

Part 512 – Construction

Subpart E – Equipment, Records, and Coordination

512.40 Engineering Equipment

A. Each State conservation engineer (SCE) must develop a list of engineering equipment that will be permanently assigned to each field or technical service office. Procedures must be established to ensure that all engineering equipment is periodically inspected for accuracy and serviceability (see Part 544, “Equipment” of this manual).

B. Specialty equipment may only be assigned to qualified individuals with the necessary skills and approvals to operate and maintain the equipment. This requirement includes, but is not limited to, survey-grade geospatial positioning system (GPS) survey equipment and portable nuclear gauges. Under the Nuclear Regulatory Commission license to USDA, nuclear gauge users are required to be qualified and have permits. The USDA entity responsible for nuclear safety is the Radiation Safety Division. Qualifications and permit requirements and other information can be found on their Web site at <https://www.dm.usda.gov/ohsec/rsd/index.htm>.

512.41 Records

A. Job Diary.—A job diary must be maintained to document the daily activities of contracts utilized to install conservation engineering practices or project elements and for all engineering job classes VI to VIII practices and projects. On engineering job approval classes I to V, details must be recorded in either the job diary or conservation assistance notes, hereafter referred to as a job diary.

- (1) The level of detail recorded directly corresponds to the complexity of the work and potential impacts upon public health and safety, and must be thorough enough to show that all aspects of the completed project meet the specifications or standards.
- (2) The SCE, contracting officer (CO), Government representative, or CO’s technical representative, individually or jointly, will determine which quality assurance (QA) personnel will maintain a job diary to record the progress and other elements of the project.
- (3) It may be beneficial on projects where construction activity is occurring at more than one location to have more than one diary to ensure important information is recorded. The job diary serves as a source of factual data related to the contractor’s performance in both quantity and quality.

B. Photographs.—The job diary must be supplemented with photographs to detail site conditions, quality of work, etc. Photographs may be digital or film, and should be clearly labeled with the date, project, and item being viewed.

C. Construction contracts that include Construction Specification (CS) 94, “Contractor Quality Control” (CQC), found in Title 210, National Engineering Handbook (NEH), Part 642, Chapter 2, will include specific testing and documentation and other requirements for the contractor.

512.42 Coordination Between Disciplines

A. The engineer or the technician responsible for onsite QA, or both, must ensure that items in the design report are addressed, and all recommended testing and examinations are properly completed as outlined in the QA plan. QA personnel must understand the design report and recognize potential variations during the construction phase. When variations from the design are detected on a Federal contract, the CO must be notified of the potential for a change. After notifying the CO, any design-

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related changes in the work must be reviewed and concurred with by the designer and an individual with appropriate job approval authority. The appropriate disciplines necessary to review potential variations must be contacted as early as possible to minimize delays in the performance of the work.

B. On contracting local organization (CLO) and private contracts where variations from design requirements or standards is noted, the NRCS personnel must inform the CLO or landowner and the appropriate line officer, as well as document the variations in the job diary or conservation assistance notes. The design engineer must also be notified.

C. On smaller projects (classes I–V), the QA process may be less rigorous. However, changes must meet the following requirements:

- (1) All parties involved must be aware of and concur with any changes prior to formalization as a modification.
- (2) Contract and program requirements continue to be satisfied.
- (3) The function of the project or practice being installed must not be impaired.