted including: • Connecting procedures • Securing process • Implement / tractor compatibility • Hitch controls, Lift arm controls • Implement stability and security • Levelling / securing procedures • Hitch types 3 point systems • Draw bar systems • PTO controls, speeds, compatibility • Guarding • Starting / stopping procedures • Hazards associated with all implements • Remove and secure implements
Environmental considerations	Explain and demonstrate procedures to be adopted including: • Clear visibility • Communication system – signals etc • Noise • Dust • Vibration • Ground contamination • Ground damage • Fuel spills • Fumes • Flying debris
Storage and transport of attachments	Explain and demonstrate the following: • Allow power driven implements to slow down • Check condition of hydraulic hoses, 3-point linkages – attachments etc • Correct / secure storage of attachments • Refer to manufacturer's handbook • attachment protection, stability and security
Demonstrate knowledge and understanding of loading and unloading procedures for machine transportation	Explain / demonstrate the following: • Correct / secure position • Banksman • All hydraulic pressure released • Cleanliness and security • Refer to manufacturer's handbook
Carry out all end of work and shut down procedures.	Explain and demonstrate procedures to be adopted including: • Shut down procedures and machine security • Clean machine thoroughly after use to avoid corrosion, facilitate maintenance, prevent personal contamination • Inspect machine for signs of wear and damage

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Learning Outcomes for N726
Quick Hitch Awareness

Learning Outcome	Instructor Notes
Have a basic understanding of the industry, the dangers of working in the industry and their responsibilities as a plant operator	Explain the structure of the course and the need to comply with your instructions at all times • Explain that the industry is very dangerous and that only safe working practices will be adopted throughout the course • Personal and others safety is not just the absence of physical injury, can be affected by noise, vibration, dust and can lead to serious illness, death, lost time, lost income, expense for the employer etc • Explain Health & Safety at Work Act 1974, PUWER Regs, LOLER Regs, Construction (Design and Management) Regulations, Management of Health and Safety at Work Regulations, risk assessments, method statements, and other relevant legislation • Discuss relating publications from CPA, HSE, OPERC, BS-EN 474-1 etc. Remind learners that operators have moral obligations, legal obligations and environmental obligations • Explain reporting structures, the importance of good communication on site (colleagues, management, and other workers on site)
Have a working knowledge of the manufacturer's handbook for the particular Quick Hitch to be used	Explain the importance of the manufacturer's handbook and that it will be used throughout the course. Stress that it has to be used in alliance with all relevant legislation
Be able to locate and identify the major components of the Quick Hitch and explain their functions	Explain the different types of components • Explain the function of the components and how they all contribute to the safety and operational integrity of the Quick Hitch • Explain hydraulic systems, Grease points, Safety pin, Lynch pin, Ram, retaining latch mechanism, Sprung latch mechanism, Jaw, Front pivot pin, Rear pivot pin, Hydraulic hoses, Warning alarms, Securing switches / devices etc
Identify and maintain PPE appropriate for Quick Hitch use	Explain that PPE should include the following: Suitable safety boots, Ear defenders, Face / eye protection, Dust mask if appropriate, Suitable gloves, Overalls, Hard hat etc
Be able to explain the different types of Quick Hitch devices	Explain the different types of Quick Hitch devices: Explain in detail the pin system: - Manual, Semi-automatic and fully automatic types of Quick Hitch, and the various different versions on the market. Explain the Dedicated System, its suitability and different characteristics. Explain that familiarisation training and the manufacturer's instructions are essential if using a new type of QH

Learning Outcomes for N726
Quick Hitch Awareness

Learning Outcome	Instructor Notes
Conduct all pre-operational checks in accordance with manufacturer's and legislative requirements	Explain and demonstrate the importance of pre-operational checks and legal implications of using a Quick Hitch without having checked it. Go through the sequence of checking, use manufacturer's handbook, check sheet, defect reporting procedure etc
Conduct all necessary safety checks at the designated change over exclusion zone	Explain the importance of a segregated exclusion zone when changing attachments using the quick hitch: Explain the dangers involved including other workers • Pedestrians • vehicles • Overhead obstructions • Buried services etc
Fit and remove attachments safely and efficiently	Explain procedures to be adopted including: Machine and attachment compatibility • Different bucket types • Manufacturer's recommendations • Other types of attachments • Manual handling issues • LOLER Regs Security of attachment – checks to be made • Codes of Practice and industry best practice • Placement of removed attachments • Importance of ground conditions etc • Access etc
Demonstrate and explain checks for attachment security	Explain that the operator should take full responsibility of the attachment security and not to rely on others. Demonstrate how to fully test the security of the attachment by exercising all movements vigorously and exerting pressure on the ground to ensure the attachment is fully secure. Explain that a physical and visual check of the attachment should also be completed. Explain how fitting an attachment on to a QH alters the working radius and the SWL of the machine and the possible dangers involved
Carry out all end of shift and shut down procedures	Explain and demonstrate procedures to be adopted including: • Safe parking, positioning • Shut down procedures and machine and attachment security

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Learning Outcomes for N027
Excavation Marshall - Banksperson

Learning Outcome	Instructor Notes
Have a basic understanding of the industry, the dangers of working in the industry and their responsibilities as an excavation marshall banksperson	Explain the structure of the course and the need to comply with your instructions at all times • Explain that the industry is very dangerous and that only safe working practices will be adopted throughout the course • Personal safety is not just the absence of physical injury, can be affected by noise, vibration and can lead to lost time, lost income, expense for the employer etc • Explain Health & Safety at Work Act 1974, MHASAW, LOLER, PUWER, HSG 47, CDM Regulations, Confined Spaces Regulations (second addition), Risk Assessment, Method Statements and other relevant legislation • Remind learners that excavation marshall / banksperson, have moral obligations, legal obligations and environmental obligations • Explain reporting structures, the importance of good communication on site (colleagues, management, and other workers on site)
Have knowledge of the equipment to be used and be conversant with method statements – risk assessments – permits to work	Explain the importance of being conversant with, and importance of risk assessments, method statements and permits to work. Stress that they have to be used in alliance with all relevant legislation
Identify and maintain PPE appropriate for use	Explain that PPE should include the following: Suitable safety boots, ear defenders, face / eye protection, dust mask if appropriate, suitable gloves, overalls, hard hat etc
Conduct pre- excavating checks	Explain the importance of pre-excavating checks and legal implications. Explain in detail what should be checked including the surrounding area, excavating area, plans, drawings, CAT & Genny, Gas Detector (Micro Clip) and tools and equipment to be used etc
Agree communication signals and emergency procedures	Explain the importance of communication between the excavation marshall / banksperson and the machine operator. Explain and demonstrate what hand signals will be used. Explain in detail the emergency procedures, how to contact the emergency services and the implications of striking a power cable (various voltage) or a high-pressure pipe (gas or water)
Safe position of excavation marshall - banksperson	Demonstrate and explain the importance of standing in a safe position in full view of the machine operator but also in full view of the excavation. Emphasise the importance of the machine operator isolating the machine to prevent any movement when the excavation marshall – banksperson is checking the excavation

