



# OSHA INSTRUCTION

U.S. DEPARTMENT OF LABOR

Occupational Safety and Health Administration

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**DIRECTIVE NUMBER: CPL-02-00-161**

**EFFECTIVE DATE: 10/1/2018**

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**SUBJECT:** National Emphasis Program on Trenching and Excavation

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## ABSTRACT

**Purpose:** This instruction, *National Emphasis Program on Trenching and Excavation*, describes policies and procedures for continued implementation of an OSHA National Emphasis Program (NEP) to identify and to reduce hazards which are causing or likely to cause serious injuries and fatalities during trenching and excavation operations.

**Scope:** This instruction applies OSHA-wide.

**References:** 29 CFR 1926, Subpart P – Excavations  
CPL 02-00-160, Field Operations Manual (FOM), August 2, 2016.

**Cancellations:** This instruction will supersede CPL 02-00-069, Special Emphasis: Trenching and Excavation, September 19, 1985, 100 days after this NEP becomes effective. Enforcement under CPL 02-00-069 shall continue during the pre-enforcement outreach period in Section XI of this instruction.

**State Impact:** Notice of Intent and Adoption required. See paragraph VII.

**Action Offices:** National, Regional, Area, and State Plan Offices.

**Originating Office:** Directorate of Construction (DOC).

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By and Under the Authority of

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Deputy Assistant Secretary

## **Executive Summary**

This instruction provides updated guidance to Occupational Safety and Health Administration's (OSHA) national, regional, area, and State Plan offices for continued implementation of an OSHA National Emphasis Program (NEP) to reduce or eliminate workplace hazards associated with trenching and excavation operations. In 1985, OSHA implemented CPL 02-00-069 - Special Emphasis: Trenching and Excavation, in response to the continuing incidence of trench/excavation collapses and accompanying loss of life. In light of the recent resurgent number of trenching/excavation fatalities and serious injuries, the agency has determined that these worksites continue to warrant an increased enforcement presence.

## **Significant Changes**

This updated instruction continues support for compliance assistance and inspection programs related to the implementation of a NEP for trenching and excavation operations. Specifically, it:

- Replaces CPL 02-00-069 - Special Emphasis: Trenching and Excavation;
- Provides a national reporting system for all OSHA trenching and excavation inspections by updating guidance for recording trenching and excavation inspections in OIS;
- Establishes the requirement for each Area Office/Region to develop and implement outreach programs in support of this emphasis program. These programs should include providing compliance assistance material to excavation employers, permitting and other municipal organizations, industry associations, equipment rental organizations, water works supply companies and major/local plumbing companies.

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**I. Purpose.**

This instruction describes policies and procedures for continued implementation of a NEP to reduce or eliminate workplace hazards associated with trenching/excavation operations.

**II. Scope.**

This instruction applies OSHA-wide. All inspections of trenching and excavation operations will be reported pursuant to this NEP.

**III. References.**

- A. [Department of Labor Agency Priority Goal - Worker Safety: Reduce Trenching and Excavation Hazards.](#)
- B. [29 CFR Part 1904](#), Recording and Reporting Occupational Injuries and Illnesses.
- C. [29 CFR Part 1926, Subpart P](#) - Excavations; Final Rule 54 FR 45894-45991, October 31, 1989, and as amended.
- D. [29 CFR Part 1926](#), Safety and Health Regulations for Construction.
- E. [29 CFR Part 1960](#), Basic Program Elements for Federal Employee Occupational Safety and Health Programs and Related Matters (and [Executive Order 12196](#), Section 1-201).
- F. [CPL 02-00-025](#), Scheduling System for Programmed Inspections, January 4, 1995.
- G. [CPL 02-00-051](#), Enforcement Exemptions and Limitations under the Appropriation Act, May 28, 1998, or successor guidance.
- H. [CPL 02-00-087](#), Inspection Procedures for Enforcing the Excavation Standard, 29 CFR 1926, Subpart P, February 20, 1990.
- I. [CPL 02-00-135](#), Recordkeeping Policies and Procedures Manual (RKM), December 30, 2004.
- J. [CPL 02-00-160](#), Field Operations Manual (FOM), August 2, 2016.
- K. [OSHA Technical Manual \(OTM\), Section V, Chapter 2](#) - Excavations: Hazard Recognition in Trenching and Shoring.
- L. OSHA OTI Training Course #3015 - Excavation, Trenching, and Soil Mechanics [https://www.osha.gov/dte/edcenters/course\\_description.html#3015](https://www.osha.gov/dte/edcenters/course_description.html#3015).

**IV. Cancellations.**

This instruction will supersede CPL 02-00-069, Special Emphasis: Trenching and Excavation. September 19, 1985, 100 days after this NEP becomes effective. Enforcement under CPL 02-00-069 shall continue during the 100 day outreach period in Section XI of this instruction.

**V. Expiration Date.**

This instruction will remain in effect until canceled, or superseded by another instruction or notice.

