

U.S. Department of Energy

Oak Ridge National Laboratory Site Office



Office/Facility-Specific Qualification Standard

Revision 2

June 2013

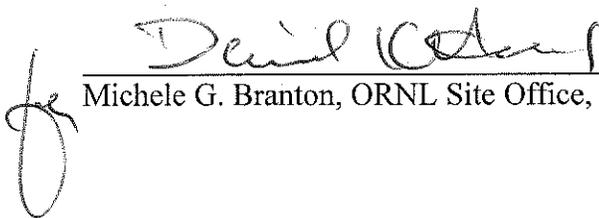
TABLE OF CONTENTS

CONCURRENCE AND APPROVAL	i
ACRONYMS	ii
1.0 PURPOSE	1
2.0 APPLICABILITY	2
3.0 IMPLEMENTATION	2
4.0 EVALUATION REQUIREMENTS	3
5.0 INITIAL QUALIFICATION, REQUALIFICATION, AND TRAINING	3
6.0 DUTIES AND RESPONSIBILITIES	4
7.0 REQUIRED TECHNICAL COMPETENCIES	4
7.1 Site and Facility Unescorted Access	4
7.2 ORNL Site Office Functions	5
7.3 ORNL/ORISE Site/Facility Awareness.....	6
7.4 Position-Specific Competencies	7

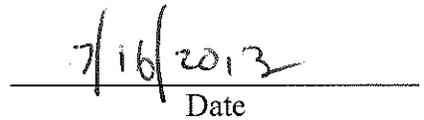
CONCURRENCE AND APPROVAL

The Department of Energy Oak Ridge National Laboratory Site Office (OSO) is the sponsor for this Office/Facility-Specific Qualification Standard. The OSO 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 OSO Management is indicated by the signatures below.

CONCURRENCE:

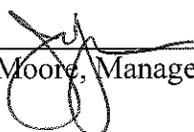


Michele G. Branton, ORNL Site Office, TQP Manager

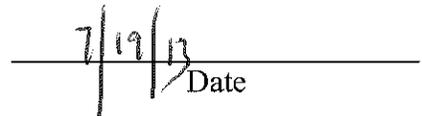


Date

APPROVAL:



