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INSTRUCTIONAL STAFF QUALIFICATION

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INSTRUCTIONAL STAFF QUALIFICATION**Revision Status**

Rev No.	Description
Rev 0	New Training Program Description
Rev 1- 4	Provide clarification of FH's responsibility to maintain instructor qualification documentation (with respect to other autonomous training organizations), to the last sentence in paragraph 4 of Section 5.2.3.
Rev 5	Input from Facility Training Managers during normal review cycle. Change to categorization of FFTF as a Category A Reactor.
Rev 6	Clarify the requirements for an Instructor in section 5.0, Initial Training
Rev 7	Revision updated only due to Memorandum, May 23, 2007
Rev 8	Updated Scope statement, added Training Points of Contact, updated instructional Staff requirements to include Instructional Designer, computer Based Training/Web Based Training Developer and Course Evaluator, added section 4.3, added 9.0 and created new section "Job/Course Specific Qualifications".
Rev 9	Updated by the issue of DOE Order 426.2
Rev 10	Editorial changes to Table 4, Moved wording in both "or equivalent per MSC-PRO-179, Obtaining Training Equivalencies, Waivers, and Extensions. Added SME Initial Training Requirements to Table 4
Rev 11	Added Technical Instructor Qualifications under Section 6.0. Changed word "or" to "and" in Table 4 OJT Instructor and OJE Instructor. Table 1 changed the experience requirement for Instructional Developer, Computer Based Training/Web Based Training Developers, and Course Evaluator. Various editorial updates.
Rev 12	<p>The criteria outlined in Table 3 apply to the following job titles: Radiological Trainer and Radiological instructor for initial qualification.</p> <p>The HAMMER Radiation Safety Manager shall establish a radiological instructor continuing training program that requires attendance at a minimum of four continuing training topics per year. Development and delivery of a radiological training topic using the SAT/ADDIE process supporting RCT continuing training or HP professional staff training will be</p>

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considered equivalent to attending professional training. Attendance at on-site or offsite training sessions approved by the HAMMER Radiation Safety Manager can be used to satisfy the four topic per year requirement.

- Rev 13 Change Knowledge Skills and Attitudes to Knowledge Skills and Abilities and reformatted.
- Rev 14 Updated TPD to reflect requirements for Contractor Instructors of Contractor Delivered Courses and Vendor Owned/Delivered Courses. Also added verbiage to 6.0 regarding documentation for Worker Trainers.
- Rev 15 Changed Technical Authority Approval. Updated Education Requirements in Section 4.1.
- Rev 16 Changed completion of course to credit for course, eliminated course evaluator in table 1, CBT/Web Based Training Developer and Course Evaluator in table 4 and removed section 6.0. Removed (or equivalent) in Table 4 and reference to MSC-PRO-179 and numerous edits.
- Rev 17 Added course 170041 to the Instructional Training Requirements. Editorial updates.
- Rev 18 Removed 5 year Training Manager, Job Related Experience Requirement {EP} and changed Nuclear EP from 6 to 5. Changed instructional Analyst/Developer Educational Requirement Baccalaureate from 7 to 6. Removed paragraph 5.

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INSTRUCTIONAL STAFF QUALIFICATION

1.0 PURPOSE

This Training Program Description (TPD) identifies the qualification requirements to ensure the instructional staff providing training have the knowledge, skills, and abilities (KSAs) necessary to provide assigned training services.

2.0 SCOPE

This TPD applies to MSA, subcontractors, and contracted instructors assigned training responsibilities for providing requirements-based formal training. Requirements-based formal training is required by state or federal law, regulation, DOE order or management directive. This TPD applies to instructional staff who will be performing classroom, laboratory, on-the-job training (OJT), on-the-job evaluation (OJE), and CBT/Web based training activities.

This TPD does not apply to read-and-sign training (employee reads a document or change, then signs a form), pre-job briefings, tailgate meetings, shift briefings, non-course orientations, or checklist training (employee and manager fill out a form together).

