OSHA Excavation Update
NAXSA Trench Safety Summit

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Directorate of Construction
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Occupational Safety and Health Administration

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Agenda

- OSHA?
- Why focus on excavation?
- Data
- Standards
- NEP
- OSHA's Compliance Directive
- Trenching and Excavation Resources

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What is OSHA’s Mission?

Assure America's workers have safe and healthful working conditions free from unlawful retaliation.

- Setting and enforcing standards
- Training, outreach, education, and assistance
- Working collaboratively with our state OSHA programs
- Enforcing anti-retaliation provisions of the OSH Act and other federal whistleblower laws

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Why Focus on Trenching?

- **Excavating is recognized as one of the most hazardous construction operations.**
- **Cave-in is the number one excavation hazard.**

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OSHA OIS Inspection Data

Top 10 Violations in Construction (10/1/24 - 3/31/25)

Standard	Total Violations	Serious Violations	Willful Violations	Repeat Violations
1926.501 - Fall Protection	3,260	2,559	77	559
1926.1053 - Ladders	1,302	1,143	3	87
1926.503 - Fall Protection Training	1,021	689	6	90
1926.451 - Scaffolds	973	877	4	37
1926.102 - Eye and Face Protection	930	802	1	106
1925.20 - General S & H Provisions	443	329	0	37
1926.100 - Head Protection	414	373	0	26
1926.453 - Aerial Lifts	313	270	0	19
1926.1153 - Respirable Silica	313	263	0	4
1926.502 - Fall Protection Systems Criteria and Practices	295	255	0	6

BLS – FY 2023 Construction Fatalities

Violent Acts	24
Transportation Incidents	240
Explosions and Fires	17
Falls, Slips, Trips	421
Harmful Substances/Environments	200
Contact Incidents	148
Total	**1,075**

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Trench Collapse Fatalities

- 2017: **24** fatalities
- 2018: 13 fatalities
- 2019: 21 fatalities
- 2020: 18 fatalities
- 2021: 15 fatalities
- 2022: **39** fatalities
- 2023: 15 fatalities
- 2024: 15 fatalities
- 2025: 8 (through April 8th)

Source OIS (Trench Collapses Only, Fed & State), Calendar Year

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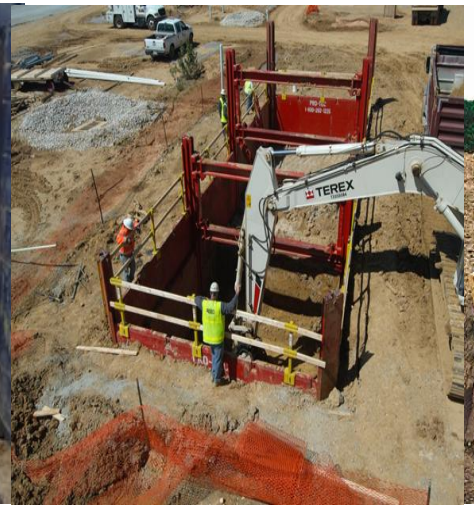
National Emphasis Program for Trenching





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National Emphasis Program for Trenching

- Increase safety awareness in trenching and excavation work;
- Reinforce the value of using proven protective measures … sloping, benching, shoring and shielding; and
- Prevent future trenching injuries and fatalities through balanced Enforcement and Compliance Assistance

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National Emphasis Program for Trenching

- **Enforcement**
  - Increase of hazards corrected
  - National Emphasis Program Inspections
    - *Compliance Directive for the Excavation Standard became effective July 7, 2021*
    - *A revised OSHA National Emphasis Program for Trenching became effective on October 1, 2018*
      - *Enforcement*
      - *Compliance Assistance*

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National Emphasis Program for Trenching

- **Compliance Assistance**
  - Consultation Program requests
  - Area Office Outreach programs
  - Online tools

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Excavation Contractor
Second degree manslaughter

