

## Civil/Structural Engineering Competency 2.5

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**Competency 2.5** Civil/structural engineering personnel shall demonstrate a familiarity level knowledge of the Occupational Safety and Health Act (OSHA).

### 1. Supporting Knowledge and Skills

- a. Discuss how the Occupational Safety and Health Act applies to and impacts Department civil/structural engineering programs.
- b. Identify the requirements contained in the Occupational Safety and Health Act that form the basis of authority for civil/structural engineering personnel in the oversight and management of Department facilities.

### 2. Self-Study Activities (corresponding to the intent of the above competency)

Below are two web sites containing many of the references you may need.

Web Sites		
Organization	Site Location	Notes
Department of Energy	<a href="http://wastenot.inel.gov/cted/stdguido.html">http://wastenot.inel.gov/cted/stdguido.html</a>	DOE Standards, Guides, and Orders
OSHA	<a href="http://www.osha-slc.gov/">http://www.osha-slc.gov/</a>	OSHA documents and search engine
U.S. House of Representatives	<a href="http://law.house.gov/cfr.htm">http://law.house.gov/cfr.htm</a>	Searchable Code of Federal Regulations

**Read** *Fundamentals of Industrial Hygiene*, Chapter 1, "Federal Regulations."

**Scan** the *Occupational Safety and Health Act* (OSHA), Public Law 91-956, Section 19, Federal Agency Safety Programs and Responsibilities.

**Scan** 29 CFR 1910, *General Industry Standards* and 29 CFR 1926, *Construction Standards*.

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**Scan** Department of Energy (DOE) Order 5483.1A, *Occupational Safety and Health Program for DOE Contractor Employees at Government-Owned, Contractor-Operated Facilities*.

EXERCISE 2.5-A Discuss how the *Occupational Safety and Health Act* applies to Department civil/structural engineering programs.

EXERCISE 2.5-B According to DOE Order 5483.1A, Section 3. “Scope,” who is covered by the Order?

EXERCISE 2.21-C Identify the requirements contained in the *Occupational Safety and Health Act* that form the basis of authority for civil/structural engineering personnel in the oversight and management of Department facilities.

### 3. Summary

The *Occupational Safety and Health Act* was passed by Congress in 1970 and became effective in 1971. The DOE excluded itself from the provisions of the act, based on the fact that DOE exercised statutory authority to prescribe and enforce safety and health standards at its facilities. Under Secretary of Energy James Watkins, DOE was committed to meet all OSHA requirements and to open its facilities to external audits if necessary. DOE further committed itself to an equivalent protection program under DOE Order 5483.1A, *Occupational Safety and Health Program for DOE Contractor Employees at Government-Owned, Contractor-Operated Facilities*. Recent changes in the federal laws and regulations bring DOE directly under the OSHA and impose personal liabilities on DOE employees. As such, it is important for DOE Civil/Structural engineering professionals to demonstrate familiarity with basic OSHA principles and requirements relating to their facilities and programs.

### 4. Exercise Solutions

EXERCISE 2.21-A Discuss how the Occupational Safety and Health Act applies to Department waste management programs.

ANSWER 2.21-A OSHA, Public Law 91-956, Section 19(a), states that “It shall be the responsibility of the head of each federal agency to establish and maintain an effective and comprehensive occupational safety and health program which is consistent with the standards. . . .”

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EXERCISE 2.21-B According to DOE Order 5483.1A, Section 3. "Scope," who is covered by the Order?

ANSWER 2.21-B The provisions of the Order apply to all elements of DOE and to DOE contractors whose contracts include the occupational safety and health contract clause. (NOTE: By extension, these same "elements" come under the OSHA.)

EXERCISE 2.21-C Identify the requirements contained in the *Occupational Safety and Health Act* that form the basis of authority for waste management personnel in the oversight and management of Department facilities.

ANSWER 2.21-C OSHA, Public Law 91-956, Section 19(5) requires the agency head to make an annual report to the Secretary with respect to the agency's program under this section.