3.0 RESPONSIBILITIES**3.1 MSA TRAINING AND LINE MANAGER**

1. Ensuring the establishment and maintenance of the process for documenting the qualification of instructional staff.
2. Providing the training program to qualify instructional staff.
3. Ensure their direct-report instructional staff are qualified in accordance with this TPD.

3.2 INSTRUCTIONAL STAFF

Conducting training assignments in accordance with approved documents and processes.

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4.0 REQUIREMENTS

4.1 INSTRUCTIONAL STAFF ENTRY LEVEL EDUCATION AND EXPERIENCE REQUIREMENTS

At a minimum, instructional staff shall meet the requirements identified in Table 1. For assignments associated with “categorized” nuclear facilities follow the requirements of Section 4.2. For assignments providing Radiological Control training use section 4.3.

Table 1 - Minimum Instructional Staff Requirements

Position Description	Educational Requirement	Experience Requirement
Training Instructor ¹	High School diploma or equivalent	Consistent with the material being presented
On-the-Job Trainer Instructor	High School diploma or equivalent	1-year experience consistent with the material being presented
On-the-Job Evaluator Instructor	High School diploma or equivalent	1-year experience consistent with material being evaluated
Instructional Analyst/ Developer	Baccalaureate degree or equivalent	1-year experience in developing training
¹ Includes Training Manager, Training Specialist, instructor, Worker Trainer, or subject-matter-expert instructor.		

4.2 ENTRY LEVEL EDUCATION AND EXPERIENCE REQUIREMENTS FOR DOE ORDER 426.2 INSTRUCTIONAL STAFF POSITIONS

Instructional staff that conduct and/or oversee DOE Order 426.2 required training activities shall meet the minimum educational and experience requirements identified in Table 2.

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Table 2 - DOE Order 426.2 Instructional Staff Entry Level Education and Experience Requirements for Hazard Category 2 and 3 Nonreactor Nuclear Facility Personnel

Position Description	Educational Requirements	Experience Requirements	
		Job Related	Nuclear
Training Instructor	High School diploma or General Education Development (GED)	(1)	(2), (3)
Training Manager	Baccalaureate (4)		4 Years (5)
Instructional Analyst/Developer	Baccalaureate (6)	1 year	

¹Experience consistent with material being presented

²Instructors responsible for instruction on subjects such as Technical Safety Requirements (TSR) must have successfully completed training on; facility operating characteristics and principles, and operating limits (Safety Limits, Limiting Control Settings, and Limiting Conditions for Operation) and their bases or have had significant involvement in writing the TSRs.

³Instructors must have demonstrated knowledge of instructional techniques through basic instructor or equivalent training or experience approved by the training manager. Instructors must have knowledge and/or expertise for the material being presented.

⁴The training manager must have a baccalaureate degree. The training manager must have courses in education or training that focus on instructional analysis, design, development, delivery and testing as well as evaluation of training programs if not included in the baccalaureate course material (baccalaureate need not be in engineering or related science).

⁵Education or experience that is job related may be substituted on a case-by-case basis. The degree may fulfill 3 of the 4 years of nuclear experience on a one-for-one time basis.

⁶Instructional Analyst/Developers should have a baccalaureate degree in Training or Education. The Instructional Analyst/Developer must have courses in education or training that focus on instructional analysis, design, development, delivery and testing, as well as evaluation of training programs, if not included in the baccalaureate course material.

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4.3 RADIOLOGICAL CONTROL TRAINERS AND INSTRUCTORS ENTRY LEVEL EDUCATION AND EXPERIENCE REQUIREMENTS

**Table 3 - Training Requirements for Radiological Control Trainers
and Radiological Instructors**

Minimum Entry Level Criteria	Initial Training	Special Requirements
(1) High School diploma (2) 2 years job related experience, which should include 3 months DOE Radiological Control experience	In accordance with "Instructor" requirements listed in Table 4 of this document.	(1) Technical knowledge, experience and instructional skills required to fulfill their assigned duties. (2) Demonstrated knowledge of instructional techniques through training or experience and certification as a qualified instructor for the material being presented. (3) Subject Matter Experts (SME) without instructor qualifications' may provide training in their areas of expertise. However, these SMEs should be trained as instructors when this occurs routinely (more than 6 times per year).