Learning Outcomes for N027
Excavation Marshall - Banksperson

Learning Outcome	Instructor Notes
Define and identify the different types of underground services	Explain that to help with identification of underground services a colour coding system is in operation, and those older services may differ. Emphasise the colour coding system as follows: Gas = Yellow ducts or pipes, Electricity = Black or red ducts and cables, Water = Blue or grey ducts blue pipes, Sewer pipes = Black ducts with various colour pipes, Telecommunications = Grey, white, green, black or purple ducts, light grey or black cable, Street Lighting = Black or orange ducts, black cables in England and Wales, Purple ducts and cables in Scotland, Orange ducts and black or orange cables in Northern Ireland
Identify risks that excavations can present and how people may be affected	Explain that different services present different risks to excavation marshall – banksperson. Electricity – electric shock, explosion from arcing current, fire etc. Gas – Asphyxiation, fire, explosion, escape of gas along channels. Water – Injury from high pressure water jet or stones etc. being displaced by high pressure water jet, flooding, secondary risk from water contact with electricity. Crushing injuries from collapsed excavations, various diseases that could be contracted
Carry out exploratory tasks	Explain and demonstrate the correct procedure for searching and uncovering the required service or pipe. Demonstrate safe digging practices and explain the importance of using isolated tools for this purpose. Explain the need for safe and secure access and egress routes. Explain how lifting and looking into inspection chambers, manholes or drains could assist in locating the direction of cables or pipes. Demonstrate and explain the advantage a cable avoidance tool when used correctly can pin point the required services, but also the misuse or lack of knowledge could lead to a service – mains strike and have a fatal outcome. Explain different types of equipment that could be used to expose services – mains i.e. water, air, suction etc
Identify the risks of excavating near to underground services, and the safe digging practices that should be adopted	Explain the potential risks to health when excavating near to live cables or pipes. Identify the potential of penetrating cables or pipes and the likelihood of electric shock, burns, explosions, high pressure water jets and the stones carried by the force, Explain HSG 47 and safe digging practices including trial holes
Carry out all end of shift and safe storage procedures	Explain and demonstrate procedures to be adopted including: Replacement of barriers and all segregation equipment. The importance of covering an exposed excavation if possible to prevent injury. Clean tools thoroughly after use to avoid damage and prevent personal contamination. Kept in a safe and secure place

The learning outcomes listed should not be considered in isolation and may be added to in order to accurately reflect the learner's duties and working environment

Learning Outcomes for N029
Refuse Collection Vehicle

Learning Outcome	Instructor Notes
Have a basic understanding of the industry, the dangers of working in the industry and their responsibilities as a Refuse collection vehicle operator	Explain the structure of the course and the need to comply with your instructions at all times • Explain that the industry is very dangerous and that only safe working practices will be adopted throughout the course • Personal safety is not just the absence of physical injury, can be affected by noise, vibration and can lead to lost time, lost income, expense for the employer etc • Explain Health & Safety at Work Act 1974, Restraining systems in accordance with risk assessment, PUWER Regs, LOLER Regs, GS6, RIDDOR Regs, Waste regulations, Road traffic act, risk assessments, method statements, ACOPs and other relevant legislation • Remind learners that operators have moral obligations, legal obligations and environmental obligations • Explain reporting structures, the importance of good communication on site (colleagues, management, and other workers on site)
Have a working knowledge of the manufacturer's handbook for the particular machine to be used	Explain the importance of the manufacturer's handbook and that it will be used throughout the course. Stress that it has to be used in alliance with all relevant legislation
Be able to locate and identify the major components of the machine and explain their functions	Explain the different types of components • Explain the function of the components and how they all contribute to the safety and operational integrity of the machine • Explain, power units, hydraulic systems, transmissions, PTO, Chassis, steering, braking, fuel tank, guards, bin lifters and compaction plate. Emergency stop controls
Be able to locate and identify key controls and explain their functions	Explain the different controls and their functions • Explain how correct and sympathetic use of the controls can ensure safety and stability of the machine and help prolong machine life by reducing wear and tear. Refer to the manufacturer's handbook, codes of practice and decals
Identify and maintain PPE appropriate for refuse collection operator	Explain that PPE should include the following: Suitable safety boots, ear defenders, face / eye protection, dust mask if appropriate, suitable gloves, overalls, hard hat etc
Conduct all pre-operational and running checks in accordance with manufacturer's and legislative requirements	Explain the importance of pre-operational and running checks and legal implications of using a machine without having checked it • Go through the sequence of checking. Use manufacturer's handbook, check sheet, defect reporting procedure etc
Safely mount and dismount the machine	Explain the following fully: Correct mounting procedure • Observations • Use of safe hand holds • Correct dismounting procedure

