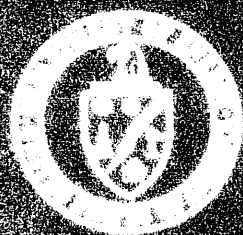


# **TAP 3 TRAINING PROGRAM SUPPORT MANUAL**

U.S. Department of Energy  
Training Program Support  
Manual, Energy



Department of the

**TRAINING ACCREDITATION PROGRAM**

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# **TAP 3 TRAINING PROGRAM SUPPORT MANUAL**

**U.S. Department of Energy  
Assistant Secretary for  
Nuclear Energy  
Washington, DC 20585**



in support of the

## **TRAINING ACCREDITATION PROGRAM**

**MASTER**

*MS*

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## FOREWORD

The Training Accreditation Program (TAP) establishes the objectives and criteria against which DOE nuclear facility training is evaluated to determine its readiness for accreditation. Training programs are evaluated against the accreditation objectives and criteria by facility personnel during the initial self-evaluation process. From this self-evaluation, action plans are made by the contractor to address the scope of work necessary, in order to upgrade any deficiencies noted. This scope of work must be formally documented in the Training Program Accreditation Plan.

Upon completion of the efforts outlined in the plan, a second self-evaluation is conducted using the accreditation objectives and criteria. The results of this evaluation are documented in the Contractor Self-Evaluation Report (CSER).

Following acceptance of the Contractor Self-Evaluation Report an Accreditation Review Team will evaluate the training programs requiring accreditation.

This *Training Program Support Manual, (TAP 3)*, has been developed to assist the contractor in preparation of the initial Self-Evaluation Report, Training Program Accreditation Plan and the CSER. Use of this manual will provide consistency in format and content, and will aid in the development and review of the reports by DOE and its contractors.

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## ACRONYMS

CSER	Contractor Self–Evaluation Report
GET	General Employee Training
JA	Job Analysis
JPM	Job Performance Measure
JTA	Job and Task Analysis
OJT	On–the–job training
O/T	Operator/Technician
PER	Performance Evaluation Report
SER	Safety Evaluation Report
SME	Subject Matter Expert
SOER	Significant Operating Event Report
SS/SM	Shift Supervisor/Shift Manager
TA	Task Analysis
TAP	Training Accreditation Program
TPAP	Training Program Accreditation Plan
TS	Technical Staff
UOR	Unusual Occurrence Report

# **TRAINING PROGRAM SUPPORT MANUAL TAP 3**

## **CHAPTER I CONTRACTOR SELF-EVALUATION AND REPORT GUIDELINES**

### **INTRODUCTION**

The Training Accreditation Program (TAP) establishes the objectives and criteria against which DOE nuclear facility training is evaluated, to determine its readiness for accreditation. Training programs are evaluated against the accreditation objectives and criteria by facility personnel, during the initial self-evaluation process. From this self-evaluation, action plans are made by the contractor to address the scope of work necessary, in order to upgrade any deficiencies noted. This scope of work must be formally documented in the Training Program Accreditation Plan. When reviewed and approved by the responsible Program Secretarial Officer, concurrence is obtained from NE-1. This plan then becomes the document which guides accreditation efforts for the contractor.

Upon completion of the efforts outlined in the plan, a second self-evaluation is conducted using the accreditation objectives and criteria. The results of this evaluation are documented in the Contractor Self-Evaluation Report (CSER). This report will address a single program (e.g., Instrument and Control Technician) as outlined in TAP 1, Chapter I, "Scope." It also will provide a written explanation of how each objective and the supporting criteria are met.

This *Training Program Support Manual, (TAP 3)*, has been developed to assist the contractor in preparation of the initial Self-Evaluation Report, Training Program Accreditation Plan and the CSER. Use of this manual will provide consistency in format and content, and will aid in the development and review of the reports by DOE and its contractors. It is expected that variations will be required to meet specific facility situations. If variations are required, the TAP Staff can provide guidance during preparation of the CSER.

For ease of reference the objectives and criteria in this document are numbered as they are found in TAP 1, Chapter II, "Accreditation Objectives and Criteria."

