
UTAH DEPARTMENT OF TRANSPORTATION

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MATERIALS MOI PART 8 SECTION 1012 INDEPENDENT ASSURANCE OF LABORATORY EQUIPMENT AND QUALITY SYSTEMS MANUALS



An Independent Assurance Program, as required by *Code of Federal Regulation Title 23 Part 637*, is an independent verification of equipment, sampling, and testing procedures, which involves an effort separate and distinct from normal materials acceptance testing activities.

The IA program, as outlined in *Materials Manual of Instruction Part 8 Section 1012*, is system-based, rather than project-based, and managed by central QA and Region Materials personnel.

Each Region has an Independent Assurance Inspector (IAI), charged with tracking and conducting Independent Assurance activities in that region. System IA for laboratory qualification and equipment certification evaluates equipment used in quality acceptance activities.

Verification of equipment evaluation will be a minimum of once a year. Equipment utilized in quality acceptance activities will be evaluated in the IA split sample and proficiency sample activities. **It is the responsibility of the qualified lab to seek Independent Assurance. Failure to participate may result in suspension of qualifications as an approved lab.**

Laboratory equipment is to be evaluated under the *Laboratory Qualification Program, Materials Manual of Instruction Part 8 Section 1013*, and *Technician Independent Assurance Split Sample and Proficiency Sample Verifications, Materials Manual of Instruction Section 1012*. Laboratories must submit verification of compliance with MOI Section 1013 to the Quality Assurance Section yearly. A satellite laboratory's Quality System Manual will be inspected once a year for compliance by its umbrella laboratory. Equipment used in Quality Assurance activities will be used in Technician IA split-samples and/or proficiency samples at least once a year. If split sampling identifies equipment deviations, corrective action will be documented in the Quality Systems Manual.

Independent Assurance for equipment used in Quality Assurance activities is a combination of calibration checks, split-samples and proficiency samples. As outlined in MOI Section 1013, a Quality System Manual will include:

Organization and Policies

- Preparation date
- Legal name and address of the lab and main office, or company if different
- Names, affiliations, and positions of principal officers, owners, directors
- An organization chart showing relevant internal components. (Managing Engineers, Lab Supervisors, Technicians)
- A Quality System Policy Statement and Objectives

Staff

- Position descriptions for each technical operational.
 - Bio-sketches for supervisory technical staff.
 - A document describing methods of how staff competency is measured, including the frequency of evaluations for each technician, what position or employee is responsible to conduct the evaluations and maintain the records.
 - A form for recording training and competency including a location for the trainee name, the name of the evaluator, the test method evaluated and the dates and results.
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Equipment

- An inventory of major sampling, testing, calibration and verification equipment. The inventory shall include the name, date in service, condition when received, manufacturer, model and serial number of the equipment (or an identifying number assigned by the lab)
- A list for test equipment which requires calibration including the interval of calibration and a reference to the calibration procedure used (either the standard or in-house procedure), and the location of the calibration records.
- A document that describes the method by which calibrations are tracked and verified
- A list of all in-house calibration procedures
- Documents that establish the traceability of in-house equipment calibration standards

Test Records and Reports

- A document that describes methods used to produce test records and prepare, check and amend test reports.
- Contain typical test report forms

Sample Management

- A document describing procedures for sample identification, storage and retention and disposal of samples.

Diagnostic and Corrective Action

- A document describing participation in proficiency sample and on-site inspection programs, methods used to identify poor results and procedures to resolve deficiencies when they occur.

Internal Quality Systems Review

- A document describing the scope of internal quality system reviews.

Subcontracting

- A document describing the lab's policy and procedures for subcontracting.

Form A1 of MOI 1013 appendix is for inspecting and evaluating the Quality Systems Manual, this form is helpful in developing a Quality Systems Manual. For requirements of a Quality Systems Manual and form A1 see MOI Section 1013 at <http://www2.udot.utah.gov/index.php/m=c/tid=644>.

FHWA Report

The Region and Central Laboratories will submit an annual report to the Quality Assurance Section summarizing the results of the IA efforts in the Region and Central Laboratory. The Quality Assurance Engineer will submit an annual report to FHWA summarizing the results of the systems based IA program

WEBSITES:

UDOT TTQP: <http://www2.udot.utah.gov/index.php/m=c/tid=412>

UDOT Materials Quality Assurance Manual (MOI Part 8 Section 1012):
<http://www2.udot.utah.gov/index.php/m=c/tid=644>

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