Learning Outcomes for N029
Refuse Collection Vehicle

Learning Outcome	Instructor Notes
Configure the machine for travel and manoeuvre it safely in open and confined areas	Explain the following fully: Safe use of steering • Driving controls, travel position • Good visibility • Travel around site / road
Conduct all necessary safety checks at the work area	Explain and demonstrate the following fully: Walk the site and highlight or remove any hazards. Confirm condition of site / area is safe. Report any hazards that can't be removed. Direction of travel, routes, slopes, inclines and hill starts. Set out warning signs and barriers, exclusion zones to warn members of the public. How to deal with public
Manoeuvre the machine to the work area and correctly configure in readiness to carry out receiving of bins	Explain all safety procedures to be adopted including: Observations to be made prior to and during manoeuvring machine • Correct site speed • Agreed hand signals, check ground type, work specification • Correct signage, use of banksman etc
Carry out receiving of bins activity	Explain procedures to be adopted including: Different types of bin • Job specifications, method statements, risk assessments, permits • Traffic control • Signage • Alignment • Materials etc, set up tailgate to receive bins, check bin for contamination, ensure safety zone is maintained, bin is securely attached
Demonstrate knowledge and understanding of discharging bins into vehicle, Dangerous objects, diverse waste, types of hazardous and toxic waste and waste landfill codes	Explain procedures to be adopted including: Different types and classes of waste • Inert waste • Positioning / safety of vehicle when tipping • Hazardous waste • Cleaning techniques • Codes from European Waste Catalogue e.g. EWC 20-03-01 etc
Environmental considerations	Explain and demonstrate procedures to be adopted including: Clear visibility, Dangerous objects • Communication system – signals etc • Noise • Clearing of compaction wheel • Disposal of waste material • Ground contamination • Fuel spills • Fumes • Hazardous and non-hazardous waste • Dangers of contacting different diseases from waste e.g. Legionnaire's, Weil's, Hepatitis or Tetanus etc
Knowledge and understanding of transfer station and landfill disposal	Explain / demonstrate the following: Correct /secure position, Banksman, Discharge the waste, Cleanliness after discharging, Refer to manufacturers handbook
Carry out all end of shift and shut down procedures	Explain and demonstrate procedures to be adopted including: Safe parking • Shut down procedures • Post stop checks • Machine security, Defect reporting

* ***The learning outcomes listed should not be considered in isolation and may be added to in order to accurately reflect the learner's duties and working environment***

Learning Outcomes for N120
Plant Loader Securer

Learning Outcome	Instructor Notes
Have a basic understanding of the industry, the dangers of working in the industry and their responsibilities as an operative in the industry	Explain the structure of the course and the need to comply with your instructions at all times • Explain that the industry is very dangerous and that only safe working practices will be adopted throughout the course • Personal safety is not just the absence of physical injury, can be affected by noise, vibration and can lead to lost time, lost income, expense for the employer, etc • Explain Health & Safety at Work Act 1974, WAHR, PUWER Regulations, LOLER Regulations and other relevant legislation. Remind learners that operators have moral obligations, legal obligations and environmental obligations • Explain reporting structures, the importance of good communication on site (colleagues, management, and other workers on site)
Have a working knowledge of the manufacturer's handbook for the particular machine to be used and relevant legislation	Explain the importance of the manufacturer's handbook and that it will be used throughout the course. Stress that it has to be used in alliance with all relevant legislation. Explain Construction and Use Regulations, codes of practice and Road Traffic Act
Be able to identify different types of transport, explain their purpose, the major components, basic construction, controls and terminology	Explain the different types of transport • Explain the function of the major components and how they all contribute to the safety and operational integrity of the transporter • Explain, power units, hydraulic systems • Trailer bed / extensions • Wheels / axles • MAM • Applications • Chassis • Safety systems etc
Conduct all pre-operational checks in accordance with manufacturer's and legislative requirements	Explain the importance of pre-operational checks and legal implications of using a machine without having checked it. Go through the sequence of checking. Use manufacturer's handbook, check sheet, defect reporting procedure etc
Conduct all necessary safety checks at the loading, unloading area	Explain the need to check: • Ground type and pressure • Where to position transporter • Where machines are positioned • Access and egress • Signage • Hazards
Ensure that the transporter is correctly configured in readiness for loading and unloading	Explain the following fully: • Stability of the vehicle • Outriggers • Positioning of ramps • Access / egress on and off trailer • Condition of ramps and traction • Condition of trailer bed • Hazards • Working at Height Regulations • Manual handling

Learning Outcomes for N120
Plant Loader Securer

Learning Outcome	Instructor Notes
Explain hazards that may exist in the work area and how to avoid them, e.g. underground services, overhead power lines etc	Explain the need to check for: Types of underground services • Overhead power lines • Warning systems • Minimum clearances • Reporting procedures
Agree a method of communication and use it	Explain: Different types of signals • Method of signalling • Importance of signaller identification • Verbal instructions • Maintaining good visibility etc
Load or direct items of plant onto and off transporting vehicle	Explain procedures to be adopted including: Positioning of machines • Signals and methods of communication to be adopted • Visibility • Accessories for loading • Stability of the trailer • Traction • Axle weight distribution • Height restrictions etc
Arrange and secure items of pant on transport vehicle ready for transport on the public highway	Explain: Different types of securing equipment • Different securing methods • Securing points on machines and trailer • Selection of appropriate securing methods and equipment • Manufacturer's recommendations • Manual handling issues
Carry out all end of shift and shut down procedures	Explain and demonstrate: All shut down procedures • Parking and positioning of the vehicle, security

The learning outcomes listed should not be considered in isolation and may be added to in order to accurately reflect the learner's duties and working environment

Learning Outcomes for N210
Tow Tractor

Learning Outcome	Instructor Notes
Have a basic understanding of the industry, the dangers of working in the industry and their responsibilities as an operator	Explain the structure of the course and the need to comply with your instructions at all times • Explain that the industry is very dangerous and that only safe working practices will be adopted throughout the course • Personal safety is not just the absence of physical injury, can be affected by noise, vibration and can lead to lost time, lost income, expense for the employer etc • Explain Health & Safety at Work Act 1974, Restraining systems in accordance with risk assessment, PUWER Regulations, LOLER Regulations, risk assessments, method statements, ACOP, Vibration at Work Regulations and other relevant legislation • Remind learners that operators have moral obligations, legal obligations and environmental obligations • Explain reporting structures, the importance of good communication on site (colleagues, management, and other workers on site)
Have a working knowledge of the manufacturer's handbook for the particular machine to be used	Explain the importance of the manufacturer's handbook and that it will be used throughout the course. Stress that it has to be used in alliance with all relevant legislation
Be able to locate and identify the major components of the machine and explain their functions	Explain the different types of components • Explain the function of the components and how they all contribute to the safety and operational integrity of the machine • Explain, power units, fuel tank, guards, safety systems etc
Be able to locate and identify key controls and explain their functions	Explain the different controls and their functions • Explain how correct and sympathetic use of the controls can ensure safety of the machine and help prolong machine life by reducing wear and tear. Refer to the manufacturer's handbook, codes of practice, decals
Conduct all pre-operational and running checks in accordance with manufacturer's and legislative requirements	Explain the importance of pre-operational and running checks and legal implications of using a machine without having checked it. Go through the sequence of checking. Use manufacturer's handbook, check sheet, defect reporting procedure etc
Identify and maintain PPE appropriate for tow tractor use	Explain that PPE should include the following: Suitable safety boots, ear defenders, face / eye protection, dust mask if appropriate, suitable gloves, overalls etc