## INITIAL SELF-EVALUATION

Conducting the initial self-evaluation is a team effort requiring proper planning and preparation. Before beginning the self-evaluation, all participants in the training process should be familiar with the accreditation objectives and criteria and the accreditation process, and should be knowledgeable about their roles in the self-evaluation.

It is important at this stage that a facility commit to a thorough and critical self-evaluation. When conducting the initial self-evaluation, current training programs and activities should be compared with accreditation objectives and criteria. Training conducted by the facility, and also that conducted by subcontractors, should be reviewed. Facility line-management, supervisors, and the work force should be active participants. On-the-job training (OJT) is usually a major part of a training program and should be reviewed as thoroughly as the training organization activities. While conducting the initial self-evaluation, the strengths and weaknesses of the facility's training should be identified and documented for internal planning purposes.

Solutions and action plans for the problems that are identified should be developed and documented in the Training Program Accreditation Plan (TPAP). These should be corrected prior to the Field Organization forwarding a formal CSER to the TAP Staff. Questions about the category in which a problem falls should be addressed to the TAP Staff.



## CONTRACTOR SELF-EVALUATION REPORT

The self-evaluation leading to the CSER should be conducted with the same thoroughness and facility personnel involvement as the initial self-evaluation. The CSER should address each program separately and completely. Each program report should be bound separately. In preparing the CSER for each program, the facility should address each objective and each supporting criterion with narrative statements and with documentation, where appropriate.

Two copies of each CSER should be sent by the facility contractor to the Field Organization Accreditation Coordinator for review and approval by the field and program offices. The report will then be forwarded to the TAP Staff. Once the TAP Staff receives and reviews the CSER, a team visit may be scheduled.

# CONTRACTOR SELF-EVALUATION REPORT FORMAT

The following guidance is offered for preparation of the CSER:

- Complete a cover page for each program report. Use the example “Suggested Cover Page” (Attachment I-1), at the end of this chapter.
- The cover page should be followed by a table of contents.
- The body of the report should begin with an “Introduction” that appropriately addresses the following points:
  - Briefly describe the training program covered by this report. Use a time-line, bar chart, or curriculum sequence to describe the program phases and time spent in each phase.
  - Describe the organizational elements responsible for various training phases and for certification/qualification.
  - If applicable, describe any special or unique arrangements or circumstances that are not covered elsewhere in the report.
  - Describe the course curriculum. Include topics covered, presentation schedule, duration of each, and training setting (e.g., in-facility, classroom, laboratory, simulator).
- Following the “Introduction,” the organization of the report should follow the numbering system of the objectives and criteria with each criterion and response starting on a separate page. The narrative response should:
  - Be written for each criterion in sufficient detail to permit the reader to understand how each criterion is met
  - Include identified weaknesses and ongoing corrective actions
  - Be supplemented with references which are included as attachments, as appropriate.

The “Contractor Self-Evaluation Report Attachment List” (Attachment I-2), to this guideline, provides the recommended order for listing attachments to the CSER, and will aid in identifying potential documents for inclusion. Different facilities will require more, less, or different documents to be included in the attachments. However, the order and format of the attachment list should follow that given in Attachment I-2. Additional documents needed for amplification but not listed in Attachment I-2 should be added at the end of the contractor attachments.

- When one section of the CSER is applicable to more than one program, it should be written once, titled to show all programs to which it applies, and then the pages reproduced for all of the reports. Page numbers should begin with the letter designations for each chapter and program (e.g., CH-I-1) and include the objective number and the page number within that objective. Record within the “Introduction,” your facility’s letter designation scheme and the associated training program(s).

### **TAP 3**

- Using the “Roster of Training Staff” (Attachment I-3) to this guideline, complete a roster for all training staff that directly supports the training program covered by this report. Include this document as Exhibit 17 in the CSER.
- Key points to consider, when describing the comparison with the objectives and to each supporting criterion, are provided in “Contractor Self-Evaluation Report Guidelines” (Attachment I-4).
  - “Organization and Management of the Training System.”
  - “Facilities, Equipment, and Materials to Support Training .”
  - “Conduct of Job Analysis and Identification of Tasks for Training.”
  - “Establishment of Training Program Content.”
  - “Development of Learning Objectives as the Basis for Training.”
  - “Organization of Instruction Using Lesson Plans and Other Training Guides.”
  - “Conduct of Classroom and Individualized Instruction.”
  - “Conduct of On-the-Job Training.”
  - “Conduct of Simulator Training.”
  - “Conduct of Laboratory Training.”
  - “Examinations and Evaluations Leading to Qualification/Certification.”
  - “Systematic Evaluation of Training Effectiveness.”

