
Title 210 – National Engineering Handbook
Part 645 – Construction Inspection
Subpart D – Construction Safety and Health
November 2024

645.30 Introduction

- A. Worker safety and health is the top priority on all construction jobsites, regardless of whether the personnel are NRCS employees, the public, or contractors. Safety must be a constant concern for all personnel on construction projects, from the preconstruction meeting throughout the project life until completion. The actions of NRCS personnel can positively impact project safety.
- B. This subpart covers the following:
 - 1. The NRCS quality assurance (QA) inspector’s role in monitoring and documenting construction safety and health issues. Their roles and responsibilities depend on the type of contract.
 - 2. The contractor’s responsibilities.
 - A. The NRCS personnel’s authority to take corrective action and actions they must take to address safety and health issues.
 - 3. The NRCS safety requirements that govern safety and health on NRCS work.
 - 4. The specific sampling and testing requirements necessary to ensure compliance with the requirements.
 - 5. The required records and reports for documenting safety and health issues.

645.31 Safety in Construction Activities

- A. The Occupational Safety and Health Administration (OSHA) is the regulating agency that enforces the law as it relates to the safety and health of America’s workers. OSHA’s charge ensures “no contractor (or employer) shall require any laborer or mechanic employed in the performance of the contract to work in surroundings or under working conditions which are unsanitary, hazardous, or dangerous to their health or safety.”
- B. OSHA codified their regulations in Title 29 of the Code of Federal Regulations, based on the Williams-Steiger Act. Chapter XVII, OSHA, Parts 1903, 1904, 1910, and 1926 cover construction safety regulations. It is most important for the QA inspector to be familiar with OSHA Parts 1910 and 1926. This subpart covers the basics of those parts in section 645.34.

- C. OSHA regulations apply to all employers. OSHA Part 1975.4 (a) defines an employer as anyone with one or more employees. OSHA Part 1975.4 (b)(2) states that any person engaged in an agricultural activity employing one or more employees comes within the definition of an employer under the Act. However, members of the immediate family of the farm employer are not employees under this definition. This does not mean NRCS personnel are not concerned about the safety and health of anyone not classified by OSHA as an employee.
- D. QA inspectors must be familiar with OSHA regulations. NRCS must comply with OSHA regulations for its own employees, including the use of personal protective equipment (PPE). See Title 210 Manual “Engineering,” Part 512 “Construction,” Subpart G “Safety” for the NRCS policy on PPE and safety training.
- E. Additional requirements regarding safety and health standards for non-NRCS employees can be found in Title 110 General Manual Part 402 “Safety and Health Standards for Non-NRCS Employees, Subpart B “Contracts, Projects and Technical Assistance.” This subpart addresses construction related service contracts, project work arrangements and work completed under land treatment programs whether NRCS-awarded or sponsor-awarded. It particularly addresses who is responsible for enforcement of safety requirements and the responsibility of NRCS employees to require the contracting entity to correct significant safety violations or withdraw assistance until the issue has been corrected.

645.32 Responsibility and Authority

A. Contractor Responsibilities

- 1. The contractor must oversee and ensure that healthy and safe conditions prevail on the jobsite and that jobsite conditions and work practices meet the required standards for safety and health. The contractor must also:
 - a. Comply with all applicable requirements of OSHA, and in particular OSHA Parts 1910 and 1926.
 - b. Provide education and training in safety and health for employees.
 - c. Furnish first aid and medical attention for those injured on the jobsite.
 - d. Keep records of accidents and injuries.
 - e. Submit required accident and injury reports.
- 2. The contractor must keep unauthorized persons away from hazardous activities on the jobsite. If the contractor allows visitors on the jobsite, they must supply them with hard hats and other required and appropriate PPE to protect them from jobsite hazards. The contractor must also restrict any visitor movement around the jobsite to ensure their safety.

B. General Responsibilities of NRCS Personnel

- 1. NRCS personnel must verify that the contractor and landowner fulfill their safety and health responsibilities. To do so, NRCS personnel must know the applicable regulations and understand their contractual duties and responsibilities on the jobsite. On a Federally awarded contract, the QA

inspector is responsible to verify the contractor meets the safety regulations. On a non-Federally awarded contract, the contracting local organization (CLO) is responsible for safety. NRCS employees must be attentive while on the project and notify the CLO immediately if a safety violation is observed.