4.4 EQUIVALENCIES AND WAIVERS

Equivalencies, exceptions, or alternatives for documenting instructor qualifications are provided in MSC-PR0-TQ-179, *Obtaining Training Equivalencies, Exceptions and Alternatives for Education and Experience*.

5.0 INITIAL TRAINING AND QUALIFICATION

Instructional staff shall complete the initial training requirements identified in Table 4 prior to performing unsupervised training activities.

NOTE: Initial training requirements as well as technical requirements for Contracted Instructors are identified in the Statements of Work for Contractor Delivered Courses and Vendor Owned/Delivered Courses.

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Table 4 - Initial Training Requirements

Position Description	Initial Training Requirements
Training Instructor	<ul style="list-style-type: none"> • (1) Credit for course 170011, <i>Trainer's Training</i>, OR Credit for course 000391, <i>Instructional Staff Qualification/Skills Checklist</i>,¹ OR Credit for courses 170041, <i>Instructional Development Fundamentals</i> AND 170045, <i>Instructor Fundamentals</i> • AND (2) Completion of site form A-6002-557, <i>Training Completion Record Instructional Staff Qualification</i>, documenting completion of course 00039N, <i>Instructional Staff Qualification</i>
Worker Trainer	<ul style="list-style-type: none"> • (1) Credit for course 170011, <i>Trainer's Training</i>, OR Credit for course 000391 <i>Instructional Staff Qualification/Skills Checklist</i>,¹ OR <i>course-specific Train-the-Trainer and mentoring by a Lead Worker Trainer</i> OR Credit for courses 170041, <i>Instructional Development Fundamentals</i> AND 170045, <i>Instructor Fundamentals</i> • AND (2) Completion of site form A- 6002-557, <i>Training Completion Record Instructional Staff Qualification</i>, documenting completion of course 00039N, <i>Instructional Staff Qualification</i>
Subject Matter Expert Trainer	<p>If providing training more than 6 times per year:</p> <ul style="list-style-type: none"> • (1) Credit for course 170011, <i>Trainer's Training</i>, OR Credit for course 000391, <i>Instructional Staff Qualification/Skills Checklist</i>¹ OR Credit for courses 170041, <i>Instructional Development Fundamentals</i> AND 170045, <i>Instructor Fundamentals</i> • AND (2) Completion of site form A-6002-557, <i>Training Completion Record Instructional Staff Qualification</i>, documenting completion of course 00039N, <i>Instructional Staff Qualification</i>

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On the Job Training (OJT) Instructor	<ul style="list-style-type: none"> • (1) Credit for course 000396, <i>On-The-Job Trainer Fundamentals</i> • AND (2) Completion of site form A-6002-557, <i>Training Completion Record Instructional Staff Qualification</i>, documenting completion of course 00039J, <i>On-the-job Trainer Qualification</i>
On the Job (OJE) Evaluator	<ul style="list-style-type: none"> • (1) Credit for course 000396 <i>On-The-Job Trainer Fundamentals</i> AND 000397, <i>On-The-Job Evaluator Fundamentals</i> • AND (2) Completion of site form A-6002-557, <i>Training Completion Record Instructional Staff Qualification</i>, documenting completion of course 00039E, <i>On-the-job Evaluator Qualification</i>
Training Manager	<ul style="list-style-type: none"> • (1) Completion of site form A-6002-557, <i>Training Completion Record Instructional Staff Qualification</i>, documenting course 00039M, <i>Instructional Staff Manager Qualification</i>
Instructional Analyst/ Developer	<ul style="list-style-type: none"> • (1) Credit for course 170011, <i>Trainer's Training</i>, OR Credit for course 000391, <i>Instructional Staff Qualification/Skills Checklist</i>, • OR Credit for course 170041, <i>Instructional Development Fundamentals</i>, • AND(2) Completion of site form A-6002-557, <i>Training Completion Record Instructional Staff Qualification</i>, documenting completion of course 00039I, <i>Instructional Analyst/Developer Qualification</i>
<p>¹ Individuals who have completed course 00039N, <i>Instructional Staff Qualification</i>, as of March 8, 2007, are grandfathered.</p> <p>² Employees who are qualifying as on-the-job trainers or evaluators for hoisting and rigging equipment (refer to DOE/RL-92-36, <i>Hanford Site Hoisting and Rigging Manual</i>) must meet the requirements of the <i>Hoisting and Rigging Training Program Description</i>.</p> <p>NOTE: Program specific requirements for OJT/OJE may apply in other cases; see program specific TPD for more information.</p>	