These examples should be used to estimate the depth of discussion when preparing the report.

**ATTACHMENT I-1  
SUGGESTED COVER PAGE**

\_\_\_\_\_  
(Facility)

\_\_\_\_\_  
(Program)

**Training Accreditation Program (TAP)  
Contractor Self-Evaluation Report (CSER)**

\_\_\_\_\_  
(Laboratory, if applicable)

\_\_\_\_\_  
(Contractor)

\_\_\_\_\_  
(Date of Report)

\_\_\_\_\_  
(Revision Number)

Person at facility to be contacted if questions arise concerning this report:

\_\_\_\_\_  
(Title)

\_\_\_\_\_  
(Address)

\_\_\_\_\_  
(Telephone—area code and FTS)

**ATTACHMENT I-2**  
**CONTRACTOR SELF-EVALUATION REPORT ATTACHMENT LIST**

EXHIBIT NUMBER	EXHIBIT TITLE	AFFECTED CRITERIA									
		1.1	1.2	1.5	1.11						
1	Operations/Training Policy on Training Management Responsibilities	1.3	1.5	1.11							
2	Organization Chart	1.3	1.5								
3	Position Descriptions	1.3	1.5								
4	Existing Training Program Evaluation—Documentation	1.3									
5	Training Goals and Objectives	1.4									
6	Performance-Based Training Policies/Procedures	1.6									
7	Training Policy Manual or Equivalent	1.7									
8	Certification/Qualification Course Curriculum	1.8									
9	Training Policy on Exceptions from Training	1.8	2.2								
10	Training Policy on Recordkeeping	1.9									
11	Training Policy on Control and Administration of Subcontracted Training	1.10	9.7	11.6	12.7	14.9					
12	Training Manpower Projections	1.11									
13	Current Year Work Plan	1.11									
14	Position Description for Entry-Level Trainees	2.1	7.1								
15	Policy on Medical Qualification for Job Position	2.1									
16	Course Curriculum for Preentry-Level Training Programs	2.2									
17	Roster of Training Staff, Training Group Position Descriptions	3.1									
18	Technical Qualification Program for Instructors	3.2									
19	Instructional Qualification Program for Instructors (or equivalent)	3.3									

## ATTACHMENT I-2 CONTRACTOR SELF-EVALUATION REPORT ATTACHMENT LIST (Continued)

EXHIBIT NUMBER	EXHIBIT TITLE	AFFECTED CRITERIA													
20	Training Policy on Instructor Continuing Training	3.4	3.8	3.9											
21	Training Policy on Part--Time/Occasional Instructors	3.5													
22	Sample Lesson Plans	3.6	7.3	7.5	8.1	8.2	9.1	9.2							
23	Training Policy on Instructor Evaluation	3.7	3.8	14.2											
24	Floor Plan of Training Facility	4.1													
25	List of Instructional Equipment (e.g., overhead projectors, mockups)	4.2													
26	List of Library "Reference Material"	4.3	9.5												
27	Training Policy on Library Controls	4.3													
28	Training Policy on Conduct of Job Analysis	5.1													
29	Task List	5.1													
30	List of Tasks Selected for Training	5.2													
31	Task-to-Training Matrix	5.3													
32	Training Policy on Keeping Training Materials Current	5.4	8.3	9.1	11.2	12.1									
33	Training Policy on Training Design	6.1	6.2	6.4	7.2	7.4									
34	Training Policy on Training Development	6.1	6.2	6.4	7.2	8.1	8.2	8.3	14.5						
35	Training Policy on Conduct of Task Analysis	6.2	6.3												
36	Training Policy on Review and Approval of Training Material	6.3	8.4												
37	Training Policy on Training Program Review and Evaluation	6.5	6.7	14.1	14.3	14.4	14.7	14.8							
38	Continuing Training Schedule	6.6													



