

**U.S. DEPARTMENT OF ENERGY
OAK RIDGE OFFICE**



**OFFICE OF ASSISTANT MANAGER FOR
NUCLEAR FUEL SUPPLY**

**OFFICE/FACILITY-SPECIFIC
QUALIFICATION STANDARD**

**Revision 1
December 2007**

CONCURRENCE AND APPROVAL

The Department of Energy (DOE) Oak Ridge Office (ORO) Office of Assistant Manager for Nuclear Fuel Supply (AMNFS) is the sponsor for this AMNFS Office/Facility-Specific (OFS) Qualification Standard. The AMNFS organization is responsible for reviewing this qualification standard to ensure that the technical content is accurate and adequate for its intended application and for ensuring that the qualification standard is maintained current. Concurrence with this qualification standard by ORO management is indicated by the signatures below.

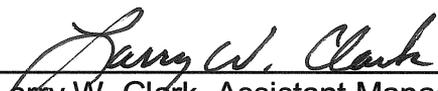
The Human Capital Assessment Group (HCAG) coordinates implementation of the Technical Qualification Program (TQP) and assists line managers in the development of ORO OFS qualification standards. Concurrence with this qualification standard by the Deputy Director of Human Resources is indicated by the signature below.

The ORO Federal Technical Capability Program (FTCP) Panel is the approval authority for this qualification standard and is indicated by the signature of the ORO FTCP Panel Chair below.

CONCURRENCE:



William J. (Jim) Vosburg, Deputy Director, ORO Human Resources Division 1-14-08
Date



Larry W. Clark, Assistant Manager for Nuclear Fuel Supply 12/31/07
Date

APPROVAL:



Larry C. Kelly, ORO FTCP Panel Chair 1-15-08
Date

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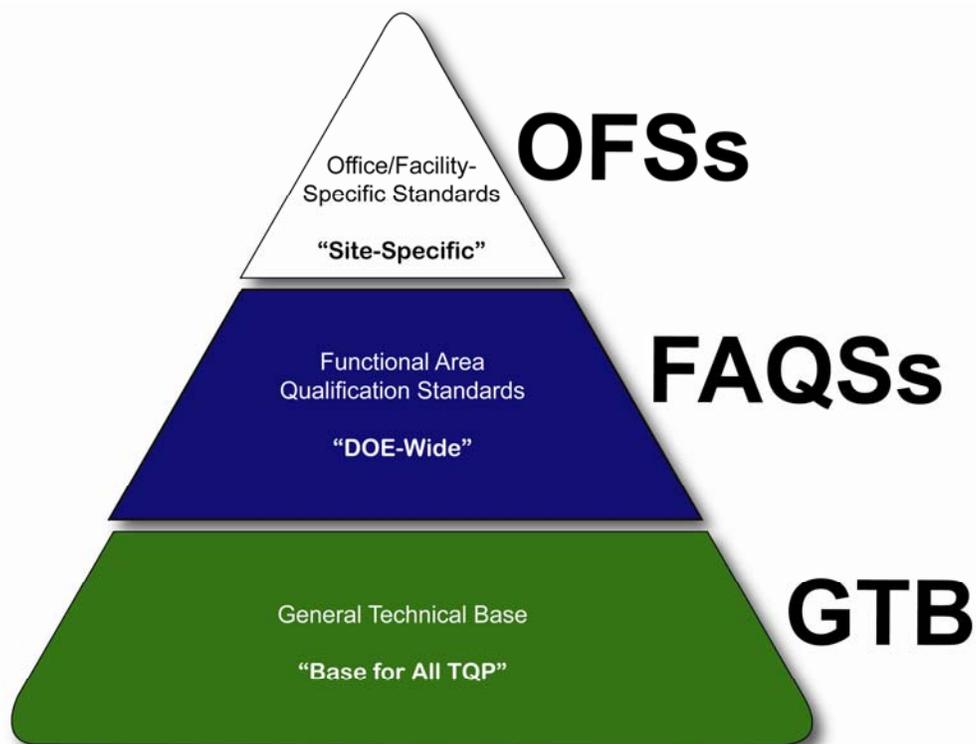
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PURPOSE

DOE M 426.1-1, *Federal Technical Capability Manual*, commits the Department to continuously strive for technical excellence. The Technical Qualification Program (TQP), along with the supporting technical qualification standards, complements the personnel processes that support the Department's drive for technical excellence. In support of this goal, the competency requirements defined in this technical qualification standard should be aligned with and integrated into the recruitment and staffing processes for technical positions. This OFS qualification standard contributes to the basis for developing vacancy announcements, qualification requirements, crediting plans, interviewing questions, and other criteria associated with the recruitment, selection, and internal placement of AMNFS personnel.