2. The Construction Safety Checklist in appendix A is a guideline for conducting safety inspections. The checklist does not list every item, and every item listed may not apply to the current work. The QA inspector may have to complete some tests and inspections several times. As the QA inspector identifies problems and their corrections, they must document the facts of the item in the job diary. The checklist must be filed with the contract records.
3. The NRCS has adopted language and provisions to supplement the OSHA safety and health regulations. This supplement, called “NRCS Supplement to OSHA Parts 1910 and 1926” (hereafter referred to as the NRCS supplement), is part of all NRCS contracts and most CLO contracts.
4. When a contract includes the NRCS supplement, NRCS personnel must verify the contractor is aware of the requirements before they begin the work.
5. For Federal construction contracts, NRCS personnel must review all safety and health requirements with the contractor before the work begins. The pre-construction (or post-award) conference is an appropriate opportunity for this review. NRCS personnel must also address specific safety issues during the performance of the work, as needed, to ensure the contractor follows the required safety and health standards. Everyone on the jobsite must wear a hard hat for head protection and as a reminder that safety is the top priority on the jobsite.
6. For non-Federal construction contracts, NRCS personnel should address safety and health issues with the local sponsor or owner and the contractor prior to the start of work and as the work progresses. On CLO construction contracts, the contract, the agreement, or both must clearly establish the party responsible for checking safety compliance. In most of these agreements, the local sponsor is usually responsible for safety compliance. In some agreements the NRCS may be responsible for checking safety compliance. Both the owner and the contractor must be aware of their responsibility to ensure that required standards of safety and health are always adhered to during the performance of the work. All parties should review the applicable OSHA sections to understand the governing regulations.
7. As a minimum, all parties involved in the day-to-day activities on the jobsite must be aware of first aid provisions and know where to quickly find local phone numbers for emergency services. These resources must be posted clearly at the contraction site for all to view.
8. When someone on a jobsite gets injured, any NRCS employee involved in the project can be named as a defendant in a tort claim regardless of the employee’s level of liability. Tort claims are claims against an entity by an injured person for the purpose of recovering damages. Employers typically

absolve individuals operating responsibly within the scope of their job and within their delegated contractual authority of claims against them. To help prevent accidents and receive absolution in tort claims, NRCS personnel must understand their responsibility and authority concerning safety and health and conduct themselves responsibly within their authority. Although the contracting officer (CO) is responsible to ensure the contractor's compliance with safety and health regulations and standards per the contract clauses, it is the QA inspector who is at the jobsite and acts as the eyes and ears of the CO.

C. Coordination with other Agencies

1. On any work in which the NRCS cooperates, there may be other Federal or state agencies involved. Many have their own safety and health standards and enforcement responsibilities. There may be inspectors from other agencies on the job who also have compliance authority and responsibility. NRCS personnel must still complete their own responsibilities and not rely on others. NRCS cooperates with other agencies for a total, effective effort.

D. NRCS Responsibilities and Authority by Contract Type

1. A contract governs all construction activities that involve payment for materials or services. Regardless of contract type or job size, worker protection from construction hazards is top priority. There are, however, variations in the way each type of contract addresses safety and health issues.
2. NRCS participates in conservation work under several types of working relationships, culminating most frequently in a non-Federal contract. NRCS responsibility to ensure compliance with safety and health standards and regulations may differ depending on the contract, grant, or agreement used to formalize each relationship. Although NRCS may not dictate the inclusion or language of safety-related contract clauses in non-Federal contracts, the contractor (or landowner acting as contractor) must still comply with OSHA standards and regulations. All contract participants—owner, contractor, and NRCS personnel—must comply with OSHA standards and regulations.

E. Safety in Federal Contracts

3. Federal construction contracts—Federal construction contracts contain Federal Acquisition Regulation (FAR) clause 52.236–13, entitled “Accident Prevention,” which requires the contractor to comply with OSHA Parts 1910 and 1926. NRCS contracts also contain the NRCS supplement.

- F. For Federal contracts, the CO has authority on all matters pertaining to the contract. However, the CO often delegates authority to the contracting officer's representative (COR) and the QA inspector to stop work whenever there is a significant safety violation. The CO delegates their authority by including the following, or similar, language in the appointment letters to the COR and the government QA inspector:

“You are authorized to notify the Contractor orally, with written confirmation, to take immediate corrective action to correct any condition which poses a serious or imminent danger to the health or

safety of the public and/or government personnel. See FAR 52.236–13(d). If after this notice the Contractor fails or refuses to promptly take the required corrective action, you are authorized to issue an order suspending all or part of the work, as appropriate, until satisfactory corrective action has been taken. You must keep the Contracting Officer informed daily of actions taken and the Contractor’s response. The Contracting officer will issue resume orders upon completion of satisfactory corrective action.”