**ATTACHMENT I-2**  
**CONTRACTOR SELF-EVALUATION REPORT ATTACHMENT LIST (Continued)**

EXHIBIT NUMBER	EXHIBIT TITLE	AFFECTED CRITERIA												
		7.2	9.6	11.5	12.6	13.1	13.2	13.3	13.4	13.5				
39	Training Policy on Examination Administration													
40	Training Policy on Conduct of Classroom Training	9.1	9.3											
41	Lesson Plan for Individualized Instruction	9.5												
42	Training Policy on Conduct of On-the-Job Training (OJT)	10.1	10.2	10.3										
43	List of Personnel Designated to Teach OJT	10.2												
44	Sample OJT Qualification Documents (cards, guides, standards)	10.1	10.3											
45	Training Policy on Conduct of Simulator Training	11.2	11.3											
46	Simulator Training Guide	11.1	11.2											
47	Training Policy on Conduct of Laboratory Training	12.1	12.4											
48	Laboratory Training Guide	12.1	12.2	12.3										
49	Training Policy on Incorporating Changes and Actions Into Training	14.5												
50	Training Policy on Incorporating Facility and Industry Experiences Into Training	14.6												

**ATTACHMENT I-3  
ROSTER OF TRAINING STAFF**

Name and Position Title (Indicate if part-time)	Program Subjects	Hours Per Week Conducting Training	Hours Spent In-Facility	Related Technical Training

Years of Education and Fields of Study	Instructional Skills Training	Years of Instructional Experience	Years of Work Experience Related to Training Areas	Other Qualifications

## ATTACHMENT I-3 ROSTER OF TRAINING STAFF (Continued)

**Instructions**—Complete a roster of all training personnel (e.g., Training Managers, Training Administrators, Accreditation Coordinators, Program Developers, Instructors) using the definitions and suggested format below. Each facility and training unit should have a separate roster.

1. **Name and Position Title**—Use titles descriptive of the individual's primary function (e.g., "Instrument Technician Instructor" rather than "Training Specialist").
2. **Program Subjects**—List the training programs or portions of programs to which the individual has been documented as qualified to teach.
3. **Hours Per Week Conducting Training**—Report the approximate average number of hours per week over the past 12 months during which the individual presented instruction or worked directly with trainees.
4. **Hours Spent In-Facility**—List the number of hours spent in the facility, participating in the job position activities associated with the area in which the individual instructs. Times listed should only reflect actual work in or supervision of the job position activities.
5. **Related Technical Training**—Report formal training programs completed.
6. **Years of Education and Fields of Study**—Report the number of years of formal education (e.g., high school, technical school, and college). For any part-time college study, report equivalent academic years. Report the areas of specialization for any postsecondary education.
7. **Instructional Skills Training**—Report formal training programs completed.
8. **Years of Instructional Experience**—Report work experience as an instructor.
9. **Years of Work Experience Related to Training Areas**—Report work experience in a technical field closely related to the area(s) in which the individual provides training, not including time as a trainer, and date of most recent industry experience.
10. **Other Qualifications**—Report other technical qualifications related to the area(s) in which the individual provides training. Include facility certifications/qualifications.

## **ATTACHMENT I-4 CONTRACTOR SELF-EVALUATION REPORT GUIDELINES**

### **OBJECTIVE 1—ORGANIZATION AND MANAGEMENT OF THE TRAINING SYSTEM**

The facility is organized, staffed, and managed to facilitate planning, directing, evaluating, and controlling a systematic training process that fulfills job-related training needs, such as listed below.

#### **Criterion 1:**

Line management is responsible for the effective conduct of training and qualification programs.

**Suggested Response**—Provide a narrative of line management's involvement in the training system and attach supporting documentation.

#### **Criterion 2:**

Line management ensures that the content and conduct of the training and qualification programs will produce competent and professional workers and supervisors.

**Suggested Response**—Provide a narrative of line management's involvement in determining and evaluating the content and conduct of training.

#### **Criterion 3:**

Actions needed to achieve high quality, job-related, performance-based training programs eligible for accreditation have been identified through a systematic evaluation of existing programs.