This ORO OFS qualification standard is required by DOE M 360.1-1, *Federal Employee Training Manual*, DOE O 360.1, *Federal Employee Training*, and DOE M 426.1-1, *Federal Technical Capability Manual*, as part of the TQP and as outlined in the illustration below, supplements the department-wide General Technical Base (GTB) qualification standard and Functional Area Qualification Standards (FAQSs).



APPLICABILITY

This ORO OFS qualification standard establishes common office/facility-specific area competency requirements for all ORO AMNFS personnel who provide assistance, direction, guidance, oversight, or evaluation of lessee/contractor technical activities that could impact the safe operation of DOE's nuclear and non-nuclear facilities.

IMPLEMENTATION

This ORO OFS qualification standard identifies the minimum technical competency requirements for DOE ORO AMNFS personnel. The competency statements define the expected knowledge and/or skill that an individual must meet. Each of the competency statements is further described by a listing of supporting knowledge and/or skill statements, which although not required, do describe the intent of the competency statements. In some cases, expected knowledge and/or skills have been designated as "Mandatory Performance Activities." These actions are not optional and can not be exempted.

Generally, TQP competencies identify a familiarity level, a working level, or an expert level of knowledge; or they require the individual to demonstrate the ability to perform a task or activity. These levels are defined as follows:

Familiarity level is defined as basic knowledge of or exposure to the subject or process adequate to discuss the subject or process with individuals of greater knowledge.

Working level is defined as the knowledge required to monitor and assess operations/activities, to apply standards of acceptable performance, and to recognize the need to seek and obtain appropriate expert advice (e.g., technical, legal, safety) or consult appropriate reference materials required to ensure the safety of Departmental activities.

Expert level is defined as a comprehensive, intensive knowledge of the subject or process sufficient to provide advice in the absence of procedural guidance.

Demonstrate the ability is defined as the actual performance of a task or activity in accordance with policy, procedures, guidelines, and/or accepted industry or Department practices.

Equivalencies should be used sparingly and with the utmost rigor and scrutiny to maintain the spirit and intent of the TQP. Equivalencies may be granted for individual competencies based on objective evidence of previous education, training, certification, or experience. Objective evidence includes a combination of transcripts, certifications, and in some cases, a knowledge sampling through a written and/or oral examination. Equivalencies shall be granted in accordance with the TQP Manual and the supporting knowledge and/or skill statements should be considered before granting equivalency for a competency.

Competencies can be achieved in numerous ways including on-the-job training; formal training and education courses, on and off the job; self-study; rotational assignments; mentoring; etc. Each fulfillment method, such as those below, is required to be documented.

- Formal education (college courses and academic degrees)
- Training (DOE, DOE contractor, other agency, vendor)
- DOE experience
- Equivalencies for prior experience, education, and training
- Documented oral evaluation
- Documented observation of performance
- Documented results of a written examination

EVALUATION REQUIREMENTS

The evaluation process identified below serves as a measurement tool for assessing whether or not the participants have acquired the technical competencies in this qualification standard. The following requirements apply to the completion of this qualification standard. Verifying and documenting that the competencies have been met may be accomplished by delegated management, or by a subject matter expert designated by ORO management. Any of the following methods may be used to evaluate a competency. Each evaluation method is required to be documented.

- Formal education (college courses and academic degrees)
- Training (DOE, DOE contractor, other agency, vendor)
- DOE experience/on-the-job training
- Equivalencies for prior experience, education, and training
- Documented oral evaluation
- Documented observation of performance
- Written examination (including test out)

Whoever performs the verification must provide some level of evaluation to confirm the participant's level of understanding when self study (of DOE orders, Federal and state/local regulations, procedures), or required reading is used to satisfy a competency. In all cases, the evaluation is documented by signature on the participant's Technical Qualification Record. Documented satisfactory completion of the competencies contained in this qualification standard ensures that the AMNFS personnel enrolled in the TQP are qualified to fulfill their duties and responsibilities.

AMNFS personnel input, track, and print completion reports on technical qualification competency information using DOE's web-based Employee Self Service (ESS), which is located at <http://mis.doe.gov/ess/>. Upon completion of the qualification standards, the completion reports are sent to the ORO HCAG for input into a centralized TQP Administration Module database.