Learning Outcomes for N210
Tow Tractor

Learning Outcome	Instructor Notes
Conduct all necessary safety checks at the work area	Explain and demonstrate the following fully: Walk the site and highlight or remove any hazards • Confirm that the condition of the site is safe to work in • Report any hazards that cannot be removed • Set out warning signs and barriers, exclusion zones to warn pedestrians and other traffic
Prepare the tow tractor for use and operate machinery safely and efficiently	Explain and demonstrate all safety procedures to be adopted including: Correct starting procedure • Mount and dismount the machine • Correct operating procedure on slopes / banks • Identify and report any defects • Correct procedure for adjusting / changing different attachments • Follow all safe working procedures • Adhere to road traffic act where applicable • Check electrical safety, overhead, underground services • Check fluid levels • Check batteries
Attach and set trailer(s) ready for operations	Explain and demonstrate procedures to be adopted including: Connecting Procedures • Securing process • Trailer / Tractor compatibility • Hitch controls • Implement stability and security • Levelling procedures • Starting / stopping procedures • Hazards associated with all implements • Remove and secure implements
Environmental considerations	Explain and demonstrate procedures to be adopted including: Clear visibility • Communication system – signals etc • Noise • Vibration • Ground contamination • Ground Damage • Fuel Spills • Fumes • Flying debris
Storage and transport of tow tractor attachments	Explain / demonstrate the following: Check condition of Hydraulic hoses, attachments etc • Correct / Secure Storage of attachments • Refer to manufacturer's handbook
Carry out all end of work and shut down procedures	Explain and demonstrate procedures to be adopted including: Shut down procedures and machine security • Clean machine thoroughly after use to avoid corrosion, facilitate maintenance, prevent personal contamination • Inspect machine for signs of wear and damage

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Learning Outcomes for N219
Skip Loader

Learning Outcome	Instructor Notes
Have a basic understanding of the industry, the dangers of working in the industry and their responsibilities as a plant operator	Explain the structure of the course and the need to comply with your instructions at all times • Explain that the industry is very dangerous and that only safe working practices will be adopted throughout the course. Personal safety is not just the absence of physical injury, can be affected by noise, vibration and can lead to lost time, lost income, expense for the employer, etc • Explain Health & Safety at Work Act 1974, Restraining systems in accordance with risk assessment, PUWER Regs, LOLER Regs and other relevant legislation • Remind learners that operators have moral obligations, legal obligations and environmental obligations. Explain reporting structures, the importance of good communication on site (colleagues, management, and other workers on site)
Have a working knowledge of the manufacturer's handbook for the particular machine to be used	Explain the importance of the manufacturer's handbook and that it will be used throughout the course. Stress that it has to be used in alliance with all relevant legislation
Be able to locate and identify the major components of the machine and explain their functions	Explain the different types of components • Explain the function of the components and how they all contribute to the safety and operational integrity of the machine • Explain different types, power units, hydraulic systems, chassis, stability, ROPS, FOPS, carrying capacities, positioning, safety systems, applications, etc
Be able to locate and identify the operating controls and explain their functions	Explain the different controls and their functions • Explain how correct and sympathetic use of the controls can ensure safety and stability of the machine and help prolong machine life by reducing wear and tear. Refer to the manufacturer's handbook, codes of practice, capacity, decals, method statements, etc
Configure the vehicle ready for travel, on site and on the public highway	Explain: Driving controls • Driving position • Visibility • Body position • Attachments • Load security etc
Travel over various types of ground i.e. level ground, undulating ground – loaded and unloaded	Explain: Driving controls • Ground conditions • Traction • Safety of the working area • Road travel • Site travel • Hazards etc
Manoeuvre in confined spaces - loaded and unloaded	Explain: Visibility issues • Ground conditions • Environmental hazards • Noise • Fumes • Other personnel • Hazards etc

Learning Outcomes for N219
Skip Loader

Learning Outcome	Instructor Notes
Check the suitability of the loading / unloading area	Explain the need to check: Access / egress • Ground type and condition • Turning areas • Signs and other site markings • Hazards etc
Check for hazards, i.e. overhead hazards, ground hazards, and explain all necessary precautions	Explain the types of: Overhead hazards • Minimum distances and clearances • Skip position on vehicle • Warning systems • Ground hazards etc
Position the vehicle safely and correctly so as to conduct loading / unloading operations	Explain and demonstrate procedures to be adopted including: Types of load • Load sizes • Even weight distribution • Reversing procedures • Signalling procedures • Ground conditions • Skip position on vehicle • Hazards etc
Pick up and deposit skips of various sizes and weights	Explain: Safe working load • Vehicle suitability and stability • Carrying capacity • Regulations and legislation • Weight distribution • Visibility • Securing techniques • Hazards etc
Transfer skips to various locations	Explain: Travel routes • Ground types and conditions • Visibility • Speed limits • Load overhang • Hazards etc
Check the load for security and integrity	Explain: Skip locking procedures • Netting or sheeting • Doors or other closures • Differing material types • Working at Height regulations • Manual handling issues • Environmental factors • Hazards etc
Check that all skips are left in a safe manner when deposited	Explain: Ground conditions • Positioning of skips • Load security and integrity • signage • Lighting • Environmental issues • Hazards etc
Carry out all end of shift and shut down procedures	Explain and demonstrate procedures to be adopted including: • Safe parking • Shut down procedures and vehicle security

The learning outcomes listed should not be considered in isolation and may be added to in order to accurately reflect the learner's duties and working environment

