

TRAINING PROGRAM DESCRIPTION

TPD-0017

INSTRUCTIONAL STAFF

Revision 15

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INSTRUCTIONAL STAFF TRAINING**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	The criteria outlined in Table 3 apply to the following job titles: Radiological Trainer and Radiological instructor for initial qualification. 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

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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.

- Rev 13 Change Knowledge Skills and Attitudes to Knowledge Skills and Abilities & 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

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INSTRUCTIONAL STAFF TRAINING

1.0 PURPOSE

This Training Program Description (TPD) identifies the requirements for qualifying instructional staff(s) with the knowledge, skills, and abilities (KSAs) necessary to provide assigned training services.

2.0 SCOPE

This Training Program Description (TPD) applies to MSA, subcontractors, and Contractor Instructors assigned training responsibilities for providing requirements-based formal training. Requirements-based formal training is training required by state or federal law, regulation, DOE order or management directive. This training program applies to classroom, laboratory, on-the-job training (OJT), on-the-job evaluation (OJE), and CBT/Web based training.

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, orientations, or checklist training (employee and manager fill out a form together).

3.0 RESPONSIBILITIES**3.1 DIRECTOR, HAMMER/HANFORD TRAINING, MISSION SUPPORT ALLIANCE**

1. Establishing minimum requirements for instructional staff qualification.
2. Establishing and maintaining the process for documenting the qualification of instructional staff.
3. Verifying that instructional staff qualifications are evaluated for compliance.
4. Providing training program to qualify instructional staff.

3.2 MSA TRAINING MANAGERS

Ensuring their instructional staff is qualified in accordance with this Training Program Description.

3.3 INSTRUCTIONAL STAFF

Conducting training assignments in accordance with approved documents and processes.

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4.0 REQUIREMENTS

4.1 MINIMUM INSTRUCTIONAL STAFF REQUIREMENTS

Instructional staff shall meet the requirements identified in Table 1 for conducting training activities or for specific assignments the requirements of Section 4.2 or 4.3 apply.

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
Authenticator	High School diploma or equivalent	There are no site-wide training requirements for authenticators
Instructional Developer	Baccalaureate degree or equivalent	1-year experience in developing training
Computer Based Training/Web Based Training Developer	Baccalaureate degree or equivalent	1-year experience in developing training
Course Evaluator	High School diploma or equivalent	1-year experience in developing training
¹ Includes Training Manager, Training Specialist, full-time instructor, occasional instructor, Worker Trainer, or subject-matter-expert instructor.		

4.2 TRAINING PROGRAM ENTRY 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-Minimum DOE Order 426.2 Instructional Staff 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	BS (4)	(5)	4 Years (6)
Instructional Analyst/Developer	BA (7)	1 year	

¹Experience consistent with material being presented

²Instructors who are 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).

⁵Managers must receive facility-specific training based upon a comparison of the individual's background and abilities with the responsibilities and duties of the position. 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).

⁶Education or experience that is job related may be substituted on a case-by-case basis. The degree may fulfill 3 or the 4 years of nuclear experience on a one-for-one time basis.

⁷Instructional 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 TRAINING REQUIREMENTS

The criteria outlined in Table 3 apply to the following job titles: Radiological Trainer and Radiological instructor for initial qualification.

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 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.

Table 3-Training Requirements for Radiological Control Trainers and 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 be certified 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

Direction is provided in MSC-PR0-179, *Obtaining Training Equivalencies, Waivers, and Extensions*, for documenting the qualifications of instructional staff members not meeting the specified requirements for their positions.

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5.0 INITIAL TRAINING

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 Contractor Instructors are identified in the Statement of Work for Contractor Delivered Courses and Vendor Owned/Delivered Courses. Statements of Work will be revised as existing contracts are modified and/or new contracts are awarded. Technical requirements for Contractor Instructors will be valid after existing contracts have been modified and/or new contracts have been awarded by the assigned Contract Specialist.

Table 4-Initial Training Requirements

Position Description	Initial Training Requirements
Training Instructor	(1) Completion of course 170011, <i>Trainer's Training</i> , or equivalent per MSC-PR0-179, <i>Obtaining Training Equivalencies, Waivers, and Extensions</i> , or completion of site form A-6001-081, <i>Instructional Staff Qualification Checklist</i> , ¹ 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 Initial Qualification</i>
Worker Trainer	(1) Completion of course 170011, <i>Trainer's Training</i> , or equivalent per MSC-PR0-179, <i>Obtaining Training Equivalencies, Waivers, and Extensions</i> , or completion of site form A-6001-081, <i>Instructional Staff Qualification Checklist</i> , ¹ or course-specific <i>Train-the-Trainer</i> and mentoring by a Lead Worker Trainer 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 Initial Qualification</i>
Subject Matter Expert Trainer	If providing training more than 6 times per year: (1) Completion of course 170011, <i>Trainer's Training</i> , or equivalent per MSC-PR0-179, <i>Obtaining Training Equivalencies, Waivers, and Extensions</i> , or completion of site form A-6001-081, <i>Instructional Staff Qualification Checklist</i> , ¹ 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 Initial Qualification</i>