**Suggested Response**—Provide a brief description of the evaluation process used to systematically determine the status of the existing training program, when compared with the accreditation objectives and criteria. Describe action plans instituted to correct identified deficiencies. Identify any outstanding items. Describe by position title who participated in the self-evaluation.

#### **Criterion 4:**

Written contractor and facility goals establish the required character and quality of key aspects of the training system. Supporting objectives are procedurally implemented at each organizational level.

**Suggested Response**—Attach a copy of current contractor and facility goals and supporting objectives that pertain to training. Describe how the goals and objectives are implemented and how accomplishment is measured.

The job function, responsibilities, authority, and accountability of personnel involved in managing, supervising, and implementing training are clearly defined in writing.

**Suggested Response**—Attach a copy of position description/guides or documents that describe the responsibilities and authority of all site personnel involved in managing, supervising, and implementing training for this program. If necessary, provide a narrative to amplify the attachments.

## **ATTACHMENT I-4 CONTRACTOR SELF-EVALUATION REPORT GUIDELINES (Continued)**

### **OBJECTIVE 1—ORGANIZATION AND MANAGEMENT OF THE TRAINING SYSTEM (Continued)**

**Criterion 5:**

A performance-based training system is implemented as the primary management tool for (a) analyzing, (b) designing, (c) developing, (d) conducting, and (e) evaluating training.

**Suggested Response**—Provide a description of the performance-based training system that is implemented as the primary management tool for developing, conducting, and evaluating all training functions.

**Criterion 6:**

Procedures are documented and implemented to ensure that all phases of instructional activities can be conducted reliably and consistently.

**Suggested Response**—Attach a copy of current training procedures pertinent to this report. If necessary, provide a narrative to amplify the attachments.

**Criterion 7:**

Training to be completed prior to qualification/certification is clearly defined. Trainee and incumbent exceptions from training may be granted when justified and supported by a documented examination of prior training and experience.

**Suggested Response**—Provide a brief description of the training that is to be completed prior to certification/qualification for the position for which the trainee/incumbent is being prepared. Include a description of the criteria and procedures used to grant exceptions from training.

Training records are maintained in an auditable manner consistent with DOE requirements. Training records support management information needs and provide required data on each individual's training participation, performance, and verification of medical evaluations.

**Suggested Response**—Attach a sample trainee record. Describe the maintenance and archiving procedures for record disposition. If necessary, provide a narrative to amplify the attachments.

**Criterion 8:**

Programs offered under subcontract remain under the control of the sponsoring contractor and are evaluated by it to ensure that the accreditation objectives and criteria are met.

**Suggested Response**—Provide a brief description of the methods/procedures for approving, monitoring, and controlling subcontracted training. Attach forms, reports, and responses that illustrate control and monitoring of subcontracted training.

## **ATTACHMENT I-4 CONTRACTOR SELF-EVALUATION REPORT GUIDELINES (Continued)**

### **OBJECTIVE 1—ORGANIZATION AND MANAGEMENT OF THE TRAINING SYSTEM (Continued)**

#### **Criterion 9:**

The work load of the training staff indicates that there are sufficient qualified personnel to accomplish assigned duties and responsibilities.

**Suggested Response**—Provide a brief description of the method or procedure used to determine training staff size and to establish qualifications. Identify any authorized positions that are vacant.

### **OBJECTIVE 2—TRAINEE SELECTION**

Trainee candidates must meet the minimum requirements for entry into the training program.

#### **Criterion 1:**

Entry-level criteria include minimum educational, technical, and experience requirements; a medical evaluation; and certification of the physical capabilities identified for the position.

**Suggested Response**—Attach a copy of the medical evaluation criteria and frequency requirements required for the position, and also include applicable position descriptions. If necessary, provide a narrative to amplify the attachments.

#### **Criterion 2:**

Remedial training programs are provided, as necessary, to prepare the trainee to meet the identified training program entry-level requirements for areas where they may be deficient.

**Suggested Response**—Provide a brief description of the remedial training programs used to prepare the trainee to meet the entry-level requirements of the program. Attach procedures, lesson plans, examinations, and/or other supporting documentation.