Learning Outcomes for N225
Multi Lift and Drop - Hook Loader Vehicle

Learning Outcome	Instructor Notes
Have a basic understanding of the industry, the dangers of working in the industry and their responsibilities as a plant operator	Explain the structure of the course and the need to comply with your instructions at all times • Explain that the industry is very dangerous and that only safe working practices will be adopted throughout the course • Personal safety is not just the absence of physical injury, can be affected by noise, vibration and can lead to lost time, lost income, expense for the employer etc • Explain Health & Safety at Work Act 1974, Restraining systems in accordance with risk assessment, PUWER, LOLER, GS6, The Waste Regulations, risk assessments, method statements, ACOP and other relevant legislation • Remind learners that operators have moral obligations, legal obligations and environmental obligations • Explain reporting structures, the importance of good communication on site (colleagues, management, and other workers on site)
Have a working knowledge of the manufacturer's handbook for the particular machine to be used	Explain the importance of the manufacturer's handbook and that it will be used throughout the course. Stress that it has to be used in alliance with all relevant legislation
Be able to locate and identify the major components of the machine and explain their functions	Explain the different types of components • Explain the function of the components and how they all contribute to the safety and operational integrity of the machine • Explain, different types, power units, PTO hydraulic systems, hooks, chassis, stability, ROPS, FOPS, carrying capacities, positioning, steering, breaking, safety systems, applications etc
Be able to locate and identify the operating controls and explain their functions	Explain the different controls and their functions • Explain how correct and sympathetic use of the controls can ensure safety and stability of the machine and help prolong machine life by reducing wear and tear. Refer to the manufacturer's handbook, codes of practice, capacity, decals, method statements etc
Conduct all pre-operational checks in accordance with manufacturer's and legislative requirements	Explain the importance of pre-operational and running checks and legal implications of using a machine without having checked it. Go through the sequence of checking. Use manufacturer's handbook, check sheet, defect reporting procedure etc

Learning Outcomes for N225
Multi Lift and Drop - Hook Loader Vehicle

Learning Outcome	Instructor Notes
Configure the vehicle ready for travel, on site and on the public highway	Explain • Driving controls • Driving position • Visibility • Body position • Attachments • Load security etc
Travel over various types of ground i.e. level ground, undulating ground – loaded and unloaded	Explain • Driving controls • Ground conditions, traction • Safety of the working area • Road travel • Site travel • Hazards etc
Manoeuvre in confined spaces loaded and unloaded	Explain • Visibility issues • Ground conditions • Environmental hazards • Noise • Fumes • Other personnel • Hazards etc
Check the suitability of the loading / unloading area	Explain • The need to check access / egress • Ground type and condition • Turning areas • Signs and other site markings • Hazards etc
Check for hazards, i.e. overhead hazards, ground hazards, and explain all necessary precautions	Explain • The types of overhead hazards • Minimum distances and clearances • Container position on vehicle • Warning systems • Ground hazards etc
Position the vehicle safely and correctly so as to conduct loading / unloading operations	Explain and demonstrate procedures to be adopted including: Different methods of unloading i.e. Ejector trailers / tipping bodies etc • Types of load • Load sizes • Even weight distribution • Reversing procedures • Signalling procedures • Ground pressures / conditions • Skip position on vehicle, hazards etc
Identify and maintain PPE appropriate for machine use	Explain that PPE should include the following: Suitable safety boots, ear defenders, face protection, dust mask if appropriate, suitable gloves, hard hat, overalls, etc as identified by risk assessment for the operation
Pick up and deposit containers of various sizes and weights	Explain • Safe working load • Vehicle suitability and stability • Carrying capacity • Regulations and legislation • Weight distribution • Visibility • Securing techniques • Hazards etc

Learning Outcomes for N225
Multi Lift and Drop - Hook Loader Vehicle

Learning Outcome	Instructor Notes
Transfer containers to various locations	Explain • Travel routes • Ground types and conditions • Visibility • Speed limits • Load overhang • Hazards etc
Check the load for security and integrity	Explain • Container locking procedures • Netting or sheeting • Doors or other closures • Differing material types • Working at height regulations • Manual handling issues • Environmental factors • Hazards etc
Check that all containers are left in a safe manner when deposited	Explain • Ground conditions • Positioning of container • Load security and integrity • Signage • Lighting • Environmental issues • Hazards etc
Carry out all end of shift and shut down procedures	Explain and demonstrate procedures to be adopted including: • Safe parking • Shut down procedures and vehicle security

The learning outcomes listed should not be considered in isolation and may be added to in order to accurately reflect the learner's duties and working environment

Learning Outcomes for N243
Shunter Vehicle

Learning Outcome	Instructor Notes
Have a basic understanding of the industry, the dangers of working in the industry and their responsibilities as an operator	Explain the structure of the course and the need to comply with your instructions at all times • Explain that the industry is very dangerous and that only safe working practices will be adopted throughout the course • Personal safety is not just the absence of physical injury, can be affected by noise, vibration and can lead to lost time, lost income, expense for the employer etc • Explain Health & Safety at Work Act 1974, Restraining systems in accordance with risk assessment, PUWER Regs, LOLER Regs, risk assessments, method statements, ACOP, risk assessments, method statements, ACOP, Vibration at Work Regulations and other relevant legislation • Remind learners that operators have moral obligations, legal obligations and environmental obligations • Explain reporting structures, the importance of good communication on site (colleagues, management, and other workers on site)
Have a working knowledge of the manufacturer's handbook for the particular machine to be used	Explain the importance of the manufacturer's handbook and that it will be used throughout the course. Stress that it has to be used in alliance with all relevant legislation
Be able to locate and identify the major components of the machine and explain their functions	Explain the different types of components • Explain the function of the components and how they all contribute to the safety and operational integrity of the machine • Explain power units, steering, brakes, chassis, fuel tank, guards, air lines, fifth wheel, jacks, wheels, trailer pin, and all other safety systems etc
Be able to locate and identify key controls and explain their functions	Explain the different controls and their functions • Explain how correct and sympathetic use of the controls can ensure safety of the machine and help prolong machine life by reducing wear and tear. Refer to the manufacturer's handbook, codes of practice, decals
Conduct all pre-operational and Running checks in accordance with manufacturer's and legislative requirements	Explain the importance of pre-operational and running checks and legal implications of using a machine without having checked it. Go through the sequence of checking. Use manufacturer's handbook, check sheet, defect reporting procedure etc
Identify and maintain PPE appropriate for Shunter Vehicle use	Explain that PPE should include the following: Suitable safety boots, ear defenders, face / eye protection, dust mask if appropriate, suitable gloves, overalls, hard hat etc