- G. Federal contracts require the contractor to file a safety and health plan prior to starting work. The plan must include a job hazard analysis, as described in FAR 52.236-13 which describes the significant hazards to life, limb, and property inherent in the contract, and a plan for controlling these hazards. The plan must include provisions for frequent safety inspections or audits conducted by a competent person. The QA inspector must document the inspections and audits in writing and make them available to the CO or COR on request. They must include the name of the inspector, the date, all findings, how they identified the safety and health issues, and how the responsible party corrected the deficiencies. The QA inspector must track all issues and deficiencies, including the following information: the date they identified the issue, the nature of the issue, the person responsible for correcting the issue, and the projected resolution date. Refer to 210 M § 512 G for the job hazard analysis, the OSHA publication reference for this process, and the NRCS Job Hazard Analysis form.
- H. If the contract includes Construction Specification (CS) 94, Contractor Quality Control (CQC), the CQC staff, as part of their CQC responsibilities, must conduct and document daily safety and occupational health inspections in their daily quality control (QC) logs.
 - 1. If the QA inspector notes a safety violation on a jobsite, they must first inform the contractor’s CQC staff and supervisory staff (project manager or superintendent) of the violation. The QA inspector must then monitor whether the contractor addresses and corrects the violation. If it is a significant safety violation, the contractor must immediately stop all work related to the violation and take corrective action. Other safety violations may not require immediate work stoppage, but it is incumbent upon the contractor to take immediate action to correct any known safety violation. If the contractor fails to take corrective action within a reasonable time, the QA inspector should elevate the concern to the COR, government representative (GR), or CO. The inspector must document all activity related to the violation in the job diary.
- I. Safety in Non-Federal Contracts
 - 1. CLO contracts are construction contracts awarded and administered by a local sponsor. CLO contracts contain safety clauses and are subject to all applicable OSHA regulations on safety and health. If agreed to by the local sponsor, the CLO contract may contain the NRCS supplement, and the job hazard analysis requirements listed above. NRCS cannot dictate the use of additional safety and health standards like those contained in the NRCS supplement. If the

CLO assigns QA inspection responsibilities to NRCS, then the NRCS QA inspector must be present on the jobsite throughout the construction period and must check the jobsite to verify strict compliance with all applicable safety and health regulations.

J. Safety in Other Contract Types

1. Contracts are legal agreements between two entities and may be oral or written. Frequently, work performed by conservation contractors for individual landowners involves oral contracts. If there is a written contract, it normally has little job specific safety language. Even if these contracts contain no explicit safety clauses, OSHA standards still govern them. All work conducted as part of these contracts must abide by OSHA standards and regulations and applicable state and local laws.

K. On contracts between an owner and a contractor, the owner has authority on all contractual matters. Assisting NRCS personnel have no authority to stop work or take other corrective action with the contractor to address safety concerns. This does not mean NRCS personnel cannot take action to address safety concerns. Only the owner has sole authority to direct the contractor. NRCS personnel must inform the contractor and landowner of the safety concern so they can take corrective action. If the contractor does not address the concern and the owner fails to correct the deficiency, NRCS personnel shall inform the owner that the Federal government can withdraw assistance for failure to comply with safety regulations.

L. NRCS personnel must verify the contractor meets all applicable standards of safety and health regardless of the contract type or working relationship. NRCS personnel must also confirm that all parties understand the safety and health standards, including the owner, the contractor, and NRCS personnel.

645.33 Actions to Correct Safety Violations

B. When trying to decide what action to take concerning safety violations, it helps to classify the violation as either a violation of a condition of the contract or a significant safety violation.

1. Violation of a Condition of the Contract:

a. A violation of the contract's safety and health conditions may exist without posing an immediate threat to the owner, contractor, NRCS personnel, or the public. For example, a hard hat sign that does not meet the size requirement is a contract violation but does not pose an immediate threat to anyone. The contractor must correct such violations, but they do not have to shut down the entire project to do so. The contractor has a reasonable amount of time to correct the problem; normally one or two days. If a piece of equipment has a violation, such as a nonaudible backup alarm, the contractor must idle the equipment until they bring it into compliance with all safety requirements.