### **OBJECTIVE 3—TRAINING STAFF**

The staff members (contractor and subcontractor, if used) possess the technical knowledge, experience, and the developmental and instructional skills required to fulfill their assigned duties.

#### **Criterion 1:**

Training staff responsible for program management, supervision, and development must have and maintain the education, experience, and technical qualifications required for their jobs.

**Suggested Response**—Besides the "Roster of Training Staff" (Attachment I-3) provide a brief description of how the minimum requirements are verified and documented.



## **ATTACHMENT I-4 CONTRACTOR SELF-EVALUATION REPORT GUIDELINES (Continued)**

### **OBJECTIVE 3—TRAINING STAFF (Continued)**

**Criterion 2:**

Instructors must have the technical qualifications, that include adequate theory, practical knowledge, and experience, for the subject matter that they are assigned to teach.

**Suggested Response**—Besides the “Roster of Training Staff,” provide a brief description of how the minimum requirements are verified and documented.

**Criterion 3:**

Developmental and instructional qualifications of instructors include theory, practical knowledge, and evaluated work experience. This experience is important for analyzing, designing, and developing, as well as conducting and evaluating training appropriate to their job assignments.

**Suggested Response**—Briefly describe the developmental and instructional training skills provided, and also the criteria used to determine applicability to an individual in training for an instructor position. Attach supporting documentation.

**Criterion 4:**

Methods are implemented to ensure that individual instructors meet and maintain position qualification requirements.

**Suggested Response**—Provide a brief description of the method used to ensure that individual instructors meet and maintain position qualification requirements.

**Criterion 5:**

When facility or subcontractor instructors have not yet attained the required instructional qualifications or instruct only occasionally, training quality is maintained through appropriate additional assistance and supervision.

**Suggested Response**—Briefly describe the methods/procedures used to ensure that instructors, who have not completed facility instructor qualification, have the assistance and supervision necessary to maintain training quality.

**Criterion 6:**

The Instructional Skills Training Program develops the necessary instructor capabilities to fulfill training program requirements.

**Suggested Response**—Provide a description of the Instructional Skills Training Program including learning objectives and examination material.

## ATTACHMENT I-4 CONTRACTOR SELF-EVALUATION REPORT GUIDELINES (Continued)

### OBJECTIVE 3—TRAINING STAFF (Continued)

#### Criterion 7:

Instructor performance in each training setting in which the individual instructs is evaluated regularly by the individual's supervisor. Results are used to improve performance.

**Suggested Response**—Briefly describe how and when instructor performance is evaluated. Include a discussion of feedback utilization. Attach applicable procedures and forms.

#### Criterion 8:

Continuing instructor training maintains, improves, and advances required knowledge and skills and is based in part on evaluations of instructor performance.

**Suggested Response**—Provide a description of the types of continuing development efforts that are used. Include a discussion of how the content of continuing instructor training is determined and documented. Describe how the results of the evaluations contribute to continued instructor training.

#### Criterion 9:

The training staff maintains facility technical qualifications and familiarity with job requirements, as appropriate to their job assignments.

**Suggested Response**—Attach procedures or documentation describing the process used to ensure that the training staff maintains their facility technical qualifications and familiarity with job requirements.

### OBJECTIVE 4—FACILITIES, EQUIPMENT, AND MATERIALS TO SUPPORT TRAINING

The training facilities, equipment, and materials adequately support training activities.

#### Criterion 1:

Classroom and other instructional facilities meet training needs.

**Suggested Response**—Briefly describe the instructional facilities available, their purpose, and frequency of use. Attach supporting documentation.

#### Criterion 2:

The training staff has necessary instructional aids and equipment to support training material development. Presentation of classroom and practical demonstration training are consistent with program learning objectives.

**Suggested Response**—Briefly describe the instructional aids and equipment available to the instructors. For tools, equipment, and components, include a similar description to those used in the facility.

**ATTACHMENT I-4  
CONTRACTOR SELF-EVALUATION REPORT GUIDELINES  
(Continued)**

**OBJECTIVE 4—FACILITIES, EQUIPMENT, AND MATERIALS TO  
SUPPORT TRAINING  
(Continued)**

**Criterion 3:**

Technical reference materials including current facility procedures, drawings, and training manuals are readily available to the trainees and instructors.