Participants should read the TQP Manual posted on the HCAG web site prior to inputting information in ESS. The TQP Manual and other TQP resources are available through the HCAG web site at <http://www.ornl.gov/tdd/QualPrgm/qualprgm.htm>.

INITIAL QUALIFICATION, REQUALIFICATION, AND TRAINING

This ORO OFS qualification standard has been constructed using information from position descriptions, DOE and ORO orders, and discussions with incumbents. The format of this document follows the department-wide functional area qualification standards developed by the DOE Federal Technical Capability Program.

Qualification of AMNFS personnel shall be conducted in accordance with the requirements of DOE O 360.1 *Federal Employee Training*, DOE M 360.1-1, *Federal Employee Training Manual*, and DOE M 426.1-1, *Federal Technical Capability Manual*. Personnel are not required to requalify; however, they shall participate in continuing education and training as necessary to improve their performance and proficiency and ensure that they stay up-to-date on changing technology and new requirements. This continuing education and training shall be documented in the employees Individual Development Plan (IDP) and may include courses and/or training provided by:

- DOE
- Other government agencies
- Outside vendors
- Educational institutions

Beyond formal classroom or computer-based courses, continuing training may include:

- Self-study
- Attendance at symposia, seminars, exhibitions
- Special assignments
- On-the-job experience

DUTIES AND RESPONSIBILITIES

Specific duties and responsibilities of personnel who fulfill this ORO OFS are contained in each employee's position description. AMNFS personnel shall be qualified or participate in an IDP to perform the duties and responsibilities of their position description.

REQUIRED TECHNICAL COMPETENCIES

Each of the competency statements defines the level of expected knowledge and/or skill that an individual must possess to meet the intent of this standard. Each of the competency statements is further described by a listing of supporting knowledge and/or skill statements, which although not requirements, do describe the intent of the

competency statement. In some cases, expected knowledge and/or skills (at least one per working level and expert level competencies) have been designated as “Mandatory Performance Activities.” These actions are not optional.

Important Note: When regulations, DOE directives, or other industry standards are referenced in this OFS, the most recent revision should be used.

1. AMNFS personnel shall demonstrate a familiarity level of knowledge of the past basic operations and processes for facilities under AMNFS’s purview in accordance with assigned job duties.

Supporting Knowledge and/or Skills

- a. Discuss the primary mission of ORO and the purpose of the AMNFS facilities.
- b. Describe some of the key operations and/or processes performed at AMNFS facilities.
- c. Discuss the major nuclear safety risks to workers and the public resulting from operations at AMNFS facilities.
- d. Identify the primary non-nuclear hazards associated with operations at AMNFS facilities.

2. AMNFS personnel shall demonstrate a familiarity level of knowledge of Federal, State, and local regulations in accordance with assigned job duties.

Supporting Knowledge and/or Skills

- a. Identify the primary Federal, State, and local regulations that apply to AMNFS.
- b. Discuss the purpose and applicability of the identified regulations.
- c. Discuss the roles of the contractor/lessee and DOE personnel with regard to each of the above regulations.
- d. Describe and provide examples of effective interactions between DOE and the applicable Federal, State, and local agencies.

- 3. AMNFS personnel shall demonstrate a familiarity level of knowledge of the Lease Agreement's and associated regulatory documents between DOE and United States Enrichment Corporation (USEC) in accordance with assigned job duties.**

Supporting Knowledge and/or Skills

- a. Describe the major provisions of the Lease Agreements between DOE and USEC.
- b. Describe the lease turnover requirements of the Gaseous Diffusion Plant Lease.

- 4. AMNFS personnel shall demonstrate a familiarity level of knowledge of the lease and title transfer processes that are employed by the Reindustrialization Program in accordance with assigned job duties.**

Supporting Knowledge and/or Skills

- a. Describe the kinds of ORO facilities that are subject to reindustrialization.
- b. Describe the program elements and/or the primary processes that are used by the reindustrialization program in order to execute a lease or transfer a facility.
- c. Identify the primary parties involved in the lease and title transfer process and discuss their roles and responsibilities.