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6.0 TRAINING ACTIVITY SPECIFIC QUALIFICATIONS

The training activity or program Point of Contact (POC), working with Subject Matter Experts and/or Interpretive/Technical Authorities, establishes the technical, educational and/or experience required for instructors to teach the training activity.

Instructor technical qualification requirements must be documented in a TPD or in the course program file. Qualification requirements may include such areas as required reading, licenses and/or certifications, or a manager's recommendation of the instructor. Before instructing a training activity as a qualified instructor, the individual must have completed the following:

- Qualified per completion of site form A-6002-557, *Training Completion Record Instructional Staff Qualification*
- Attend and complete the course that is to be taught
- Teach the course at least once while being observed and mentored by an experienced instructor for that course.

Training activity specific requirements can be documented in an instructor training course that has its own course number (e.g. Respiratory Train-the-Trainer). The POC for the training activity may also choose to document technical instructional requirements on a qualification card. If the POC chooses to utilize a qualification card for documentation, the completed qualification card should be documented by a course number.

Instructional qualifications must be met prior to the instructor being listed on a Training Activity Sheet (TAS) and prior to the instructor teaching the training activity alone. An instructor who has not met the instructional or technical qualifications required for the training activity can instruct under the observation and mentorship of a qualified instructor.

If a training activity qualified instructor's performance requires improvement or re-establishment of proficiency, the training activity POC and Responsible Manager will develop an improvement/proficiency program for the instructor. If the person is suspended from performing the training activity during the improvement process, the training activity POC should remove the individual from the respective TAS(s).

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7.0 CONTINUING TRAINING

Continuing training requirements for instructional staff and instructors are encouraged. Opportunities for professional and instructional development might include attending or providing an instructor enhancement workshop, attending a Radiological Control Trainer continuing training, attending a seminar or conference related to training, reading trade journals, actively participating in professional organizations related to technical areas, etc.

The HAMMER Radiation Safety Manager shall establish a radiological control instructor continuing training program that requires attendance at a minimum of four continuing training topics per year. Development and delivery of a radiological control training topic, using a Systematic Approach to Training process will be considered equivalent to attending professional training. Attendance at on-site or offsite training sessions approved by the HAMMER Radiation Safety Manager can be used to satisfy the four topic per year requirement.

Personnel performing OJT and OJE activities may require continuing training based on other training program requirements such as the Hoisting and Rigging TPD.

8.0 FORMS

The following site forms are used to document instructional staff qualification and training.

Table 5 - Documentation of Instructional Staff Qualifications and Skills

Site Form	Form Title	Form
A-6001-081	Instructional Staff Qualification/ Skills Checklist	<ul style="list-style-type: none"> • Document initial qualification for instructional staff who have not completed course 170011, <i>Trainer's Training</i>. • Identify training skills required to perform training assignments. • Document the acquisition of additional instructional knowledge, skills, and abilities.

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A-6002-557	Training Completion Record Instructional Staff Qualification	<ul style="list-style-type: none"> • Identify qualifications of instructional staff • Identify the qualified instructional assignment(s). • Document the instructional and technical qualifications for instructional assignments • Document the continuing training completion of instructional staff.
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9.0 DEFINITIONS

