

Excavations—Construction

Date: 2/7/2011

Excavations: Prior to Opening—Construction

Y N N/A

1. Are the estimated locations of underground utility installations determined prior to opening an excavation?

29 CFR 1926.651(b)(1)

2. Are utility companies or owners contacted within established or customary local response times, advised of the proposed work, and asked to establish the location of the utility underground installations prior to the start of an actual excavation?

29 CFR 1926.651(b)(2)

Excavations: General Requirements—Construction

Y N N/A

3. When excavation operations approach the estimated location of underground installations, is the exact location of the installations determined by safe and acceptable means?

29 CFR 1926.651(b)(3)

4. While the excavation is opened, are underground installations protected, supported or removed as necessary to safeguard employees?

29 CFR 1926.651(b)(4)

5. Are structural ramps that are used solely by employees as a means of access or egress from excavations designed by a competent person?

29 CFR 1926.651(c)(1)(i)

6. Are structural ramps that are used for access or egress of equipment designed by a competent person qualified in structural design, and are they constructed in accordance with the design?

29 CFR 1926.651(c)(1)(i)

7. In trench excavations that are 4 feet deep or more, is a stairway, ladder, ramp or other safe means of egress located so as to require no more than 25 feet of lateral travel for employees?

29 CFR 1926.651(c)(2)

8. Where employees or equipment are required or permitted to cross over excavations, are walkways with standard guardrails provided?
29 CFR 1926.651(l)
9. Is adequate barrier physical protection provided at all remotely located excavations?
29 CFR 1926.651(l)(2)
10. Are all wells, pits, shafts, etc. barricaded or covered?
29 CFR 1926.651(l)(2)
11. Upon completion of exploration and similar operations, are temporary wells, pits, shafts, etc. backfilled?
29 CFR 1926.651(l)(2)
12. Do protective systems have the capacity to resist without failure all loads that are intended or could reasonably be expected to be applied or transmitted to the system?
29 CFR 1926.652(a)(2)

Excavations: Employee Protection—Construction

Y N N/A

13. Are all surface hazards removed or supported, as necessary, to safeguard employees?
29 CFR 1926.651(a)
14. Do you provide warning vests or other suitable garments, marked with or made of reflectorized or high-visibility material, to employees exposed to public vehicular traffic?
29 CFR 1926.651(d)
15. Are employees prohibited to be underneath loads handled by lifting or digging equipment?
29 CFR 1926.651(e)
16. Are employees required to stand away from any vehicle being loaded or unloaded to avoid being struck by any spillage or falling materials?
29 CFR 1926.651(e)
17. If employees are working in excavations where there is accumulated or accumulating, are adequate precautions taken to protect them against the hazards posed by water accumulation?
29 CFR 1926.651(h)(1)

18. Is adequate protection provided to protect employees from loose rock or soil that could pose a hazard by falling or rolling from an excavation face?
29 CFR 1926.651(j)(1)
19. Are employees protected from excavated or other materials or equipment that could pose a hazard by falling or rolling into excavations?
29 CFR 1926.651(j)(2)
20. Is each employee in an excavation protected from cave-ins by an adequate protective system designed in accordance with 1926.652(b) and (c)?
29 CFR 1926.652(a)(1)
21. Do you prohibit excavation below the level of the base or footing of any foundation or retaining wall that could be reasonably expected to pose a hazard to employees?
29 CFR 1926.651(i)(2)
22. If sidewalks, pavements, or appurtenant structures have been undermined, is a support system or another method provided to protect employees from the possible collapse of such structures?
29 CFR 1926.651(i)(3)
23. Do you provide protection by placing and keeping excavated or other materials or equipment at least 2 feet from the edge of excavations, or by the use of retaining devices, or by a combination of both if necessary?
29 CFR 1926.651(j)(2)
24. Are employees prohibited to work on the faces of sloped or benched excavations at levels above other employees, if employees at the lower levels are not adequately protected from the hazard of falling, rolling, or sliding material or equipment?
29 CFR 1926.652(f)
25. Are employees protected from the hazard of cave-ins when entering or exiting the area protected by shields?
29 CFR 1926.652(g)(1)(iii)
26. Do you prohibit employees from being in shields when the shields are being installed, removed, or moved vertically?
29 CFR 1926.652(g)(1)(iv)

Excavations: Emergency Rescue—Construction

Y N N/A

27. Is emergency rescue equipment, such as breathing apparatus, a safety harness and line, or a basket stretcher, readily available where hazardous atmospheric conditions exist or could reasonably be expected to develop during work in an excavation?

29 CFR 1926.651(g)(2)(i)

28. Is this emergency rescue equipment attended when it is in use?

29 CFR 1926.651(g)(2)(i)

Excavations: Warning Systems—Construction

Y N N/A

29. Is a warning system used when mobile equipment is operated adjacent to an excavation when the equipment is required to approach the edge of an excavation and the operator does not have a clear and direct view of the excavation?

29 CFR 1926.651(f)

Excavations: Atmosphere—Construction

Y N N/A

30. In excavations greater than 4 feet deep, where an oxygen deficiency or a hazardous atmosphere exists or could reasonably be expected to exist, is the atmosphere tested before employees enter the excavations?