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OJT Instructor	(1) Completion of course 000396, <i>On-The-Job Trainer Fundamentals</i> or equivalent per MSC-PR0-179, <i>Obtaining Training Equivalencies, Waivers, and Extensions</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>
OJT Evaluator	(1) Completion of course 000397, <i>On-The-Job Evaluator Fundamentals</i> , or equivalent per MSC-PR0-179, <i>Obtaining Training Equivalencies, Waivers, and Extensions</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 Trainer Evaluator Qualification</i>
Training Manager	(1) Completion of site form A-6002-557, <i>Training Completion Record Instructional Staff Qualification</i> , documenting course 00039M, <i>Training Manager Qualification</i>
Instructional Analyst/ Developer	Completion of course 170011, <i>Trainer's Training</i> , or equivalent or completion of site form A-6001-081, <i>Instructional Staff Qualification Checklist</i> , ¹ per MSC-PR0-179, <i>Obtaining Training Equivalencies, Waivers, and Extensions</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 Designer Initial Qualification</i>
Computer Based Training/Web Based Training Developer	Completion of course 170011, <i>Trainer's Training</i> , or equivalent or completion of site form A-6001-081, <i>Instructional Staff Qualification Checklist</i> , ¹ per MSC-PR0-179, <i>Obtaining Training Equivalencies, Waivers, and Extensions</i> and (2) Completion of site form A-6002-557, <i>Training Completion Record Instructional Staff Qualification</i> , documenting completion of course 00039W, <i>Computer Based Training/Web Based Training Developer Qualification</i>
Course Evaluator	Completion of course 170011, <i>Trainer's Training</i> , or equivalent or completion of site form A-6001-081, <i>Instructional Staff Qualification Checklist</i> , ¹ per MSC-PR0-179, <i>Obtaining Training Equivalencies, Waivers, and Extensions</i>

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¹ Individuals who have completed course 00039N, *Instructional Staff Initial Qualification*, as of March 8, 2007, are grandfathered and do not need to meet this requirement.

² Employees who are qualifying as on-the-job trainers or evaluators for hoisting and rigging equipment (refer to DOE/RL-92-36, *Hanford Site Hoisting and Rigging Manual*) must meet the requirements of the HAMMER *Hoisting and Rigging Training Program Description*. **NOTE:** Program specific requirements for OJT/OJE may apply in other cases; see program specific TPD for more information.

6.0 JOB/COURSE SPECIFIC QUALIFICATIONS

The course or program Point of Contact (POC), working with Subject Matter Experts and/or Technical Authorities, establishes the technical, educational and experience background for all instructors teaching courses for HAMMER Hanford Training.

Instructor technical qualifications requirements must be documented in a Training Program Description or in the course program file. Qualification requirements may include such areas as required reading, licenses and/or certifications, observation and presentation of training, and a manager's recommendation of the instructor.

Documentation of these requirements could be accomplished in an instructor training course that has its own course number. The course POC may also chose to document technical instructional requirements on a qual-card. If the POC chooses to utilize a qual-card for documentation, the completed qual-card can be documented by a course number.

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

Job/course specific qualifications shall be performed for each instructional staff new hire and when instructional staff are reassigned. Verification of the instructor's technical qualification requirements shall be conducted. If the technical requirements have not been met, the instructor must perform the following:

1. Attend and complete the course that is to be taught, and

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2. Teach the course at least once while being observed and mentored by an experienced instructor for that course.

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 RCT continuing training, attending a seminar or conference related to training, reading trade journals, actively participating in professional organizations related to technical areas, etc. Personnel performing OJT and OJE activities may require continuing training based on other training program requirements such as hoisting and rigging.

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-6000-979	Review of Instructional Staff	<ul style="list-style-type: none"> • Document periodic observations/evaluations of instructional staff responsibilities, training assignments, and development recommendations.
A-6001-081	Instructional Staff Qualification 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.
A-6001-994	Instructional Evaluation – Classroom	<ul style="list-style-type: none"> • Document the evaluation of an instructor's initial classroom training presentation. Used to document instructor's minimum technical qualifications.

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A-6001-995	Instructional Evaluation – OJT/OJE	<ul style="list-style-type: none"> • Document the OJT performance evaluation of an OJT training instructor during the presentation of an actual OJT session – Side One. • Document the OJE performance evaluation of an on-the-job evaluator during the performance of an actual OJE – Side Two.
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.

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.
- **Computer Based Training/Web Based Training Developer:**
An individual who designs and develops CBT/WBT training and materials using an Instructional Systems Design (ISO) and Systematic Approach to Training (SAT) process.
- **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.
- **Course Evaluator:**
An individual who evaluates training and materials.
- **Instructional Developer:**
The individual primarily involved in the analysis, design, development, and implementation of training for job positions/activities in nuclear facilities. This individual works under the direction of the MSA Training Manager and in coordination with the training instructors to:

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- (1) conduct needs and job analysis to identify training requirements (valid task list, training requirements matrix),
 - (2) design training including determination of training setting and development of learning objectives, evaluation standards, and examination test items,
 - (3) develop training materials including lesson plans and trainee support materials,
 - (4) conduct classroom, on-the-job, simulator, or laboratory training,
 - (5) assist line management in the evaluation of training program evaluations.
- **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.
 - **MSA Training Manager:**
A HAMMER/Hanford Training manager who supervises HAMMER/Hanford Training instructional staff, Worker Trainer 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

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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.
- **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 Instructor:**
A bargaining unit employee who instructs Site-wide courses at HAMMER/Hanford Training.

10.0 SOURCE REQUIREMENT DOCUMENTS

- 10 CFR 830, Subpart A, *Nuclear Safety Management, Quality Assurance Requirements*

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- 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-92-36, *Hanford Site Hoisting and Rigging Manual*
- Hoisting and Rigging Training Program Description
- MSC-PR0-179, *Obtaining Training Equivalencies, Waivers, and Extensions*