- b. For Federal contracts, the inspector may stop work on a project if the contractor fails to correct a violation within the given amount of time or repeatedly violates even minor safety requirements. In such cases, the inspector must notify the CO, who must issue the order to stop work in writing. The QA inspector does not normally have the authority to stop work for minor safety and health violations. Only the CO can provide written authorization for the work to resume.
- c. For non-Federal contracts, NRCS employees must be familiar with the contract or agreement for a CLO contract. They must verify that all applicable safety and health standards are clear to all participants. Violations must be reported to the local sponsor or contractor, depending on the terms of the contract or agreement. For contracts between landowners and contractors, the QA inspector will inform the landowner and contractor when violations occur. Any conversations with local sponsors, landowners, or contractors concerning violations of the safety standards must be documented. If the landowner and contractor ignore the safety standards or warnings of safety violations, the QA inspector shall elevate their concerns to their supervisor.

2. Significant Safety Violations

- a. Significant safety violations are violations of contract clauses, laws, and regulations, or a disregard for safety and health standards that lead to conditions that cause an imminent danger of serious injury or loss of life of the owner, contractor personnel, NRCS personnel, or the public. Some examples of significant safety violations are laborers working in a deep trench without shoring, laborers working on scaffolding or other heights without appropriate fall protection, incorrect handling of crane loads, or laborers working where they are in danger of an object or equipment striking them. NRCS personnel must take immediate action to address significant violations.
- b. When faced with significant safety violations on a Federal contract, one or more of the following actions must be taken:
 - (1) Immediately inform the contractor's supervisory staff of the violation.
 - (2) If the contractor has delegated the authority to stop the work and they fail to correct the problem immediately, the QA inspector must stop the work on all or part of the project.
 - (3) If the contractor has not delegated the authority to stop the work and they fail to correct the problem immediately, contact the COR. If the COR is not available, contact the CO or anyone else in a position of authority and request assistance.
 - (4) Always document actions in the job diary, including those of the contractor, and provide photographic documentation if possible.
- c. When faced with significant safety violations on a non-Federal contract, contact the GR or local sponsor safety representative. If the representative is not on site, ask the GR to immediately report the violation to the sponsor and the contractor's supervisory staff.

- d. On a contract between a contractor and a landowner, immediately inform both the contractor and the owner of the safety violation. If the contractor fails to immediately correct the problem, recommend to the landowner to stop the work until the contractor corrects the problem.
- e. If the landowner does not stop operations and the contractor continues working without correcting significant safety violations, the QA inspector should document the facts in the job diary, elevate the issue to their supervisor, and leave the jobsite. An NRCS official should then inform the landowner that NRCS will withdraw project funding.
- f. If the QA inspector cannot contact the landowner and the contractor continues working without correcting significant safety violations, the inspector can call local law enforcement authorities.
- g. Always document the facts in writing, including the actions of the landowner and contractor, and photographs, if possible.
- h. For non-Federal contracts, if the contractor continued working without correcting significant safety violations, the QA inspector should consult with their supervisor or GR, as applicable, concerning sending the documentation to OSHA.

645.34 Safety Requirements

- A. OSHA regulations govern all construction contracts in the United States. All Federal construction contracts, and most CLO construction contracts, also contain the NRCS supplement. These OSHA regulations and the NRCS supplement define the safety and health standards for NRCS construction work.
- B. There may be State and local laws or regulations governing safety and health that meet or exceed the minimum standards set forth by OSHA. Whenever there is a conflict between OSHA regulations, the NRCS supplement, and State and local laws, the regulation or law that is most stringent takes precedence.
- C. OSHA Regulation:
 - 1. NRCS personnel must ensure the owner, contractor, and other NRCS personnel understand OSHA Parts 1910 and 1926 requirements and that all workers perform their work in strict compliance with them and all other applicable regulations. Refer to the OSHA website for their requirements.
- D. OSHA Part 1910 provides safety and health regulations for general industry. The section applicable to construction is 1910.12—Construction Work, and includes:
 - 1. A statement that each employer must protect the employment and places of employment of their employees engaged in construction work by complying with Part 1926 standards.
 - 2. “Construction work” defined as work for construction, alteration, or repair, including painting and decorating.
- E. OSHA Part 1926