29 CFR 1926.651(g)(1)(i)

31. Are adequate precautions taken to prevent employee exposure to atmospheres containing less than 19.5 percent oxygen and other hazardous atmospheres?

29 CFR 1926.651(g)(1)(ii)

32. Are adequate precautions taken, such as providing ventilation, to prevent employee exposure to atmospheres containing a concentration of a flammable gas in excess of 20 percent of its lower flammable limit?

29 CFR 1926.651(g)(1)(iii)

33. When controls are used that are intended to reduce the level of atmospheric contaminants to acceptable levels, is testing conducted as often as necessary to ensure that the atmosphere remained safe?

29 CFR 1926.651(g)(1)(iv)

Excavations: Water—Construction

Y N N/A

34. Where water is controlled or prevented from accumulating by use of water removal equipment, is the water removal equipment and operations monitored by a competent person to ensure proper operation? O

29 CFR 1926.651(h)(2)

35. Where excavation work interrupts the natural drainage of surface water, are suitable means used to prevent surface water from entering the excavation, and provide adequate drainage of the area adjacent to the excavation?

29 CFR 1926.651(h)(3)

36. Are excavations subject to runoff from heavy rains inspected by a competent person to ensure compliance with 1926.651(h)(1) and (2)?

29 CFR 1926.651(h)(3)

37. Where the stability of adjoining buildings, walls, or other structures is endangered by excavation operations, are support systems such as shoring, bracing or underpinning provided to ensure the stability of such structures for the protection of employees?

29 CFR 1926.651(i)(1)

Excavations: Inspections—Construction

Y N N/A

38. Are daily inspections of the excavation, the adjacent areas, and protective systems made by a competent person for evidence of possible cave-in, or other hazardous conditions, before work and as needed throughout the shift?

29 CFR 1926.651(k)(1)

39. Is an inspection of the excavations, the adjacent areas, and protective systems made after every rainstorm or other hazard increasing occurrence?

29 CFR 1926.651(k)(1)

40. If the competent person finds evidence of a situation that could result in a possible cave-in or other hazardous conditions, are exposed employees removed from the hazardous area until the necessary safety precautions have been taken?

29 CFR 1926.651(k)(2)

Excavations: Requirements for Protective Systems—Construction

Y N N/A

41. Are materials and equipment used for protective systems free from damage or defects that might impair their proper function?

29 CFR 1926.652(d)(1)

42. Are manufactured materials and equipment used for protective systems maintained in a manner that is consistent with the recommendations of the manufacturer?

29 CFR 1926.652(d)(2)

43. Are manufactured materials and equipment used for protective systems used in a manner that prevent employee exposure to hazards?
29 CFR 1926.652(d)(2)
44. When material or equipment that is used for protective systems is damaged, does a competent person examine the material or equipment and evaluate its suitability for continued use?
29 CFR 1926.652(d)(3)
45. If a competent person can not assure that the material or equipment used for protective systems is able to support the intended loads or is otherwise suitable for safe use, is the material or equipment removed from service?
29 CFR 1926.652(d)(3)
46. Is material or equipment used for protective systems that is found to be damaged and has been removed from service evaluated and approved by a registered professional engineer before being returned to service?
29 CFR 1926.652(d)(3)
47. Are members of support systems securely connected together to prevent sliding, falling, kickouts, or other predictable failure?
29 CFR 1926.652(e)(1)(i)
48. Are support systems installed and removed in a manner that protects employees from cave-ins, structural collapses, or from being struck by members of the support system?
29 CFR 1926.652(e)(1)(ii)
49. Do you make certain that individual members of support systems are not subjected to loads exceeding those which those members are designed to withstand?
29 CFR 1926.652(e)(1)(iii)
50. Before temporary removal of individual members is begun, are additional precautions taken to ensure the safety of employees, such as installing other structural members to carry the loads imposed on the support system?
29 CFR 1926.652(e)(1)(iv)
51. Does removal of members from the support system begin at, and progress from, the bottom of the excavation?
29 CFR 1926.652(e)(1)(v)
52. Are members released slowly so as to note any indication of possible failure of the remaining members of the structure or possible cave-in of the sides of the excavation?
29 CFR 1926.652(e)(1)(v)



53. Does backfilling progress together with the removal of support systems from excavations?

29 CFR 1926.652(e)(1)(vi)



54. Are members of the support system closely coordinated with the excavation of trenches?

29 CFR 1926.652(e)(2)(ii)



55. Do you make certain that shield systems are not subjected to loads exceeding those which the system is designed to withstand?

29 CFR 1926.652(g)(1)(i)



56. Are shields installed in a manner to restrict lateral or other hazardous movement of the shield in the event of the application of sudden lateral loads?

29 CFR 1926.652(g)(1)(ii)



57. Is excavation of material to a level no greater than 2 feet below the bottom of a shield system prohibited if there are indications while the trench is open of a possible loss of soil from behind or below the bottom of the shield system?

29 CFR 1926.652(g)(2)