- 07.22.22 – Trench collapse occurs in Vernon, CT
  - 8’ in depth, and no means of egress provided
- 1.19.23 – OSHA issues 3 Willful violations
- 11.30.23 – Formal Settlement Agreement reached on violations
- 3.3.23 – Owner and Foreman each charged with one count 1st degree manslaughter and one count of reckless endangerment
- 4.4.25 – Owner and Foreman plead guilty to 2nd degree manslaughter
- Sentencing scheduled for 5.16.25

News Brief

U.S. Department of Labor | March 17, 2023

Investigations by Department of Labor, Vernon Police lead to first-degree manslaughter charges in Connecticut trench fatality

Employer, equipment operator also face first-degree reckless endangerment

Incident: Fatal trench collapse in Vernon, Connecticut

Date: July 22, 2022

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1926.651(j) Specific Excavation Requirements

- Protect workers from loose rock & soil as well as equipment rolling into the excavation
- Spoil at least 2 feet away, or retained, or both

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1926.651(k) Specific Excavation Requirements

- Daily inspections made by Competent Person prior to workers entering in a trench
- Prior to start of work and repeated as necessary
- After every rainstorm
- After any hazard increasing occurrence
- If a hazard exists, the employees are removed until conditions are safe for the employees to re-enter the excavation

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1926.651(h) Specific Excavation Requirements

- Precautions are required before working with water in excavations.
- Competent Person (CP) must monitor control measures.
- If diverting surface water the CP must take steps to prevent the water from re-entering trench.

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Compliance Directive for the Excavation Standard

- CPL 02-00-165
- Effective Date: 7/1/2021
- Provides inspection procedures for the enforcement Subpart P
- Applies OSHA-wide
- Provides useful abatement information for the private sector

OSHA INSTRUCTION

U.S. DEPARTMENT OF LABOR — Occupational Safety and Health Administration

DIRECTIVE NUMBER: CPL 02-00-165	**EFFECTIVE DATE:** 7/1/21
SUBJECT: Compliance Directive for the Excavation Standard, 29 CFR 1926, Subpart P	

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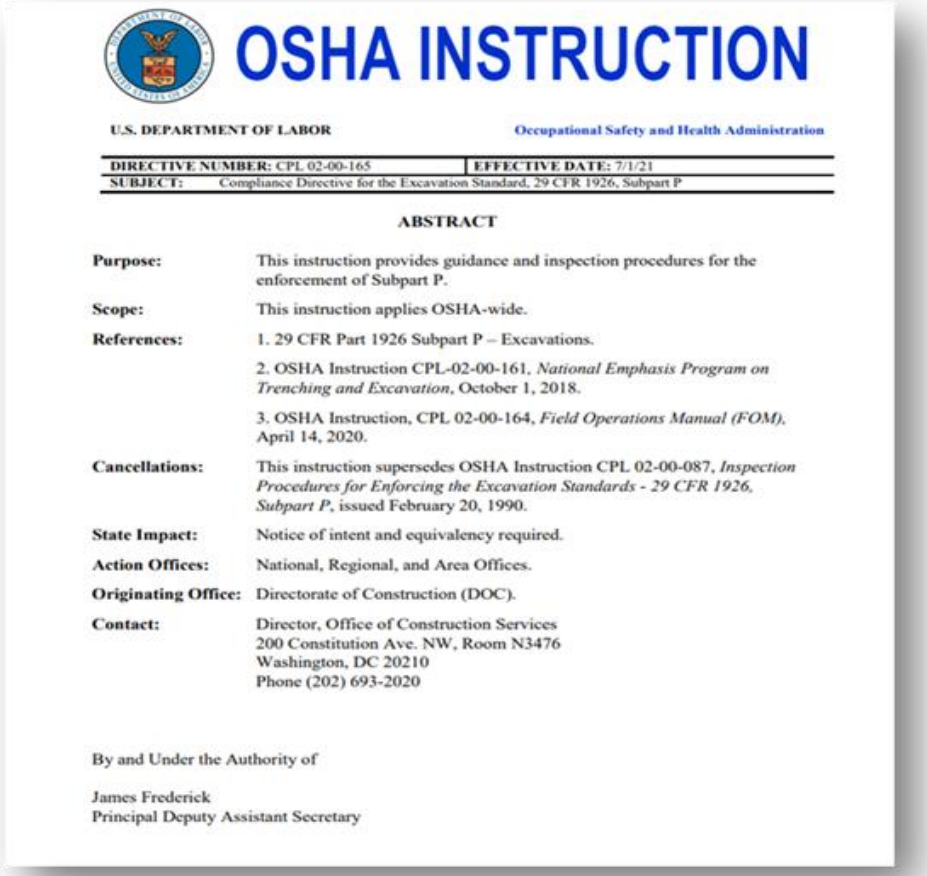
OSHA's Compliance Directive for the Excavation Standard