**VI. Action Offices.**

- A. Responsible Office. Directorate of Construction (DOC), Office of Construction Services (OCS).
- B. Action Office. OSHA Regional Administrators, Area Directors, State Plan Designees, and National Office Directors must ensure that the policies and procedures set forth in this instruction are followed. Regional Administrators also must ensure that Consultation Program Managers in their regions are informed of the requirements of this instruction and encourage the involvement of On-Site Consultation programs in compliance assistance activities for trenching/excavation operations.

**VII. State Plan Impact - Notice of Intent and Adoption Required.**

- A. This instruction describes a federal program change which updates OSHA's NEP covering trenching and excavation operations. States with OSHA-approved State Plans are expected to have enforcement policies and procedures in place for their trenching and excavation inspections which are at least as effective as those in this instruction.
- B. OSHA-approved State Plans are required to notify OSHA within 60 days whether they intend to adopt policies and procedures identical to those in this instruction or adopt or maintain different policies and procedures.
- C. If a State Plan adopts or maintains policies and procedures that differ from federal policies and procedures, the State Plan must identify the differences and may either post its policy on its website and provide the link to OSHA or submit an electronic copy to OSHA with information on how the public may obtain a copy. If the State Plan adopts policies and procedures that are identical to federal policies and procedures, the State Plan must provide the date of adoption to OSHA. State Plan adoption must be accomplished within 6 months, with posting or submission of documentation within 60 days of adoption. OSHA will provide summary information on the State Plan responses to this instruction on its website at: [www.osha.gov/dcsp/osp/index.html](http://www.osha.gov/dcsp/osp/index.html).

## **VIII. Background.**

- A. Because of the continuing incidence of trench/excavation collapses and accompanying loss of life, the agency has determined that these worksites continue to warrant an increased enforcement presence. OSHA has long maintained that employees exposed to potential cave-ins must be protected before the excavation face is in imminent danger of collapse, because OSHA believes that there is a potential for a collapse in virtually all excavations. [54 FR 45894, 45895, 45927]
- B. Trenching and excavation work exposes workers to extremely dangerous hazards. According to the Census of Fatal Occupational Injuries (CFOI) data, published by the Bureau of Labor Statistics (BLS), there were 130 fatalities recorded in trenching and excavation operations between 2011 and 2016. The private construction industry accounted for 80%, or 104, of those fatalities. An alarming 49% of those construction fatalities occurred between 2015 and 2016. In summary, of the 104 fatalities in this industry:
  - 1. 40 (38%) were at industrial places and premises;
  - 2. 39 (38%) were at private residences; and
  - 3. 21 (20%) occurred at streets or highways.
- C. OSHA believes that the rate of deaths and serious injuries resulting from trenching and excavation incidents (mostly collapses) can be significantly reduced if OSHA concentrates resources to effectively engage trenching and excavation operations through both enforcement and compliance assistance activities.
- D. The construction scheduling procedures outlined in the FOM can be used to schedule inspections of trenching and excavation operations. However, these operations tend to begin and end quickly and must be inspected while they are ongoing. Consequently, the following procedures are prescribed for scheduling excavation inspections.

## **IX. Procedures.**

- A. Compliance Safety and Health Officers (CSHOs) shall initiate inspections under this NEP whenever they observe an open trench or an open excavation, regardless of whether or not a violation is readily observed. These observations may occur during the course of their normal work-day travel or while engaged in programmed or un-programmed inspections. Trenching and excavation operations will also be assigned for inspection as the result of incidents, referrals, and complaints.

- B. When CSHOs observe trenching or excavation operations but are unable to begin an immediate inspection (i.e., responding to an incident, etc.), they shall notify the area office of their observations. CSHOs will provide the area office with the following information:
1. The name, address and/or location of the worksite;
  2. The state and condition of the operation, including any apparent serious hazards; and,
  3. The name of contractor performing the operation (if known), and the number of workers observed;
  4. Because trenching and excavations are often of a short duration, CSHOs will also attempt to document the conditions of the trench/excavation through photographs and sketches.
- C. When CSHOs observe trenching or excavation operations, they shall attempt to contact the area office to obtain supervisory authorization to begin an immediate inspection.
- D. If the CSHO cannot contact the area office (i.e., no cellular phone service or land-line) to get authorization, the CSHO will begin an immediate inspection of the trench and associated activities provided this activity will not interfere with higher priority inspections or assignments. In these cases, the CSHO will give highest priority to preventing further employee exposure if trenching or excavation hazards were observed.
- E. Any unprotected trench or excavation that is brought to the attention of the Area Office shall be evaluated, and, if appropriate, inspected (i.e., referrals from city inspectors, DOT and other third parties).
- F. Whenever an inspection is initiated under this NEP on the basis of a CSHO self-referral, the CSHO shall include in the case file narrative a description of the circumstances which prompted the inspection. The case file shall indicate if supervisory consent for the inspection was obtained prior to the start of the inspection, or an explanation why this consent was not obtained.
- G. During all programmed safety and health inspections (such as national, regional or local emphasis programs), and during all un-programmed inspections (incidents, complaints and referrals), CSHOs will observe the surrounding area for open trenches or excavations and conduct an inspection under this NEP if any are present.
- H. The scope of inspections scheduled under this NEP will be in accordance with the

Field Operations Manual.

