

Overview

This national occupational standard defines the competence involved in interpreting instructions, planning, organising and adopting safe working practices for preparing and carrying out the reinstatement of excavations and the surfaces of highways and footway pavements following site operations, by use of the appropriate sub-grade, sub-base and road-base materials and by suitable selection of surface materials including cold-lay bituminous and modular surfaces.

This standard is for those responsible for operations during gas network construction activities. These activities will usually include the leadership and direction of the members of a team and decision making regarding the approach to take when undertaking the work.

This standard consists of four elements:

1. prepare for reinstatement of excavation and pavement surface in site operations
2. carryout reinstatement of excavation and pavement surface
3. use and communicate data and information
4. resolve problems which arise from the reinstatement work

Performance criteria

- You must be able to:* **Prepare for reinstatement of excavation and pavement surface in site operations**
1. confirm the location of the excavation, cavity and trenches in accordance with instructions and work specifications
 2. carry out site specific risk assessment, and review in accordance with company procedures
 3. apply control measures identified in risk assessments
 4. select, check condition of, use and store the appropriate personal protective equipment (PPE)
 5. carry out safety related activities associated with working in the vicinity of hazardous materials
 6. confirm the flexible, composite, rigid and modular pavement construction, verge, and natural ground for reinstatement is in accordance with statutory and regulatory Codes of Practice
 7. carry out preparation procedures for reinstatement of excavation in accordance with statutory and regulatory Codes of Practice
 8. use approved procedures and practices and statutory requirements to determine the requirement for excavation support
 9. protect supply apparatus and sub-structures in accordance with the relevant Codes of Practice
 10. confirm the condition of the new and reusable materials for backfill, sub-base, road-base and pavement surface, and cold-lay materials to be used for the reinstatement are fit-for-purpose and meet statutory and regulatory Codes of Practice
 11. select and confirm hand tools, powered tools and equipment suitable to the materials to be used for reinstatement in accordance with the manufacturer's specifications and operational requirements
 12. report remedial work and defects in the excavation that are outside the control of the job holder in accordance with organisational and operational procedures
- Carry out reinstatement of excavation and pavement surface**
13. maintain conditions and security of the excavation throughout the reinstatement operations in line with operational and regulatory requirements
 14. carry out the laying and compaction procedures of the materials appropriate to the area and type of structure being reinstated to meet statutory and regulatory Codes of Practice

15. report defects and deficiencies in the laying and compaction of materials outside the control of the job holder in accordance with organisational and operational procedures

16. replace ironwork, kerbs and edge constraints in accordance with relevant Codes of Practice

17. store and dispose of surplus materials in accordance with work instructions and statutory and regulatory Codes of Practice

18. complete the work by checking and confirming the quality and condition of the finished reinstatement, and the work site, conform to statutory and regulatory Codes of Practice

19. carry out all work to approved procedures and practices and in compliance with statutory requirements

Use and communicate data and information

20. use records to determine potential deep excavations, confined spaces and hazardous materials

21. use information in the work instructions and specification to determine the work site and area to be excavated

22. check with designated personnel any circumstances where information appears incorrect

23. use organisational information systems to record and store data and information

Resolve problems that arise from the excavation work

24. report to the designated person any damage to supply apparatus and sub-structures

25. advise colleagues or managers where situations require intervention

26. resolve problems within the responsibility of the job role

Knowledge and understanding

*You need to know and
understand:* **General**

1. the main responsibilities of the employer and employee under the Health and Safety at Work Act,
2. the main responsibilities of the employer and employee under environmental legislation
3. how to carry out and review site specific risk assessments
4. how to review risk assessments and application of appropriate control measures
5. the company reporting lines, roles, responsibilities and levels of authority
6. the identification and application of safe procedures for handling hazardous and non-hazardous materials
7. organisational accident recording and reporting procedures
8. the range, use and importance of personal protective equipment for the work activity and procedures for checking PPE is fit for purpose
9. statutory, organisational and emergency reporting procedures

Reinstatement of Excavations

10. responsibilities of the employer and employee under the legislation and Codes of Practice, and how to comply with them applicable to new roads and street works for reinstatement works in excavations
11. legislation governing reinstatement of excavations
12. safe procedures for handling reinstatement equipment
13. different types of pavement surfaces including flexible, composite, rigid and modular pavement
14. the sub-surface requirements for each type of pavement surface
15. preparation procedures including edge trimming, surface formation, removal of loose debris, repair information
16. the types of excavation materials in excavations and possible defects, including backfill, sub-base, road base, and paved surface
17. the remedial actions to take when defects are encountered
18. the types of supply apparatus and sub-structures that may be encountered including utilities and other agencies
19. methods of protecting each of the supply apparatus and sub-structures

20. methods of segregating the different materials including, backfill, sub-base road-base, and pavement surface
21. methods of checking the condition of material that is to be reused
22. specifications for surface, sub-surface, and general reinstatement materials including fine fill materials; back-fill materials; granular sub-bases; cement bound excavated material, road base materials; bituminous road base materials; surfacing materials; concrete footways; modular surfacing; cold lay,
23. methods of storing or protecting excavated material to prevent deterioration
24. how to select, check, use and maintain the hand tools, powered tools and other equipment used for reinstatement work
25. legislation controlling the use of hand tools, powered tools and equipment
26. safe working procedures and practices for excavation work including environmental, organisational, regulatory, emergency, operational, health, safety and environment compliance, relevant company procedures, and risk assessments
27. how to remove trench support safely whilst reinstating the excavation
28. the roles and responsibilities of persons within the highways operations team
29. site management structures for highways operations
30. the importance of referring to the designated persons, problems that are outside the area of the job role responsibility
31. the procedures for reporting and recording job progress, problems, deviations to work programmes
32. materials specified as acceptable for use as backfill, sub-base, road base, and pavement surface including cold lay compounds
33. the types of surface finishes including flexible, composite, rigid and modular, verge and natural ground
34. the types of equipment used for compaction of materials including hand and power tools, and motorised equipment
35. how to report any spillage from fuel and lubricants, and to safely prevent their spread, in accordance with company procedures
36. the maintenance requirements of compaction equipment
37. the methods to be used for compacting reinstatement materials
38. types of reinstatement, including holes and trenches and pavement

surfaces

- 39. common defects in reinstatement including settlement and surface damage and remedial actions
- 40. the reasons for ensuring correct storage conditions for materials

Scope/range

Supply apparatus and sub-structures - the supply apparatus for utilities and other agencies, above and below ground services, built structures, and the natural environment (e.g. foundations, tree roots, and natural watercourses)

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