OSHA INSTRUCTION

U.S. DEPARTMENT OF LABOR — Occupational Safety and Health Administration

DIRECTIVE NUMBER: CPL 02-00-165	EFFECTIVE DATE: 7/1/21
SUBJECT: Compliance Directive for the Excavation Standard, 29 CFR 1926, Subpart P	

ABSTRACT

Purpose: This instruction provides guidance and inspection procedures for the enforcement of Subpart P.

Scope: This instruction applies OSHA-wide.

References: 1. 29 CFR Part 1926 Subpart P – Excavations.

2. OSHA Instruction CPL-02-00-161, *National Emphasis Program on Trenching and Excavation*, October 1, 2018.

3. OSHA Instruction, CPL 02-00-164, *Field Operations Manual (FOM)*, April 14, 2020.

Cancellations: This instruction supersedes OSHA Instruction CPL 02-00-087, *Inspection Procedures for Enforcing the Excavation Standards - 29 CFR 1926, Subpart P*, issued February 20, 1990.

State Impact: Notice of intent and equivalency required.

Action Offices: National, Regional, and Area Offices.

Originating Office: Directorate of Construction (DOC).

Contact: Director, Office of Construction Services
200 Constitution Ave. NW, Room N3476
Washington, DC 20210
Phone (202) 693-2020

By and Under the Authority of

James Frederick
Principal Deputy Assistant Secretary

- **Who is this CPL for?**
- **Why?**
- **How do I use it?**

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Inspection and Citation Guidance
Scope, Application, & Definitions

- **Summary of scope**
- **Trench or Excavation?**

NOTE: Subpart P applies to trench and excavation hazards, even if the work activity being performed inside the excavation is considered a general industry task. See, for example, OSHA's February 26, 2013, letter of interpretation concerning the applicability of Subpart P to burial vaults:

https://www.osha.gov/laws-regs/standardinterpretations/2013-02-26

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Inspection and Citation Guidance Chapter – Elements

2. § 1926.651(b). Underground Installations.

Establishes minimum criteria regarding the employer's responsibility to locate and address utility installations reasonably expected excavation operations.

Underground installations include all types of utility abandoned, including sewer, telephone, fuel (gas or

Inspection Guidance

Determine whether the employer has complied with the requirements to locate and address utility installations:

- Inspect the excavation to determine if underground installations are/were present

photos of utility installations
ations.

e employer has contacted 811
to locate underground

Citation Policy

a. § 1926.651(b)(1). If the locations of utility installations were not estimated prior to opening the excavation, consider a violation of § 1926.651(b)(1).

b. § 1926.651(b)(2). If the utility company or owner was not contacted within established or customary local response time to communicate the project scope and request utility location, consider a violation of § 1926.651(b)(2). If the utility company or owner could not respond within 24 hours (or longer

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Inspection and Citation Guidance Chapter – Elements

NOTE: As contemplated in the preambles to the Proposed Rule and Final Rules for Subpart P (Excavations), OSHA does not consider "probing with hand tools" a safe and acceptable means to locate utility installations unless used in conjunction with detection equipment. However, the following letter of interpretation establishes that that non-conductive hand tools, hydro-vacuum excavation equipment, or other technologies may constitute "safe and acceptable means" when used with appropriate caution.