- I. Inspections under this NEP shall normally be limited to evaluating worker exposure to safety and health hazards associated with the excavation. However, a CSHO may expand the scope of an inspection if other safety and health hazards or violations are observed in plain view and/or brought to their attention. CSHOs shall follow the guidelines in the FOM when expanding the scope of any inspection (Chapter 3.III.B.).
- J. At the end of each NEP inspection, the CSHO will provide the employer with information concerning trenching and excavation hazards. For example, the CSHO may give the employer the website address for OSHA's excavation standards and related outreach materials, or provide copies of OSHA publications (resource dependent).

**X. Recording in OIS.**

- A. All enforcement activities (inspections, complaints, and referrals) conducted under this NEP must be coded with the NEP code, "TRENCH," entered in the OIS. Consultation request/visit forms will also be completed with the NEP code "TRENCH."
- B. All consultation activities (Request, Visit, and Compliance Assistance) conducted in response to this NEP will also be coded "TRENCH" into OIS.
- C. Enforcement and consultation activities related to trenching and excavation hazards under other NEPs and/or LEPs must be coded for all the NEPs and LEPs. For example, consultation activities related trenching and excavation hazards conducted under the Amputations NEP must be coded "AMPUTATE" as well as "TRENCH."

**XI. Outreach.**

- A. Each Area Office/Region must develop and implement a comprehensive excavation safety outreach program for 90 days prior to initiating inspections under this revised NEP. Enforcement under CPL 02-00-069 will continue during the pre-enforcement outreach period. Area Offices and Regions are encouraged to continue outreach efforts after the 90 day outreach period has concluded. Suggested outreach activities are as follows:
  - 1. Letters, news releases by local and national news organizations, and trade magazines can assist with disseminating information about this NEP.
  - 2. Conduct outreach activities such as seminars/informational sessions for employer groups, trade associations, as well as worker groups (this would



include national and local unions).

3. Provide outreach material to local licensing / permitting and other municipal agencies for distribution to employers when they request dig permits.
4. Provide outreach material to underground utilities, water works supply companies, and major/local plumbing companies for distribution to employers.
5. Provide outreach material to industry associations and equipment rental organizations for distribution to membership and clients.
6. Collaborate with OSHA State Plan and cooperative program participants, including Voluntary Protection Programs, Strategic Partnership, and Alliance Program participants, to share success stories and technical information concerning effective means of controlling, reducing or eliminating excavation hazards.
7. Collaborate with OSHA On-Site Consultation programs on strategic approaches for assisting employers with trenching and excavation safety at worksites.

B. OSHA compliance assistance resources for this industry include:

1. [Trenching and Excavation Safety - OSHA 2226-10R 2015](#).
2. Trenching and Excavation Safety OSHA Fact Sheet - DOC FS-3476 September 2011 ([English](#)) and DOC FS-3480 September 2011 ([Spanish](#)).
3. Working Safely in Trenches OSHA Quick Card - OSHA 3243-09R 2011 ([English](#) and [Spanish](#)).
4. “Protect Workers in Trenches” OSHA Poster - OSHA 3215-06R 2018 ([English](#)) and OSHA 3255-06R 2018 ([Spanish](#)).
5. [OSHA Construction eTool - Trenching and Excavation August 2014](#) ([English](#) and [Spanish](#)).
6. [OSHA v-Tool - Excavations in Construction/Trenching](#).
7. [OSHA v-Tool - Excavations in Construction/Soil Classification](#).
8. [Heat Stress Safety and Health Topics Page](#).
9. [Construction Focus Four Topics Page](#).
10. Common Ground Alliance’s Best Practices guide <http://commongroundalliance.com/programs/best-practices>.

- C. Area Offices should consider establishing Partnerships and Alliances with groups representing employers and workers in the trenching and excavation industry to share information concerning effective means of controlling and reducing employee exposures. Some examples include:
1. NUCA - National Utility Contractors Association
  2. NAXSA - North American Excavation Shoring Association
  3. IUOE - International Union of Operating Engineers
  4. APCA - American Pipeline Contractors Association
  5. AEM - Association of Equipment Manufacturers
  6. AWWA - American Water Works Association
- D. Small businesses should contact their local OSHA On-Site Consultation program for assistance. OSHA On-Site Consultation Program offers no-cost and confidential safety and health services to small- and medium-sized businesses in all 50 states, the District of Columbia, and several U.S. territories, with priority given to high-hazard worksites. Consultants from local agencies or universities work with employers to identify workplace hazards, provide advice for compliance with OSHA standards, and assist in establishing and improving safety and health programs. On-Site Consultation services are separate from enforcement and do not result in penalties or citations. To locate the OSHA On-Site Consultation program nearest you, call 1-800-321-OSHA (6742) or visit [www.osha.gov/consultation](http://www.osha.gov/consultation).