Johnny O. Moore, Manager, ORNL Site Office



Date

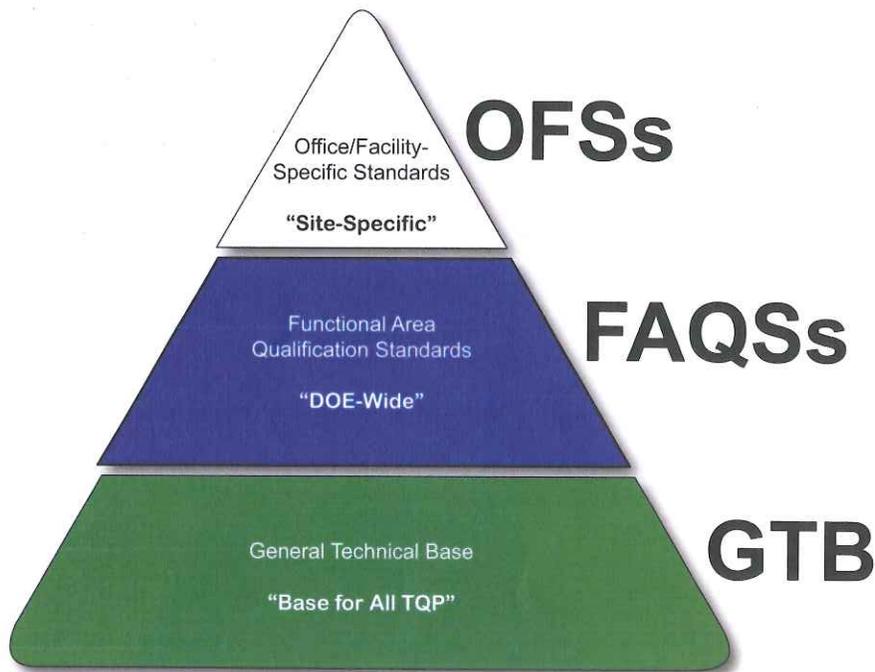
ACRONYMS

DOE	Department of Energy
DSA	Documented Safety Analysis
ES&H	Environmental, Safety, and Health
ESS	Employee Self Service
FAQSs	Functional Area Qualification Standards
GET	General Employee Training
HQ	Headquarters
IDP	Individual Development Plan
LWS	Laboratory Waste Services
OFS	Office/Facility-Specific
ORISE	Oak Ridge Institute for Science and Education
ORNL	Oak Ridge National Laboratory
OSO	ORNL Site Office
QA	Quality Assurance
SC	Office of Science
TQP	Technical Qualification Program
TSR	Technical Safety Requirements

1.0 PURPOSE

In a memorandum from George Malosh, dated April 2, 2007, subject, "Technical Qualification Program," the requirement was set forth for implementing an Office of Science (SC) Technical Qualification Program (TQP) for all SC sites with Hazard Category 1, 2, or 3 nuclear facilities in accordance with the *U. S. Department of Energy Office of Science Integrated Support Center Technical Qualification Program Manual* dated March 2007 (hereinafter referred to as the SC TQP Manual). This requirement includes positions designated as Senior Technical Safety Manager, Facility Representative, and other personnel who oversee nuclear facility safety. (See SC Management System: *Human Resources Services*, Subject Area: *Employee Development*, Procedure 5, *Implementing Technical Qualification Program*). The 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 office/facility-specific (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 Oak Ridge National Laboratory (ORNL) Site Office (OSO) personnel.

This OSO OFS qualification standard supplements the department-wide General Technical Base qualification standard and Functional Area Qualification Standards (FAQSs) as illustrated below.



2.0 APPLICABILITY

This OSO OFS qualification standard establishes common OFS area competency requirements for all OSO personnel who provide assistance, direction, guidance, oversight, or evaluation of contractor technical activities that could impact the safe operation of the Department of Energy's (DOE) nuclear and non-nuclear facilities.

3.0 IMPLEMENTATION

This OSO OFS qualification standard identifies the minimum technical competency requirements for OSO 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 cannot 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 SC 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.

4.0 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 OSO 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; and
- 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 OSO personnel enrolled in the TQP are qualified to fulfill their duties and responsibilities.

OSO 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://www.mis.doe.gov/ess/>. Participants should read the TQP Competency Data Entry Guidance posted at <http://www.ora.gov/tdd/QualPrgm/Ess.pdf> before entering data into ESS.

5.0 INITIAL QUALIFICATION, REQUALIFICATION, AND TRAINING

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

Personnel are not required to re-qualify per this OSO OFS; however, they are encouraged to engage 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 should be documented in the employees Individual Development Plan (IDP) and may include courses and/or training provided by:

- DOE;
- Other government agencies;
- Outside vendors; or
- Educational institutions.

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

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

6.0 DUTIES AND RESPONSIBILITIES

Specific duties and responsibilities of personnel who fulfill this OSO OFS are contained in each employee's position description.

7.0 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.

Note: All OSO Federal Project Directors are qualified through the Project Management Career Development Program.

7.1 Site and Facility Unescorted Access

- A. OSO personnel shall complete General Employee Training (GET).

Supporting Knowledge and/or Skill

1. Complete either GET or facility-specific General Employee Access Training that covers General Topics, Hazardous Communications, and General Employee Radiological Training.

- B. OSO personnel shall complete Basic Radiological Worker training requirements.

Supporting Knowledge and/or Skill

- 1. Complete the Basic Radiological Worker training module.

7.2 ORNL Site Office Functions

- A. OSO personnel shall demonstrate a working level knowledge of the OSO Procedures located on the OSO Portal.