Standard Interpretation, October 23, 2003 - Use of hydro-vacuum excavation equipment and other acceptable means to locate underground utility installations.

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Inspection and Citation Guidance Chapter - Specific Excavation Requirements

1926.651(c)

- Access and egress
- Structural ramps

NOTE: OSHA does not consider lifting equipment to be a "safe means of egress" under § 1926.651(c)(2). For example, employees riding in a backhoe bucket is not safe egress to either enter or exit trench excavations.

Aluminum forms are also not to be used as egress, as they do not permit a quick and easy means of escape in case of an emergency. See, for example, OSHA's May 11, 2004, letter of interpretation concerning the use of aluminum forms as an exit route from trench excavations:

https://www.osha.gov/laws-regs/standardinterpretations/2004-05-11-0

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Inspection and Citation Guidance
Inspections by a Competent Person

- **1926.651(k)(1) vs (k)(2)**
- **1926.651(k)(2) or 1926.652(a)(1)**

NOTE: Interplay between § 1926.651(k)(2) and§ 1926.652(a)(1). The purpose of an inspection performed by a competent person under § 1926.651(k)(1) is to verify that protective systems have not been compromised or that new hazards have not developed. For example, if shoring is used, the competent person should conduct inspections to ensure that shoring remains in good condition. If no protective system has been selected by the employer and employees are exposed to cave-in hazards, do not cite § 1926.651(k)(2). Rather, a citation for failure to have a protective system under § 1926.652(a)(1) should be cited by itself and not grouped with § 1926.651(k)(2). (See additional discussion of citations under § 1926.652(a)(1) below).

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Inspection and Citation Guidance Chapter-
Requirements for Protective Systems

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Inspection and Citation Guidance Chapter- Requirements for Protective Systems

1926.652(a) -Protection of Employees in Excavations

- Does the excavation consist entirely of stable rock? How did the employer come to that conclusion?
- What is the soil type in the excavation?
- What is the depth/width of the excavation?
- Who is the competent person? Did the competent person evaluate the soils and the protective systems in place?
- Is there a protective system in place? Was the system designed in accordance with 1926.652(b) or 1926.652(c)?

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Inspection and Citation Guidance Chapter- Requirements for Protective Systems

1926.652(a) -Protection of Employees in Excavations

Citation Policy

- 1926.652(a)(1) vs. 1926.652 (a)(2)
- 1926.652(a)(1) vs. 1926.652(b) or (c)
- 1926.652(a)(1) vs. 1926.651(k)(2)

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Inspection and Citation Guidance
1926.652 Citation Policy

1926.652(a)(1) vs. 1926.651(k)(2)

- 652(a)(1) Each employee in an excavation shall be protected from cave-ins by an adequate protective system designed in accordance with paragraph (b) or (c) of this section except when:
  - Excavations are made entirely in stable rock; or
  - Excavations are less than 5 feet (1.52m) in depth and examination of the ground by a competent person provides no indication of a potential cave-in.
- .651(k)(2) Where the competent person finds evidence of a situation that could result in a possible cave-in, indications of failure of protective systems, hazardous atmospheres, or other hazardous conditions, exposed employees shall be removed from the hazardous area until the necessary precautions have been taken to ensure their safety.

Inspection and Citation Guidance
1926.652 Citation Policy

§ 1926.652(e)(2). Additional Requirements for Support Systems for Trench Excavations.

Note: The requirements in § 1926.652(e)(2) apply only to trenches.

1926.652(e)(2)(i).

This section allows excavation up to 2 feet (.61 m) below bottom of the members of a trench support system if it is designed to resist forces calculated for the full depth of the trench and there are no indications of soil loss from behind or below the bottom of the support system. Otherwise, excavating below the bottom of the members of a trench support system is prohibited. Employers wishing to excavate deeper than 2 feet below the support system must comply with § 1926.652(c)(4), which requires design by a registered professional engineer.