- 5. AMNFS personnel shall demonstrate a familiarity level of knowledge to manage ORO projects and programs in accordance with assigned job duties.**

Supporting Knowledge and/or Skills

- a. Describe the applicable project management responsibilities in DOE Order 413.3, *Project Management for the Acquisition of Capital Assets*.
- b. Define the terms related to Life Cycle Asset Management and provide examples of their application.
- c. Describe the processes used to evaluate and document the condition of facilities that are transitioned to/from the private sector and identify the management skills that are needed to oversee these activities.
- d. Compare the various categories of performance objectives, measures, and expectations and how they are used by ORO and the contractor/lessee to evaluate project or program performance.

- e. Describe the process for acquiring approvals for project/program guidance and resources from the sponsoring program office.

6. AMNFS personnel shall demonstrate a familiarity level of knowledge of performance-based contract management (PBCM) principles and practices as applied to ORO and oversight of the contractor in accordance with assigned job duties.

Supporting Knowledge and/or Skills

- a. Describe some of the important project control measures and tools.
- b. Discuss how the PBCM elements are applied by AMNFS in managing site activities.
- c. Describe performance-based practices used to evaluate project management, cost estimating, maintenance, real estate, and utilities under the Life Cycle Asset Management implementation process.
- d. Describe the responsibilities for monitoring the contractor/lessee to ensure compliance with the technical, safety, and administrative requirements of the contract/lease.
- e. Describe the role of the principal liaison between contractor/lessee and DOE identifying deliverables, objectives, timeliness, assumptions, constraints, and/or priorities for AMNFS assignments.

7. AMNFS personnel shall demonstrate a working level of knowledge of effective oral and written communication skills with Headquarters, regulators, contractors, lessees, and other stakeholders in accordance with assigned job duties.

Supporting Knowledge and/or Skills

- a. Demonstrate effective oral and written communications skills that have been used to further the AMNFS mission.
- b. Demonstrate effective oral and written communication skills when providing specific work or task direction.
- c. Demonstrate skill in conducting productive meetings and fostering cooperation among parties that may have different objectives and goals, by conducting and coordinating a meeting among stakeholders.

8. AMNFS personnel shall demonstrate a familiarity level of knowledge of surveillance and maintenance activities and facility modifications in accordance with assigned job duties.

Supporting Knowledge and/or Skills

- a. Describe the Surveillance and Maintenance Review Process.
- b. Describe the processes that are followed when a lessee proposes to modify a facility.

9. AMNFS personnel shall demonstrate a familiarity level of knowledge of Safety Basis Requirements in accordance with assigned job duties.

Supporting Knowledge and/or Skills

- a. Discuss the basic purposes and objectives of a Facility Safety Basis.
- b. Describe the responsibilities of contractors/lessees authorized to operate facilities.
- c. Define the following terms and discuss the purpose of each:
 - i. Authorization Agreements
 - ii. Authorization Basis
 - iii. Safety Basis
 - iv. Unreviewed Safety Question Determinations
 - v. Safety Evaluation Report
 - vi. Documented Safety Analysis
- d. Define the various Hazard Categorization levels and the general process utilized to determine the Facility Hazard Category.
- e. Discuss the reasons and actions for performing an Unreviewed Safety Question determination.
- f. Describe the situations for which a safety evaluation is required to be performed.
- g. Describe the actions to be taken by a contractor/lessee upon identifying information that indicates a potential inadequacy of previous safety analyses or, a possible reduction in the margin of safety as defined in the Technical Safety Requirements.
- h. Describe the basic requirements of material control and accountability.

Note: This applies only to personnel who are not assigned ORO Safety Basis OFS competencies.

10. AMNFS personnel shall demonstrate a familiarity level of knowledge of the appropriate Site Emergency Action Plan in accordance with assigned job duties.

Supporting Knowledge and/or Skills

- a. Identify the major points in the Emergency Action Plan.
- b. Describe how this plan integrates with other emergency plans.
- c. Describe the roles and responsibilities of NFS personnel in the Emergency Action Plan.

11. AMNFS personnel shall demonstrate a familiarity level of knowledge of visitor access requirements for the appropriate site(s) in accordance with assigned job duties.

Supporting Knowledge and/or Skills

- a. Briefly describe the process and requirements for establishing access by uncleared visitors at ORO and other facilities.
- b. List the provisions within the Escort Protocol.
- c. Briefly describe the major provisions for uncleared access to the limited security area.

12. AMNFS personnel shall demonstrate a familiarity level of knowledge of the Employee Concerns Program.

Supporting Knowledge and/or Skills

- a. Discuss the purpose of the site specific *Employee Concerns* program.
- b. Describe the NFS staff member's responsibilities in identifying, reporting and resolving personnel concerns.