Supporting Knowledge and/or Skills

- 1. Describe the content of the procedures and how the procedures relate to the incumbent's job.
 - 2. Describe the process for initiating new procedures and revising existing procedures.
- B. OSO personnel shall demonstrate a familiarity level knowledge of program guidance, requirements, and budgeting process, related to ORNL/Oak Ridge Institute for Science and Education (ORISE) programs/activities to ensure adequacy to implement established program goals, meeting environmental, safety, and health (ES&H) regulations, and to coordinate resolution of program/budget disconnects.

Supporting Knowledge and/or Skills

- 1. Using DOE Order 412.1A, *Work Authorization System*, describe DOE system for Headquarters (HQ) authorizing work to the field.
 - 2. Describe methods of transferring funds between DOE field elements and/or DOE contractors.
 - 3. Describe the process that HQ utilizes to provide funding for specific ORNL/ORISE programs.
- C. OSO personnel shall demonstrate a working level knowledge of the organizations and personnel responsible for implementing the DOE programs of his/her oversight responsibility at ORNL/ORISE.

Supporting Knowledge and/or Skills

- 1. Using a current ORNL/ORISE organization chart, discuss the primary interfaces between Site Office and contractor personnel.
- 2. Using a current ORNL organization chart, discuss the major functions of each ORNL Associate Laboratory Director.

Mandatory Performance Activity

1. Conduct an operational awareness activity with the contractor.
- D. OSO personnel shall demonstrate a working level knowledge of emergency management functions associated with ORNL.

Supporting Knowledge and/or Skill

1. Using DOE Order 151.1C, *Comprehensive Emergency Management System*; discuss responsibilities of the assigned position.

Mandatory Performance Activity

1. Participate or observe an emergency management activity such as training, drills, or exercises.
- E. OSO personnel shall demonstrate a working level knowledge of DOE training requirements applicable to OSO federal employees.

Supporting Knowledge and/or Skill

1. Using DOE Order 360.1C and related Directives, describe the major technical training requirements for OSO federal personnel.

Mandatory Performance Activity

1. Assess personal continuing training record in preparation of the IDP.

7.3 ORNL/ORISE Site/Facility Awareness

- A. OSO personnel shall demonstrate a familiarity level knowledge of the ORNL/ORISE operations, facilities, and hazards related to the SC missions.

Supporting Knowledge and/or Skill

1. Attend a general orientation by OSO management.
- B. OSO personnel shall demonstrate a working level knowledge of ORNL/ORISE programs, processes, and operations.

Supporting Knowledge and/or Skills

1. Discuss the primary mission of OSO and the purpose of the ORNL/ORISE facilities.
2. Describe some of the key programs and/or projects performed at ORNL/ORISE facilities.
3. Describe some of the key operations and/or processes performed at ORNL/ORISE facilities.
4. Discuss the major nuclear safety risks to workers and the public resulting from operations at OSO facilities.

Mandatory Performance Activity

1. Identify the primary non-nuclear hazards and controls associated with operations at assigned OSO facilities.
- C. OSO personnel shall demonstrate a working level knowledge of the ORNL/ORISE ES&H programs, permits, procedures, and hazards associated with processes, areas and equipment to oversee the ES&H programs.

Supporting Knowledge and/or Skills

1. Discuss the ORNL and ORISE Integrated Safety Management System programs, their implementation, and DOE oversight.
2. Discuss the Standards Based Management System at ORNL, and its relationship to these programs.
3. Discuss concepts of Contractor Assurance as discussed in the OSO Oversight Plan and describe its application to contractor activities.

Mandatory Performance Activity

1. Participate in a related oversight activity.

7.4 Position-Specific Competencies

A. Nuclear Facility Program Coordinator

1. OSO personnel shall demonstrate a working level knowledge of activities associated with their assigned facility(ies) and programs.

