

PRODOD17 (SQA Unit Code - H1PA 04)

Carry out mud, slurry or fluid plant operations



Overview

This standard is designed for the candidate to demonstrate competence in installing, operating and maintaining mud, slurry or fluid plant to given working instructions in either piling, tunnelling or drilling. This will require the candidate to prepare, set up, connect, check, maintain, mix, monitor, test, pump, clean, adjust, and record. Candidates will be required to make decisions regarding and use materials, components and fixings, tools, plant and ancillary equipment.

During this work the candidate must take account of the relevant operational requirements and safe working practices.

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Performance criteria

- You must be able to:*
- P1 the given information relating to the work and resources are interpreted and confirmed as relevant
 - P2 the given, relevant legislation and official guidance to carry out the work and maintain safe work practices are fully complied with
 - P3 the required quantity and quality of resources for the methods of work are selected
 - P4 the risk of damage to the work and surrounding area is minimized
 - P5 area allocated for the plant and ancillary equipment is prepared
 - P6 plant and ancillary equipment is set up and assembled (including the connection of hoses, valves and items of plant for delivery, extraction, recycling and disposal of mud, slurry or fluids) and its integrity checked
 - P7 mud, slurry or fluids are mixed in accordance with manufactures recommendations
 - P8 the pumping process is monitored and appropriate adjustments made in order to maintain operational efficiency
 - P9 the viscosity and density of the mud, slurry or fluid is tested
 - P10 the work is carried out efficiently to the required specification and programme
 - P11 the records of the process are completed

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Knowledge and understanding

You need to know and understand:

- K1 how to deal with the disposal of waste including environmental responsibilities, organisational procedures, manufacturers' information, statutory regulations and official guidance.
- K2 how to identify and respond to emergencies including fires, spillages, injuries and other hazards as identified by method of work, manufacturers' technical information, statutory regulations and official guidance.
- K3 how and where to access and interpret information including drawings, instructions, specifications, schedules and manufacturers' information.
- K4 the relevant legislation and official guidance as it applies to the workplace, below ground level, at height, with tools and equipment, with materials and substances, movement of materials and manual handling and mechanical lifting.
- K5 how to maintain and care for hand tools and/or portable power tools, plant and ancillary equipment for mud, slurry or fluid operations.
- K6 how to apply knowledge for safe work practices, procedures, skills and transference of competence, relating to the area of work and materials
- K7 how to work in a team and communicate with others.
- K8 how to identify the needs of others associated with mud, slurry or fluid plant operations.
- K9 how, and when, to use personal protective equipment (ppe)
- K10 how to identify problems arising from information, resources and methods of work and which are addressed by the candidates own authority to rectify and those which require formal organisational reporting procedures.
- K11 how to access and interpret different types of progress charts, timetables and estimated times.
- K12 the organisational procedures for reporting circumstances which will affect the work programme.
- K13 how to protect work against damage from general workplace activities; others involved with the work; adverse weather conditions.
- K14 the materials, components and equipment relating to types, quantity, quality and sizes of standard and/or specialist; mud, slurry or fluid plant; hand and/or powered tools and equipment.
- K15 methods of calculating quantity, length, area and wastage associated with the method/procedure to pump mud or slurry.
- K16 the security procedures affecting site, workplace, company and operative.
- K17 the organisational procedures developed to report and rectify inappropriate information and unsuitable resources, and how they are implemented.

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- K18 the types of information (including drawings, instructions, specifications, schedules, manufacturers' information), their source and how they are interpreted.
- K19 the organisational procedures to solve problems with the information and why it is important they are followed.
- K20 the level of understanding operatives must have of information for relevant, current legislation and official guidance and how it is applied.
- K21 how emergencies should be responded to and who should respond.
- K22 the organisational security procedures for tools, equipment and personal belongings.
- K23 what the accident reporting procedures are and who is responsible for making the reports.
- K24 why and when personal protective equipment (ppe) should be used.
- K25 the characteristics, quality, uses, limitations and defects associated with the resources and how defects should be rectified.
- K26 how the resources should be used and how any problems associated with the resources are reported.
- K27 the organisational procedures to select resources, why they have been developed and how they are used.
- K28 the hazards associated with the resources and methods of work and how they are overcome.
- K29 how to protect work from damage and the purpose of protection.
- K30 why disposal of waste should be carried out safely and how it is achieved.
- K31 how methods of work, to meet the specification, are carried out and problems reported.
- K32 how maintenance of tools and equipment is carried out.
- K33 what the programme is for the work to be carried out in the estimated, allocated time and why deadlines should be kept.

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