**Suggested Response**—Briefly describe what technical reference materials are available, their locations, and how they are maintained current. Attach supporting documentation.

**OBJECTIVE 5—CONDUCT OF JOB ANALYSIS AND IDENTIFICATION  
OF TASKS FOR TRAINING**

The tasks required for competent job performance are identified, documented, and included in the training program, as appropriate.

**Criterion 1:**

Facility personnel, training staff, and other subject matter experts, as appropriate and as needed, have conducted a job analysis to develop a valid facility-specific task list.

**Suggested Response**—Briefly describe the methods/procedures used to develop the facility-specific task list. Attach the task list and supporting documentation used in the process.

**Criterion 2:**

Subject matter experts (appropriate facility technical personnel, training staff personnel, or knowledgeable outside personnel) assist in the selection of tasks for training.

**Suggested Response**—Provide a description of the process used to select/deselect tasks for training. Attach the list of tasks selected for training.

**Criterion 3:**

Each task selected for training (initial or continuing) from the facility-specific task list is matrixed to supporting procedures and training materials. These are then compared with existing training materials, in sufficient depth, to determine if existing training adequately supports task performance.

**Suggested Response**—Briefly describe how tasks selected for training are compared to existing training materials, to determine adequacy of material coverage and identify needed improvements. Provide the task-to-training matrix used for documentation.

## **ATTACHMENT I-4 CONTRACTOR SELF-EVALUATION REPORT GUIDELINES (Continued)**

### **OBJECTIVE 5—CONDUCT OF JOB ANALYSIS AND IDENTIFICATION OF TASKS FOR TRAINING (Continued)**

**Criterion 4:**

The facility-specific list of tasks selected for training and the comparison to training materials are reviewed periodically. These tasks are updated as needed by changes in procedures, facility systems/equipment, job scope, and advances in technology.

**Suggested Response**—Provide a brief description of the method/procedure used to systematically review and update the facility-specific list of tasks selected for training.

### **OBJECTIVE 6—ESTABLISHMENT OF TRAINING PROGRAM CONTENT**

The training program content provides the trainee with the knowledge and skills needed to perform tasks associated with the position for which training is being conducted. The content of initial training prepares the trainee to meet the minimum criteria to perform the job for which the candidate is being trained. The content of continuing training maintains and improves official job performance.

**Criterion 1:**

DOE and other appropriate training guidelines (e.g., training design specifications) are used as a guide for selecting, sequencing, and verifying training program structure and content.

**Suggested Response**—Briefly describe how DOE and other appropriate training guidelines were used in the design, development, modification, and evaluation of the training program/curriculum.

**Criterion 2:**

Tasks are analyzed, as necessary, to determine the task's supporting skills and knowledge to be included in training programs.

**Suggested Response**—Briefly describe how and by whom the tasks were analyzed (if analysis was necessary) to determine the supporting skills and knowledge requirements, and how they were incorporated into the training program.

**Criterion 3:**

Personnel qualified in the position for which training is being developed and conducted help determine training content and confirm its completeness.

**Suggested Response**—Briefly discuss who, by position, were used to help derive the training content and validate its completeness. Attach applicable procedures and other documents.

## **ATTACHMENT I-4 CONTRACTOR SELF-EVALUATION REPORT GUIDELINES (Continued)**

### **OBJECTIVE 6—ESTABLISHMENT OF TRAINING PROGRAM CONTENT (Continued)**

**Criterion 4:**

Current facility procedures, technical and professional references, and facility/industry operating experience are used to identify training content and facility-specific information for use in developing training materials.

**Suggested Response**—Briefly describe how facility procedures and other technical and professional references and their changes are used to develop initial and continuing training material. Attach applicable procedures or other documentation.

**Criterion 5:**

Initial training program content is modified to reflect the results of program review and evaluation by facility and training staff personnel.

**Suggested Response**—Briefly describe how the initial training program is evaluated and how the evaluation results are used to update, modify, or improve the program content. Attach supporting documentation.

**Criterion 6:**

Continuing training content includes refresher training on selected initial training topics: (a) facility and industry events, (b) facility and procedure modifications, (c) retraining addressing task performance deficiencies, and (d) refresher training on infrequently performed tasks.