Supporting Knowledge and/or Skills

- a. Discuss the purpose of the facility and its role in meeting DOE mission requirements.

- b. Describe the facility boundary, location, and general layout of the building.
 - c. Locate and identify the major equipment in the building (e.g., storage vaults, hot cells, control stations, laboratories, etc.).
 - d. Identify and explain the material types (e.g., uranium, plutonium, beryllium, thorium, etc.); material forms (e.g., canned subassemblies, fuel assemblies, oxides, metals, alloys); storage configurations (e.g., cans, drums, birdcages); and the hazards associated with each.
 - e. Determine the major criticality safety features and limits applicable to the operations in the building, as well as postulated accident scenarios.
 - f. Recognize facility management and identify key reporting relationships relative to ORNL Management.
 - g. Identify HQ sponsor organizations relative to the specific facility.
 - h. Research and review the facility's near-term budget history and requirements.
 - i. Identify and explain DOE training requirements applicable to the contractor training activities/development of training policies and procedures.
 - j. Identify facility authorization basis document requirements and how the contractor implements the requirements.
 - k. Identify and explain the operational limits as documented in the facility Documented Safety Analysis (DSA) or Technical Safety Requirements (TSR).
2. OSO personnel shall demonstrate a working level knowledge of ORNL process development activities sufficient to review and evaluate the contractor's technical progress as defined by laboratory and DOE guidance requirements.

Supporting Knowledge and/or Skill

- a. Locate and describe ORNL procedures, facilities, laboratories, and related equipment related to process development activities.

Mandatory Performance Activity

- a. Using the ORNL Performance Evaluation Measurement Plan, review, analyze, and evaluate contractor performance in meeting critical outcomes.

B. Nuclear Facility Safety

1. OSO personnel shall demonstrate a working level of knowledge of the Facility Safety Basis implementation at ORNL (in accordance with current rules and DOE Orders) in order to identify problems, to evaluate solutions, and to monitor technical progress.

Supporting Knowledge and/or Skills

- a. Describe the ORNL Nuclear Facility Safety Program policies, procedures, and organizational structure.
- b. Describe the basic requirements of the ORNL DSA Program, including the current schedule/plans to issue DOE-Approved safety documentation.
- c. Describe the ORNL implementation plans for meeting Unreviewed Safety Question Determination requirements.

Mandatory Performance Activity

- a. Identify the ORNL DSA/TSR requirements and explain how they relate to facility safety.

C. Quality Assurance

1. OSO personnel shall demonstrate a working level knowledge of the ORNL quality assurance (QA) requirements that is sufficient to identify problems, to evaluate solutions, and to monitor technical progress.

Supporting Knowledge and/or Skills

- a. Describe the policies, procedures, and organizational structure of the ORNL QA Program and the requirements that implement 10 CFR 830.120.
- b. Explain how the Price-Anderson Amendments Act relates to QA at ORNL.
- c. Identify the ORNL Counterfeit and Suspect Part requirements that are currently established.

Mandatory Performance Activity

- a) List the attributes of the ORNL Corrective Actions and Issues Management Program.

D. Waste Management Program Manager

1. OSO personnel shall demonstrate a working level knowledge of the waste management activities associated with their assigned facilities, and a familiarity level knowledge with ORNL Waste Management Operations.

Supporting Knowledge and/or Skills

- a. Describe the purpose of the ORNL Laboratory Waste Services (LWS) and its role in meeting the DOE mission requirements.
- b. Locate and identify major facilities managed by UT-Battelle, LLC, in the various waste management systems at ORNL.
- c. Describe the satellite accumulation area and 90-day area general requirements.
- d. Be cognizant of LWS near term budget history and requirements.
- e. Describe the general features of the Pollution Prevention plans at ORISE and ORNL.
- f. Describe the interface between the Office of Environmental Management and SC for waste management activities.

Mandatory Performance Activity

- a. Identify the major waste types and where they are typically stored or disposed.