Learning Outcomes for N243 Shunter Vehicle

Learning Outcome	Instructor Notes
Conduct all necessary safety checks at the work area	Explain and demonstrate the following fully: • Walk the site and highlight or remove any hazards • Confirm that the condition of the site is safe to work in • Report any hazards that cannot be removed • Set out warning signs and barriers, Exclusion zones to warn members of the public and to exclude animals
Prepare the Shunter Vehicle for use and Operate machinery safely and efficiently	Explain and demonstrate all safety procedures to be adopted including: • Correct starting procedure • Mount and dismount the machine • Identify and report any defects • Air-line (Suzie) connections • Air pressures • Correct procedure for adjusting / changing different attachments • Follow all safe working procedures • Adhere to Road Traffic Act where applicable • Check electrical safety, overhead & underground services • Check fluid levels • Check batteries
Attach and set trailers ready for operation	Explain and demonstrate procedures to be adopted including: • Couple up procedures • Securing process • Implement / Tractor compatibility • Hitch controls • Implement stability and security • Raise landing legs • Starting / stopping procedures • Hazards associated with all implements • Remove and secure implements
Environmental considerations	Explain and demonstrate procedures to be adopted including: • Clear visibility • Communication system – signals etc • Noise • Dust • Vibration • Ground contamination • Ground damage • Fuel Spills • Fumes • Flying debris
Transport and uncouple Shunter Vehicle Attachments	Explain / Demonstrate the following: • Uncouple air hoses, attachments etc • Lower landing legs and secure • Correct / Secure Storage of attachments • Refer to manufacturer's handbook
Carry out all end of Work and shut down procedures	Explain and demonstrate procedures to be adopted including: • Shut down procedures and machine security • Release air, drain tanks • Clean machine thoroughly after use to avoid corrosion, facilitate maintenance, prevent personal contamination • Inspect machine for signs of wear and damage

The learning outcomes listed should not be considered in isolation and may be added to in order to accurately reflect the learner's duties and working environment.

Learning Outcomes for N608a
All-Terrain Vehicles

Learning Outcome	Instructor Notes
Have a basic understanding of the industry, the dangers of working in the industry and their responsibilities as an operator	Explain the structure of the course and the need to comply with your instructions at all times • Explain that the industry is very dangerous and that only safe working practices will be adopted throughout the course • Personal safety is not just the absence of physical injury, it can be affected by noise, vibration and can lead to lost time, lost income, expense for the employer etc • Explain Health & Safety at Work Act 1974, Restraining systems in accordance with risk assessment, PUWER Regs, Vibration at Work Regulations, Road Traffic Act, The All-Terrain Motor Vehicles (Safety) Regulations and other relevant legislation • Remind learners that operators have moral obligations, legal obligations and environmental obligations • Explain reporting structures, the importance of good communication on site (colleagues, management, and other workers on site)
Have a working knowledge of the manufacturer's handbook for the particular machine to be used	Explain the importance of the manufacturer's handbook and that it will be used throughout the course • Stress that it has to be used in alliance with all relevant legislation
Be able to locate and identify the major components of the machine and explain their functions	Explain the different types of components • Explain the function of the components and how they all contribute to the safety and operational integrity of the machine • Explain power units • Fuel tank • Guards • Safety systems etc
Be able to locate and identify key controls and explain their functions	Explain the different controls and their functions • Explain how correct and sympathetic use of the controls can ensure safety of the machine and help prolong machine life by reducing wear and tear • Refer to the manufacturer's handbook, codes of practice, decals etc
Conduct all pre-operational and running checks in accordance with manufacturer's and legislative requirements	Explain the importance of pre-operational and running checks and legal implications of using a machine without having checked it. Go through the sequence of checking. Use manufacturer's handbook, check sheet, defect reporting procedure etc
Identify and maintain PPE appropriate for ATV use	Explain that PPE could include the following: • Head protection meeting BS6658 or BS EN 1384 or UN ECE 22.05. • Suitable safety boots, ear defenders, face / eye protection, dust mask if appropriate, suitable gloves, overalls etc

Learning Outcomes for N608a
All-Terrain Vehicles

Learning Outcome	Instructor Notes
Conduct all necessary safety checks at the work area	Explain and demonstrate the following fully: • Walk the site and highlight or remove any hazards • Confirm that the condition of the site is safe to work in • Report any hazards that cannot be removed • Set out warning signs and barriers, exclusion zones to warn members of the public and to exclude animals
Prepare the ATV for use and operate machinery safely and efficiently	Explain and demonstrate all safety procedures to be adopted including: • Correct starting procedure • Mount and dismount the machine • Correct operating procedure on slopes, banks, diverse ground conditions • Identify and report any defects • Correct procedure for ascending / descending slopes • Braking procedures • Follow all safe working procedures • Adhere to Road Traffic Act where applicable • Check electrical safety, overhead / underground services • Check fluid levels
Attach and set trailer implements ready for work	Explain and demonstrate procedures to be adopted including: • Connecting procedures • Securing process • Implement compatibility • Hitch controls • Implement stability and security of loads • Levelling procedures • Guarding • Starting / stopping procedures • Hazards associated with all attachment • Remove and secure implements
Environmental considerations	Explain and demonstrate procedures to be adopted including: • Clear visibility • Communication system – signals etc • Noise • Vibration • Ground contamination • Ground damage • Fuel spills • Fumes • Animals
Storage and transport of ATV attachments	Explain and demonstrate the following: • Allow ATV engine to cool down • Check condition of ATV – attachments etc • Correct / secure storage of attachments • Refer to manufacturer's handbook
Carry out all end of work and shut down procedures	Explain and demonstrate procedures to be adopted including: • Shut down procedures and machine security • Clean machine thoroughly after use to avoid corrosion • facilitate maintenance • prevent personal contamination • Inspect machine for signs of wear and damage • Secure immobilise • remove key