1. Part 1926 provides safety and health regulations for the construction industry. Several subparts contain more information about the standards. OSHA's eTools is a stand-alone, interactive, web-based training that includes tools on construction topics that are highly illustrated, use graphical menus and expert system modules, and enable users to answer questions and receive reliable advice on how OSHA regulations apply to their work site. Part 1926 provides:
 - a. Subpart A—General
 - (1) Provides the purpose, scope, and applicable policies;
 - (2) Describes variances, inspections, and rules or guidelines used throughout the construction regulations; and
 - (3) Addresses the right of entry in detail.
 - b. Subpart B—General Interpretations
 - (1) Provides interpretations that apply to construction work conducted under contract to all government agencies; and
 - (2) Explains how and when construction safety and health standards apply.
 - c. Subpart C—General Safety and Health Provisions
 - (1) Provides many general safety and health provisions;
 - (2) Requires the contractor to have an accident prevention program and jobsite inspections performed by competent persons;
 - (3) Provides requirements for first aid, housekeeping, illumination, fire protection and prevention, sanitation, egress, PPE, and emergency plans.
 - d. Subpart D—Occupational Health and Environmental Controls
 - (1) Provides requirements for:
 - (a) Medical services, including worker access to a medical professional;
 - (b) Sanitation, including worker access to toilets and washing facilities; and
 - (c) Dealing with harmful substances.
 - e. Subpart E—Personal Protective and Life Saving Equipment
 - (1) Describes the types of PPE according to work performed; and
 - (2) Provides PPE requirements for provision, training, and maintenance.
 - f. Subpart F—Fire Protection and Prevention
 - (1) Provides requirements for fire protection, fire prevention, flammable and combustible liquids, liquid petroleum, and temporary heating devices; and
 - (2) Requires a fire protection program when the work has fire potential.
 - g. Subpart G—Signs, Signals, and Barricades
 - (1) Provides the standards for signs and symbols to alert workers and the public of the presence of hazards.
 - h. Subpart H—Materials Handling, Storage, Use, and Disposal
 - (1) Provides requirements for materials storage, how to stack, rack, and secure them against falling or sliding, materials rigging, and safe disposal.

- i. Subpart I—Tools—Hand and Power
 - (1) Provides requirements for the safe use of both power and hand tools for both employer and employee-owned tools.
- j. Subpart J—Welding and Cutting
 - (1) Provides procedures and precautions for arc welding, gas welding, cutting, fire prevention, compressed gas cylinders, and welding materials; and
 - (2) Provides special attention to procedures for transporting, moving, and storing compressed gas cylinders and welding equipment like hoses, torches, and regulators.
- k. Subpart K—Electrical
 - (1) Provides regulations for installing and using electrical power on construction work sites, including temporary and permanent power.
- l. Subpart L—Scaffolds
 - (1) Provides requirements for scaffolds, strength capacities for scaffolds and components, platform specifications, guardrail and toe board requirements, and the work height that requires fall protection.
- m. Subpart M—Fall Protection
 - (1) Provides requirements for installing, constructing, and using fall protection. Workers need fall protection when there is an obvious danger at low height, or when working at a specific height above the ground. The only allowable exception is inspecting, investigating, or assessing the workplace before or after construction activities. It also mandates the need for overhead protection from falling objects.
 - (2) Subpart M does not cover work related to scaffolds, cranes, derricks, steel work tunneling, power transmission, or stairways and ladders.
- n. Subpart N—Helicopters, Hoists, Elevators, and Conveyers
 - (1) Provides requirements for helicopters, various types of hoists, elevators, and conveyors.
- o. Subpart O—Motor Vehicles, Mechanized Equipment, and Marine Operations
 - (3) Provides requirements for vehicles that operate on non-highway related jobsites.
- p. Subpart P—Excavations
 - (1) Provides requirements for open excavations and trenches.
 - (2) Provides specific procedures for protecting workers at depths greater than five feet below the ground surface that include:
 - (a) Protective systems for workers;
 - (b) Locating and protecting underground utilities inspections by a competent person;
 - (c) Potential for hazardous atmospheres in excavations;
 - (d) Danger of water; and
 - (e) Location of equipment, materials, and other structures adjacent to the excavation.
 - (3) Explains that excavation slope configurations and shoring requirements may vary depending on the soil type.