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Links to Appendices

XII. Links to Appendices to Subpart P.

Appendix A to Subpart P - Soil Classification

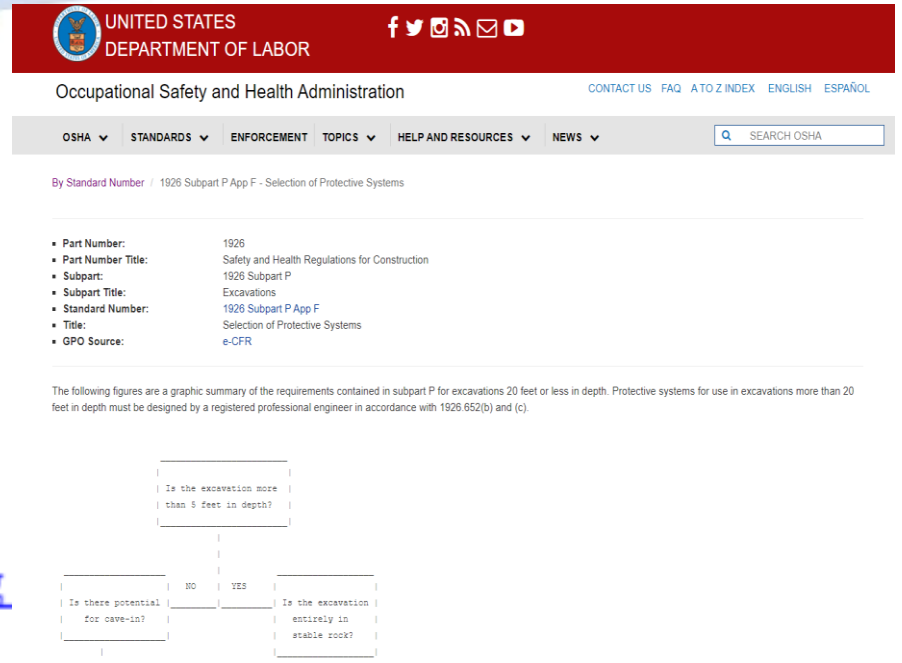
Appendix B to Subpart P - Sloping and Benching