The learning outcomes listed should not be considered in isolation and may be added to in order to accurately reflect the learner's duties and working environment

Learning Outcomes for N608b
All-Terrain Vehicles

Learning Outcome	Instructor Notes
Have a basic understanding of the industry, the dangers of working in the industry and their responsibilities as an operator	Explain the structure of the course and the need to comply with your instructions at all times • Explain that the industry is very dangerous and that only safe working practices will be adopted throughout the course • Personal safety is not just the absence of physical injury, it can be affected by noise, vibration and can lead to lost time, lost income, expense for the employer etc • Explain Health & Safety at Work Act 1974, Restraining systems in accordance with risk assessment, PUWER Regs, Vibration at Work Regulations, Road Traffic Act, The All-Terrain Motor Vehicles (Safety) Regulations and other relevant legislation • Remind learners that operators have moral obligations, legal obligations and environmental obligations • Explain reporting structures, the importance of good communication on site (colleagues, management, and other workers on site)
Have a working knowledge of the manufacturer's handbook for the particular machine to be used	Explain the importance of the manufacturer's handbook and that it will be used throughout the course • Stress that it has to be used in alliance with all relevant legislation
Be able to locate and identify the major components of the machine and explain their functions	Explain the different types of components • Explain the function of the components and how they all contribute to the safety and operational integrity of the machine • Explain power units • Fuel tank • Guards • Safety systems etc
Be able to locate and identify key controls and explain their functions	Explain the different controls and their functions • Explain how correct and sympathetic use of the controls can ensure safety of the machine and help prolong machine life by reducing wear and tear • Refer to the manufacturer's handbook, codes of practice, decals etc
Conduct all pre-operational and running checks in accordance with manufacturer's and legislative requirements	Explain the importance of pre-operational and running checks and legal implications of using a machine without having checked it. Go through the sequence of checking. Use manufacturer's handbook, check sheet, defect reporting procedure etc
Identify and maintain PPE appropriate for ATV use	Explain that PPE could include the following: • Head protection meeting BS6658 or BS EN 1384 or UN ECE 22.05. • Suitable safety boots, ear defenders, face / eye protection, dust mask if appropriate, suitable gloves, overalls etc

Learning Outcomes for N608b
All-Terrain Vehicles

Learning Outcome	Instructor Notes
Conduct all necessary safety checks at the work area	Explain and demonstrate the following fully: • Walk the site and highlight or remove any hazards • Confirm that the condition of the site is safe to work in • Report any hazards that cannot be removed • Set out warning signs and barriers, exclusion zones to warn members of the public and to exclude animals
Prepare the ATV for use and operate machinery safely and efficiently	Explain and demonstrate all safety procedures to be adopted including: • Correct starting procedure • Mount and dismount the machine • Correct operating procedure on slopes, banks, diverse ground conditions • Identify and report any defects • Correct procedure for ascending / descending slopes • Braking procedures • Follow all safe working procedures • Adhere to Road Traffic Act where applicable • Check electrical safety, overhead / underground services • Check fluid levels
Attach and set trailer implements ready for work	Explain and demonstrate procedures to be adopted including: • Connecting procedures • Securing process • Implement compatibility • Hitch controls • Implement stability and security of loads • Levelling procedures • Guarding • Starting / stopping procedures • Hazards associated with all attachment • Remove and secure implements
Environmental considerations	Explain and demonstrate procedures to be adopted including: • Clear visibility • Communication system – signals etc • Noise • Vibration • Ground contamination • Ground damage • Fuel spills • Fumes • Animals
Storage and transport of ATV attachments	Explain and demonstrate the following: • Allow ATV engine to cool down • Check condition of ATV – attachments etc • Correct / secure storage of attachments • Refer to manufacturer's handbook
Carry out all end of work and shut down procedures	Explain and demonstrate procedures to be adopted including: • Shut down procedures and machine security • Clean machine thoroughly after use to avoid corrosion • facilitate maintenance • prevent personal contamination • Inspect machine for signs of wear and damage • Secure immobilise • remove key

The learning outcomes listed should not be considered in isolation and may be added to in order to accurately reflect the learner's duties and working environment

Learning Outcomes for N608c
All-Terrain Vehicles

Learning Outcome	Instructor Notes
Have a basic understanding of the industry, the dangers of working in the industry and their responsibilities as an operator	Explain the structure of the course and the need to comply with your instructions at all times • Explain that the industry is very dangerous and that only safe working practices will be adopted throughout the course • Personal safety is not just the absence of physical injury, it can be affected by noise, vibration and can lead to lost time, lost income, expense for the employer etc • Explain Health & Safety at Work Act 1974, Restraining systems in accordance with risk assessment, PUWER Regs, Vibration at Work Regulations, Road Traffic Act, The All-Terrain Motor Vehicles (Safety) Regulations and other relevant legislation • Remind learners that operators have moral obligations, legal obligations and environmental obligations • Explain reporting structures, the importance of good communication on site (colleagues, management, and other workers on site)
Have a working knowledge of the manufacturer's handbook for the particular machine to be used	Explain the importance of the manufacturer's handbook and that it will be used throughout the course • Stress that it has to be used in alliance with all relevant legislation
Be able to locate and identify the major components of the machine and explain their functions	Explain the different types of components • Explain the function of the components and how they all contribute to the safety and operational integrity of the machine • Explain power units • Fuel tank • Guards • Safety systems etc
Be able to locate and identify key controls and explain their functions	Explain the different controls and their functions • Explain how correct and sympathetic use of the controls can ensure safety of the machine and help prolong machine life by reducing wear and tear • Refer to the manufacturer's handbook, codes of practice, decals etc
Conduct all pre-operational and running checks in accordance with manufacturer's and legislative requirements	Explain the importance of pre-operational and running checks and legal implications of using a machine without having checked it. Go through the sequence of checking. Use manufacturer's handbook, check sheet, defect reporting procedure etc
Identify and maintain PPE appropriate for ATV use	Explain that PPE could include the following: • Head protection meeting BS6658 or BS EN 1384 or UN ECE 22.05. • Suitable safety boots, ear defenders, face / eye protection, dust mask if appropriate, suitable gloves, overalls etc