- (4) Provides requirements for the maximum allowable slope for a soil or rock deposit in a table. The slope reduction degree below the maximum allowable slope must be determined by a competent person to assure the slope achieves the reduction when surcharge loads from stored material or equipment, operating equipment, or traffic are present.
- (5) Provides figures that determine the configurations of sloping and benching systems for different types of soil.
- q. Subpart Q—Concrete and Masonry Construction
 - (1) Provides requirements for the premature removal of formwork, failure to brace masonry walls, failure to support precast panels, inadvertent operation of equipment, and failure to guard reinforcing steel; and
 - (2) Prescribes performance-oriented requirements.
- r. Subpart R—Steel Erection
 - (1) Provides the standards for structural steel assembly, bolting, riveting, fitting-up, and plumbing-up; and
 - (2) Provides requirements for using fall protection (safety nets) in steel erection.
- s. Subpart S—Underground Construction, Caissons, Cofferdams, and Compressed Air
 - (1) Provides standards for various types of underground construction and working in and around caissons and cofferdams;
 - (2) Provides requirements for personnel working in compressed air or pressurized environments; and
 - (3) Subpart S does not cover excavation and trenching operations (see subpart P) or underground electrical lines (see subpart V).
- t. Subpart T—Demolition
 - (1) Provides standards for activities associated with the demolition of structures.
- u. Subpart U—Blasting and Use of Explosives
 - (1) Provides requirements for handling and using explosives, including storage, transportation, and loading drill holes.
- v. Subpart V—Electric Power Transmission and Distribution
 - (1) Provides standards for above ground and underground electric transmission and distribution lines and equipment.
- w. Subpart W—Rollover Protective Structures; Overhead Protection
 - (1) Provides requirements for rollover protective structures (ROPS) and overhead protection.
- x. Subpart X—Stairways and Ladders
 - (1) Provides standards for all stairways and ladders used in construction, alteration, repair, and demolition.
- y. Subpart Y—Diving
 - (1) Provides requirements for dives and diving support operations within all waters in the United States, trust territories, District of Columbia, Commonwealth of Puerto Rico, and other United States protected islands.

- z. Subpart Z—Toxic and Hazardous Substances
 - (1) Provides specific standards for a select group of toxic or hazardous chemicals;
 - (2) Sets exposure limits and details acceptable work procedures; and
 - (3) Outlines workplace and environmental sampling requirements, sets PPE requirements, and prescribes the requirements for regulated work areas.
- aa. Subpart AA—Confined Spaces in Construction
 - (1) Provides requirements for permitting, training, duties, and emergency rescue for personnel working in confined spaces.
- bb. Subpart BB—RESERVED
- cc. Subpart CC—Cranes and Derricks in Construction
 - (1) Provides requirements for types, assembly, disassembly, general and power line safety, inspection, operation, signals, operators, and all other aspects of crane and derrick use in construction operations.

F. NRCS Job Hazard Analysis Form

- 1. The NRCS Job Hazard Analysis Form (see 210 NEM § 512.71 exhibit B), contains three sections for an analyst to conduct a job hazard analysis: task number and description, hazard type and description, and hazard remedy and control description. The analyst can control hazards through administration, engineering, or the use of PPE.
 - a. An example of an administrative remedy is changing the work requirements (contract, inspection, or testing) to remove personnel from the hazardous area or eliminate the hazard entirely.
 - b. An example of an engineering remedy is changing workers' means and methods on the site to reduce or eliminate the hazard.
 - c. An example of a PPE remedy is requiring PPE on site to reduce the hazard. NRCS policy in Title 120 General Manual "Administrative Services," Part 406 "Acquisitions," Subpart P "Purchasing Personal Protective Equipment" provides, or pays for, any PPE required by the job hazard analysis.

G. NRCS Supplement to OSHA Parts 1910 and 1926

- 1. The NRCS supplement, appendix F, requires contractors to adhere to additional specific safety items not covered by OSHA. It includes:
 - a. General Contractor Requirements
 - b. First Aid and Medical Facilities
 - c. Physical Qualifications of Employees
 - d. Personal Protective Equipment
 - e. Machinery and Mechanized Equipment
 - f. Ladders and Scaffolding

645.35 Construction Safety Checklist

- A. The Construction Safety Checklist, appendix A, guides the QA inspector's safety and health assessment of jobsite conditions and work practices. It is not an exhaustive list of all safety and health concerns and may not address all conditions on a construction site. The QA inspector should also use their own experience and knowledge of construction site hazards to guide their inspection.
- B. The Construction Safety Checklist references the safety and health standards that apply to each checklist item. The QA inspector should complete the checklist on a regular basis to ensure the contractor maintains the minimum safety measures throughout the project. Completing the checklist requires a walkthrough review of the work and the construction site.
- C. The QA inspector should document when they complete a safety checklist, document any action taken to correct safety violations in the job diary, share the safety checklists with the contractor's supervisory personnel, and file them with the contract documents.

