

# SAFETY WALKAROUND CHECKLIST TRENCHES & EXCAVATIONS


2001

Date Prepared: \_\_\_\_\_

By: \_\_\_\_\_

Project Name/No: \_\_\_\_\_

Location: \_\_\_\_\_

- Check the box if the statement is true.
- Fill in the blanks where the  appears.
- Citations in brackets are from Title 8 of the California Administrative Code.

## NOTES

### HAZARD IDENTIFICATION

- The company has a written Injury and Illness Prevention Program (IIPP) that meets all Cal/OSHA requirements. It includes identification of trenching and excavation hazards on the site, regular inspections, accident investigation, and correction of hazardous conditions. [1509]

### PERMIT

- A Cal/OSHA permit has been obtained for any trenching or excavating job over 5 feet deep if workers will enter. [341(a)(1)]
- Sloping or benching for excavations greater than 20 feet deep follows Cal/OSHA specifications **or** was designed by a professional engineer. [1541.1(b) and Appendix B]

### THE COMPETENT PERSON

- A “competent person” is on site to identify hazards. [1504 and 1541(k)(1)]



Name of competent person: \_\_\_\_\_

- If the competent person finds evidence of a hazard, workers are removed from the dangerous area. [1541(k)(2)]
- No one enters a trench or excavation unless the competent person is on site.

- The competent person has knowledge of testing procedures for hazardous atmospheres. [1541(k)(1)]
- The competent person has knowledge of soil classification, has classified the soil, and has determined the appropriate type of cave-in protection and required slope. [1541.1 Appendix A]

## **PROTECTIVE SYSTEMS**

- Workers are protected from cave-ins in all excavations by an adequately designed protective system. (A protective system is not required if the excavation is made entirely in stable rock, or if the excavation is less than 5 feet deep and the competent person finds no indication of a potential cave-in.) [1541.1(a)(1)]
- Work is done only in areas protected by sloping and benching, a support system, a shield system, etc. [1541.1(b), (c), and (g)]
- Installation of the support system is closely coordinated with excavation of the trench. [1541.1(e)(2)(B)]
- Material and equipment used for protective systems are the right size, in good condition, and free of defects. [1541.1(d)(1)]
- Members of support systems are securely connected together and are not subjected to loads beyond their capacity. [1541.1(e)]
- Workers are protected from cave-ins, structural collapse, or accidentally being hit during installation and removal of the support system. [1541.1(e)(1)(B)]
- Removal of shoring or other protective systems starts at the bottom of the excavation. Members are released slowly so structural failures will be noticed. [1541.1(e)(1)(E)]
- Backfilling progresses with the removal of support systems from excavations. [1541.1(e)(1)(F)]
- Workers are instructed not to climb on shoring or bracing. [1509]

## **INSPECTIONS**

- The competent person inspects (a) every day before work, (b) after every rainstorm, and (c) as needed, for evidence of possible cave-ins, failure of systems, hazardous atmospheres, etc. [1541(k)]
- There is no accumulated water in trenches or excavations where employees work, unless special precautions are taken. Water is removed safely, monitored by the competent person. The competent person is aware of the water table and natural drainage. [1541(h)]

- There are no tension cracks, sloughing (small cave-ins), or bulging in trench walls or in the ground near trenches or excavations. [1541(k) and 1541.1 Appendix B]
- There is no bending or buckling of shoring. (If there is any damage, call a registered professional engineer.) [1541(k)]
- There has been no change in weather affecting soil moisture since the last inspection by the competent person. [1541(h) and (k)]

### **LOOKOUT**

- Nobody works in a trench without a lookout standing by.

### **HAZARDS—UNDERGROUND, OVERHEAD, SURFACE**

- Underground utility installations in the area (such as electrical, phone, gas, sewage, water, and fuel lines) have been identified. [1541(b)]
- Utility owners have been notified at least two working days prior to digging. [1541(b)(2)]
- While an excavation is open, underground utility lines are protected, supported, or removed as necessary. [1541(b)(4)]
- Workers are not permitted underneath a load handled by lifting or digging equipment. [1541(e)]
- No workers are permitted above others on sloped/benched faces unless those below are protected from falling material. [1541.1(f)]
- There is adequate protection from loose rock on the face of a trench or excavation. (Protection may include scaling to remove loose material, or erection of a barricade.) [1541(j)(1)]
- Hazards from vehicle or equipment vibration have been corrected. [1541.1 Appendix A(d)(1)(G)]
- Support systems have been installed wherever the stability of adjoining buildings, walls, or other structures is endangered by excavation operations. [1541(i)(1)]
- No excavation is done below the level of the base or footing of any foundation or retaining wall unless the structure is supported. [1541(i)(2)]
- Sidewalks and roads are supported if undermined. [1541(i)(3)]
- Spoil, tools, material, and equipment are kept at least two feet from the edge. If not, they are kept in place by retaining devices. [1541(j)(2)]

- Protection is provided for mobile equipment which approaches the edge of an excavation. (Protection may include barricades, hand or mechanical signals, or stop logs) Where possible, the grade of vehicle paths slopes away from the excavation. [1541(f)]

**ACCESS TO TRENCHES AND EXCAVATIONS**

- Ladders, stairs, ramps, or other means of access are no more than 25 feet from any worker in a trench 4 feet or more deep. [1541(c)(2)]
- Structural ramps used solely by workers are designed by a competent person; ramps for equipment are designed by a competent person qualified in structural design. [1541(c)(1)]
- Walkways or bridges with standard guardrails are provided where employees or equipment cross over excavations that are deeper than 6 feet and wider than 30 inches. [1541(l)(1)]
- There are adequate barriers (warning signs, barricades, covers) to prevent unauthorized entry into a trench or excavation. [1541(l)(2)]
- All remotely located trenches, excavations, wells, pits, etc. are barricaded or covered. [1541(l)(2)]
- Temporary wells, pits, shafts, etc. are backfilled as soon as exploration or similar operations are completed. [1541(l)(2)]

**CONFINED SPACES AND HAZARDOUS ATMOSPHERES**

- Excavations are classified as confined spaces if dangerous air contamination or oxygen deficiency may exist **and** it is difficult for workers to exit. (If there are such areas, Cal/OSHA has strict requirements for confined spaces which must be followed on the site.) [5158]



*Confined spaces on this site:* \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

- If digging over 4 feet deep near a landfill or in a known toxic area, testing is done for potential hazardous atmospheres (such as lack of oxygen, or the presence of toxic, flammable, or explosive substances). [1541(g)(1)]

**PERSONAL PROTECTIVE EQUIPMENT**

- Hard hats, protective boots or shoes, goggles, protective clothing, and protective gloves are available and used as required by employees entering trenches, excavations, and confined spaces. Protective equipment is appropriate for the work and provides adequate protection. [3380–3385]
- If respirators are used on the site (for example, in confined spaces) the company has a written Respiratory Protection Program. [5144(c)]
- Workers exposed to vehicle traffic wear bright orange warning garments (shirts, vests, jackets). In rainy weather, they wear orange or yellow raingear. [1590(a)(5), 1598(c), and 1599(d)]

**HOUSEKEEPING**

- Adequate lighting exists if working at night. [1523]
- All work areas are free of tripping hazards. [1513]
- Means of access are kept clear at all times. [1513]