Learning Outcomes for N608c
All-Terrain Vehicles

Learning Outcome	Instructor Notes
Conduct all necessary safety checks at the work area	Explain and demonstrate the following fully: • Walk the site and highlight or remove any hazards • Confirm that the condition of the site is safe to work in • Report any hazards that cannot be removed • Set out warning signs and barriers, exclusion zones to warn members of the public and to exclude animals
Prepare the ATV for use and operate machinery safely and efficiently	Explain and demonstrate all safety procedures to be adopted including: • Correct starting procedure • Mount and dismount the machine • Correct operating procedure on slopes, banks, diverse ground conditions • Identify and report any defects • Correct procedure for ascending / descending slopes • Braking procedures • Follow all safe working procedures • Adhere to Road Traffic Act where applicable • Check electrical safety, overhead / underground services • Check fluid levels
Attach and set trailer implements ready for work	Explain and demonstrate procedures to be adopted including: • Connecting procedures • Securing process • Implement compatibility • Hitch controls • Implement stability and security of loads • Levelling procedures • Guarding • Starting / stopping procedures • Hazards associated with all attachment • Remove and secure implements
Environmental considerations	Explain and demonstrate procedures to be adopted including: • Clear visibility • Communication system – signals etc • Noise • Vibration • Ground contamination • Ground damage • Fuel spills • Fumes • Animals
Storage and transport of ATV attachments	Explain and demonstrate the following: • Allow ATV engine to cool down • Check condition of ATV – attachments etc • Correct / secure storage of attachments • Refer to manufacturer's handbook
Carry out all end of work and shut down procedures	Explain and demonstrate procedures to be adopted including: • Shut down procedures and machine security • Clean machine thoroughly after use to avoid corrosion • facilitate maintenance • prevent personal contamination • Inspect machine for signs of wear and damage • Secure immobilise • remove key

The learning outcomes listed should not be considered in isolation and may be added to in order to accurately reflect the learner's duties and working environment

Learning Outcomes for N725
Tipping Bodies Including Demountables

Learning Outcome	Instructor Notes
Have a basic understanding of the industry, the dangers of working in the industry and their responsibilities as a plant operator	Explain the structure of the course and the need to comply with your instructions at all times • Explain that the industry is very dangerous and that only safe working practices will be adopted throughout the course • Personal safety is not just the absence of physical injury, can be affected by noise, vibration and can lead to lost time, lost income, expense for the employer, etc • Explain Health & Safety at Work Act 1974, Restraining systems in accordance with risk assessment, PUWER Regs, LOLER Regs, Gs6, risk assessments, method statements ACOP and other relevant legislation • Remind learners that operators have moral obligations, legal obligations and environmental obligations • Explain reporting structures, the importance of good communication on site (colleagues, management, and other workers on site)
Have a working knowledge of the manufacturer's handbook for the particular machine to be used	Explain the importance of the manufacturer's handbook and that it will be used throughout the course. Stress that it has to be used in alliance with all relevant legislation
Be able to locate and identify the major components of the machine and explain their functions	Explain the different types of components • Explain the function of the components and how they all contribute to the safety and operational integrity of the machine • Explain, different types, power units, hydraulic systems, support arms, connection process, chassis, stability, ROPS, FOPS, carrying capacities, positioning, steering, breaking, safety systems, applications etc
Be able to locate and identify the operating controls and explain their functions	Explain the different controls and their functions. Explain how correct and sympathetic use of the controls can ensure safety and stability of the machine and help prolong machine life by reducing wear and tear. Refer to the manufacturer's handbook, codes of practice, capacity, decals, method statements etc

Learning Outcomes for N725
Tipping Bodies Including Demountables

Learning Outcome	Instructor Notes
Conduct all pre-operational checks in accordance with manufacturer's and legislative requirements	Explain the importance of pre-operational and running checks and legal implications of using a machine without having checked it. Go through the sequence of checking. Use manufacturer's handbook, check sheet, defect reporting procedure etc
Configure the vehicle ready for travel, on site and on the public highway	Explain • Driving controls • Driving position • Visibility • Body position • Attachments • Load security etc
Travel over various types of ground i.e. level ground, undulating ground – loaded and unloaded	Explain • Driving controls • Ground conditions • Traction • Safety of the working area • Road travel • Site travel • Hazards etc
Manoeuvre in confined spaces loaded and unloaded	Explain • Visibility issues • Ground conditions • Environmental hazards • Noise • Fumes • Other personnel • Hazards etc
Check the suitability of the loading / unloading area	Explain • The need to check access / egress • Ground type • Pressures and condition • Turning areas • Signs and other site markings • Hazards etc
Check for hazards, i.e. overhead hazards, ground hazards, and explain all necessary precautions	Explain the types of overhead hazards • Minimum distances and clearances • Container position on vehicle • Warning systems • Ground hazards etc
Position the vehicle safely and correctly so as to conduct loading / unloading operations	Explain and demonstrate procedures to be adopted including • Types of load • Load sizes • Even weight distribution • Reversing procedures • Signalling procedures • Ground pressures / conditions • Skip position on vehicle • Hazards etc

Learning Outcomes for N725
Tipping Bodies Including Demountables

Learning Outcome	Instructor Notes
Identify and maintain PPE appropriate for machine use	Explain that PPE should include the following: Suitable safety boots, ear defenders, face protection, dust mask if appropriate, suitable gloves, hard hat, overalls, etc
Pick up and deposit containers of various sizes and weights	Explain • Safe working load • Vehicle suitability and stability • Carrying capacity • Regulations and legislation • Weight distribution • Visibility • Securing techniques • Hazards etc
Transfer containers to various locations	Explain Travel routes • Ground types and conditions • Visibility • Speed limits • Load overhang • Hazards etc
Check the load for security and integrity	Explain Container locking procedures • Netting or sheeting • Doors or other closures • Differing material types • Working at height regulations • Manual handling issues • Environmental factors • Hazards etc
Check that all containers are left in a safe manner when deposited	Explain • Ground conditions • Positioning of container • Load security and integrity • Signage • Lighting • Environmental issues • Hazards etc
Carry out all end of shift and shut down procedures	Explain and demonstrate procedures to be adopted including: • Safe parking • Shut down procedures and vehicle security

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