645.36 Sampling and Testing

- A. The safety and health provisions in OSHA Parts 1910 and 1926 contain sampling and testing criteria to assess safety and health hazards. For example, hard hats, lanyards, gloves, and other PPE must meet specific American National Standards Institute standards. The OSHA criteria for health hazards, like exposure to dust, air contaminants, and loud noise, also have protocols for taking and analyzing jobsite samples. The contractor must perform the sampling and testing in compliance with these criteria. To monitor compliance, the QA inspector should be familiar with both the OSHA criteria and the OSHA allowable exposure limits.
- B. The OSHA regulations allow contractors to use safety measures that are different than those prescribed in the standards if the contractor can prove the alternate measures provide the same level of protection. Although it is allowable, NRCS personnel should discourage this practice. If the contractor proposes alternative safety measures, the QA inspector and the project engineer must collaborate with the contractor to develop an appropriate testing protocol and analysis procedure. Refer to the appropriate OSHA regulation subpart for the performance criteria the proposed safety measures must meet.
- C. Heavy equipment must be in good working order, not present safety or health hazards on the jobsite, and must meet the applicable minimum performance standards set forth in the Society of Automotive Engineers (SAE) Recommended Practices as required by OSHA Part 1926.602. The contractor must provide documentation of SAE compliance. The QA inspector is not responsible for testing items, like brake performance, on heavy equipment.

645.37 Records and Reports

- A. The inspector must record the daily construction safety activities in a job diary. If needed, they must also complete and submit an accident investigation report in addition to the job diary. Refer to Title 110 General Manual “Management,” Part 402 “Safety and Health Standards for Non-NRCS Employees,” and Title 360 General Manual “Human Resources,” Part 420 “Safety and Health Management Program,” for guidance and requirements on reporting construction related accidents.
- B. Accurate documentation for safety and health related items is crucial on the jobsite, especially in the case of legal proceedings, injury, or fatality. The inspector must record all safety and health items in the job diary, including:
 - 1. All safety and health hazards on the jobsite and any action taken to remedy those hazards.
 - 2. If the contract includes specific safety measures as line items, like fall protection systems or excavation shoring systems, record the type and estimated quantity installed.
 - 3. Any good housekeeping practices the contractor uses to ensure safe working conditions on the jobsite.
 - 4. Refer to appendix C for a sample job diary entry covering a safety inspection.
- C. OSHA requires the contractor to keep records of injury or illness incidents that occur on a jobsite. The OSHA forms include:
 - 1. Form 300—Log of Work-Related Injuries and Illnesses.
 - 2. Form 301—Injury and Illness Incident Report, includes data about how the injury or illness occurred.
 - 3. Form 300A—Summary of Work-Related Injuries and Illnesses, provides data for employers to calculate incidence rates.
- D. The contractor may keep all records on computers at a central location, or on alternative forms if the information is compatible, and produce the data when needed. The records must include a description of how the accident or illness exposure occurred, a list of the objects or substances involved, and an indication of the nature of the injury or illness and the part or parts of the body affected.
- E. In addition to the contractor’s records, the QA inspector should prepare a detailed accident investigation report with more information than OSHA requires. The inspector can then examine the information to identify trends or discover the root causes of most employee injuries. In accordance with 110 GM § 402 and 360 GM § 420, the inspector must examine every incident where a worker could have been injured and property or equipment could have been damaged. The contractor can learn from near misses to change their work practices and avoid a serious accident. Record the following on the accident report and in the job diary:

1. Who was involved.
2. Work activity taking place at the time of the incident.
3. Nature of the incident (what happened).
4. Reason for the incident (why did it happen).
5. What efforts will help prevent future incidents.

645.38 References

Reese, C.D., and J.V. Eidson. 1999. Handbook of OSHA Construction Safety and Health. CRC Press, LLC. Boca Raton, FL.

U.S. Department of Labor, Occupational Safety and Health Administration. Available at [OSHA](#)