- **Authenticator:**
An individual designated on a Training Activity Sheet as authorized to sign the Training Completion Record and/or Course Completion Roster for the satisfactory completion of a training activity. Example: a vendor instructor is brought onsite to instruct training on new equipment and is not listed on the TAS. The vendor instructor would sign as the instructor and the authenticator validates the completed training by signing as the Authenticator, which authorizes completion.
- **Contractor Delivered Courses:**
A training course which includes classroom instruction, exercises, practices or processes provided by selected Subject Matter Experts who are under contract to provide the training as a sub-contractor to HAMMER/Hanford Training.
- **Instructional Analyst/Developer:**
The individual primarily involved in the analysis, design, development, and implementation of training for job positions/activities in nuclear facilities.
- **Instructional Staff:**
A general term used to encompass all of the positions with direct responsibilities that are in the nature of accomplishing the training function and shall specifically include but not be limited to: instructors, instructional developers, course evaluators, and training program managers.
- **Instructional Qualification:**
The process of determining and verifying that individuals meet the instructional and technical competence of qualification criteria for a specific instructor qualification.

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- **MSA Training Manager:**
A MSA Training manager who supervises instructional staff, Worker Trainers, instructors, or subcontractors.
- **Nonreactor Nuclear Facility:**
Those facilities, activities, or operations that involve, or will involve, radioactive and/or fissionable materials in such form and quantity that a nuclear or a nuclear explosive hazard potentially exists to workers, the public, or the environment, but does not include accelerators and their operations and does not include activities involving only incidental use and generation of radioactive materials or radiation such as check and calibration sources, use of radioactive sources in research and experimental and analytical laboratory activities, electron microscopes, and X-ray machines (10 CFR 830).
- **Nuclear Experience:**
Defined in DOE Order 426.2, when used in reference to Hazard Category 1/Category A and Hazard Category 2/Category 8 Reactors, is experience acquired at commercial, production, training, test, military, or research reactors and includes experience acquired in reactor facility startup activities or operation. Experience in design, construction, maintenance, or related technical services that are job-related may also be considered. When used in reference to Nonreactor Nuclear Facilities, is experience acquired at any facility in which radioactive materials are routinely handled, stored, processed, or utilized.
- **On-the-Job Evaluation (OJE):**
Evaluation of a trainee's specific task performance by a qualified on-the-job evaluator using approved performance evaluation criteria.
- **On-the-Job Training (OJT):**
Training that is conducted and evaluated in the work environment.
- **Subject Matter Expert:**
A person with extensive knowledge or ability based on research, experience, or occupation in a particular area of study.
- **Technical Requirements:**
According to DOE-HDBK-1001-96, Guide to Good Practices for Training and Qualification of Instructors, instructors of technical topics should possess technical qualifications consistent with their assignments. Technical qualifications should include theoretical and practical knowledge as well as practical work experience at or above the level that is required of the trainee population.

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- **Training Activity:**
A unit of training, such as a classroom training activity presentation, an on-the-job training exercise, an on-the-job evaluation, a job performance measure, a qualification or certification card, a written or oral examination, or a certificate of completion.
- **Training Instructor:**
The individual, with duties and responsibilities to instruct personnel.
- **Vendor Owned/Delivered Courses:**
A training course which includes classroom instruction, exercises, practices or processes which are the sole property of the selected Subject Matter Expert providing the training as a sub-contractor to HAMMER/Hanford Training.
- **Worker Trainer:**
A bargaining unit employee who instructs Sitewide courses at HAMMER/Hanford Training.

10.0 SOURCE REQUIREMENT DOCUMENTS

- 10 CFR 830, Subpart A, *Nuclear Safety Management, Quality Assurance Requirements*
- 10 CFR 835, *Occupational Radiation Protection*
- 10 CFR 851, *Worker Safety and Health Program*
- 29 CFR 1910, *Occupational Safety and Health Administration*
- DOE-HDBK-1001-96, *Guide to Good Practices for Training and Qualification of Instructors*
- DOE Order 414.1A, *Quality Assurance*
- DOE Order 426.2, *Personnel Selection, Qualification, and Training, Requirements for DOE Nuclear Facilities*
- DOE/RL-2002-12, *Hanford Radiological Health and Safety Document*
- DOE/RL-92-36, *Hanford Site Hoisting and Rigging Manual*
- Hoisting and Rigging Training Program Description 0016
- MSC-PR0-TQ-179, *Obtaining Training Exceptions and Alternatives for Education and Experience*