Appendix C to Subpart P - Timber Shoring for Trenches

Appendix D to Subpart P - Aluminum Hydraulic Shoring

Appendix E to Subpart P - Alternatives to Timber Shoring

Appendix F to Subpart P - Selection of Protective Systems



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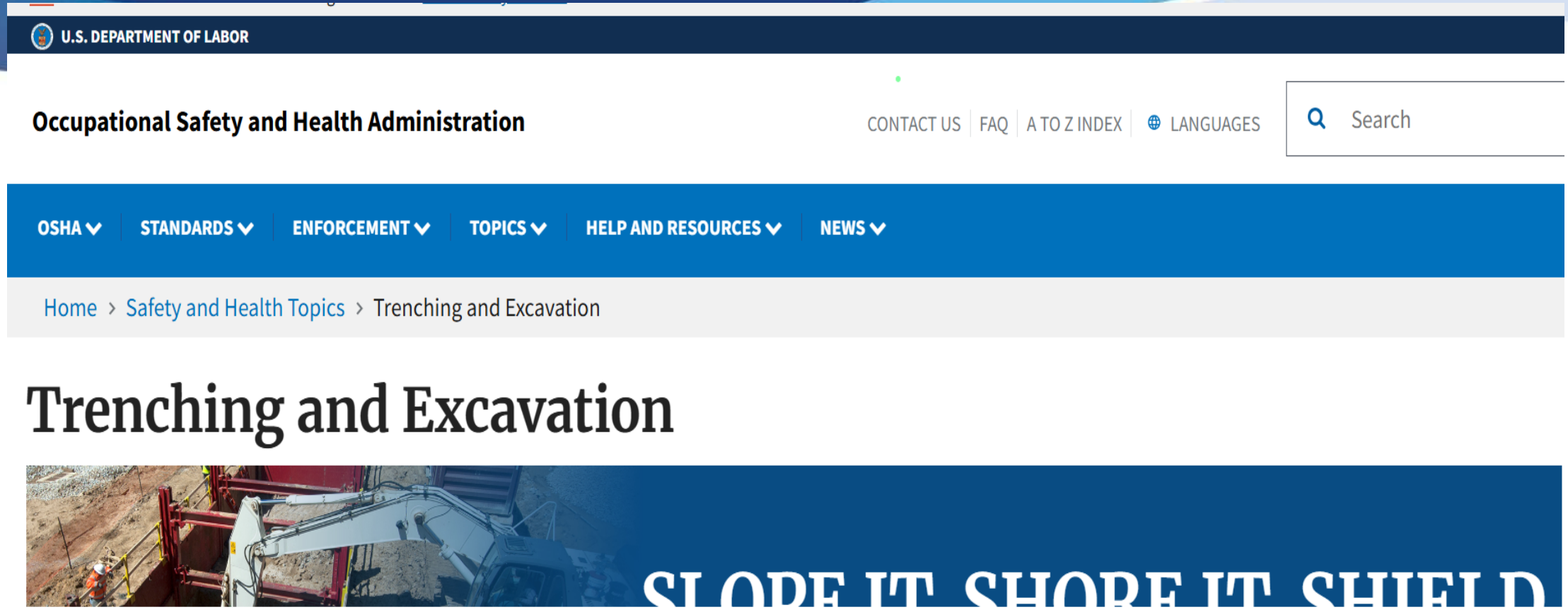
OSHA's Trenching and Excavation Webpage



https://www.osha.gov/trenching-excavation

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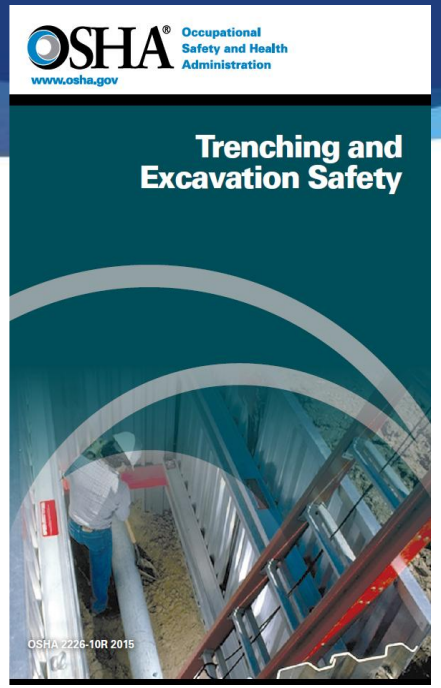
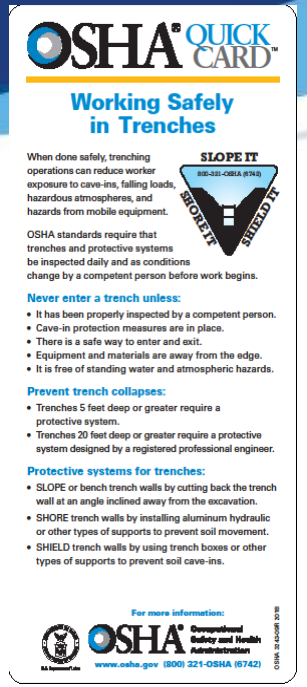
Trenching and Excavation Resources





Trenching and Excavation Toolkit

SLOPE IT
800-321-OSHA (6742)
SHORE IT
SHIELD IT

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OSHA V-Tools

- 5 Things You Should Know to Stay Safe in a Trench
- Excavations in Construction: Soil Classification
- Excavations in Construction: Trenching

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