**Suggested Response**—Provide copies of past continuing training schedules showing topics and training location. Include a discussion of how the training areas are prioritized and scheduled.

**Criterion 7:**

The results of trainee and program evaluations are used to help determine the content of continuing training.

**Suggested Response**—Briefly describe how the content of the continuing training program was determined. Attach supporting documentation.

## **ATTACHMENT I-4 CONTRACTOR SELF-EVALUATION REPORT GUIDELINES (Continued)**

### **OBJECTIVE 7—DEVELOPMENT OF LEARNING OBJECTIVES AS THE BASIS FOR TRAINING**

Learning objectives that identify training content and define satisfactory trainee performance are derived from job performance requirements.

#### **Criterion 1:**

The minimum trainee entry-level skills, knowledge, and experience for the position are considered when developing learning objectives.

**Suggested Response**—Briefly describe how the expected entry-level experiences, skills, and knowledge are used in developing or modifying learning objectives, and how actual entry-level skills and knowledge of trainees are determined. Include action taken if the new trainees do not match the expected entry level. Attach supporting documentation.

#### **Criterion 2:**

Learning objectives are derived from an analysis of job performance requirements and are the basis for trainee/incumbent evaluation.

**Suggested Response**—Briefly describe how the actual job performance requirements were used in developing or modifying the learning objectives, and how the learning objectives were used to develop written and oral examinations. Attach supporting documentation.

#### **Criterion 3:**

Learning objectives state the action (knowledge or skills) the trainee must demonstrate, the conditions under which the action will take place, and the standards of performance the trainee should achieve upon completion of the training activity.

**Suggested Response**—Attach lesson plans, training guides, or checklists which provide examples of learning objectives used. If necessary, provide a narrative to amplify the attachments.

#### **Criterion 4:**

Learning objectives are grouped by similar training setting (for example, classroom, simulator, laboratory, and facility).

**Suggested Response**—Briefly describe the method used to determine the training setting to which learning objectives were assigned. Attach supporting documentation.

#### **Criterion 5:**

Learning objectives are sequenced based on their relationship to one another and help trainees move from one level of skill and knowledge to another.

**Suggested Response**—Briefly describe the method used to determine the sequencing of learning objectives and associated training material, so as to help the trainee progress from simple skills and knowledge to performing complex job-related tasks. Attach examples.



## **ATTACHMENT I-4 CONTRACTOR SELF-EVALUATION REPORT GUIDELINES (Continued)**

### **OBJECTIVE 8—ORGANIZATION OF INSTRUCTION USING LESSON PLANS AND OTHER TRAINING GUIDES**

Lesson plans and other training guides provide guidance and structure to ensure the consistent conduct of training activities.

#### **Criterion 1:**

Lesson plans for classroom instruction provide for effective, consistent class presentations.

**Suggested Response**—Briefly describe the format used for lesson plans. Include a discussion of how they are maintained current. Attach example lesson plans, procedures, and other supporting documents.

#### **Criterion 2:**

Lesson plans or equivalent training guides are used for laboratory training, on-the-job training (OJT), and simulator training and include criteria for evaluating proper trainee performance.

**Suggested Response**—Briefly describe the format used for lesson plans and training guides and how they are maintained current. Attach example lesson plans, training guides, and procedures.

#### **Criterion 3:**

Lesson plans and other training materials are developed or modified using learning objectives derived from job performance requirements.

**Suggested Response**—Briefly describe how the learning objectives were used to develop or modify lesson plans and other training material. Attach supporting documentation.

#### **Criterion 4:**

Review and approval requirements are established and utilized for all lesson plans, training guides, and other training materials prior to their issue and use.

**Suggested Response**—Attach copies of applicable procedures. If necessary, provide a narrative to amplify the attachments.

### **OBJECTIVE 9—CONDUCT OF CLASSROOM AND INDIVIDUALIZED INSTRUCTION**

Classroom and individualized instruction is effectively and consistently presented.

#### **Criterion 1:**

Training is implemented as outlined by approved performance-based training materials and is well-organized and current.

**ATTACHMENT I-4**  
**CONTRACTOR SELF-EVALUATION REPORT GUIDELINES**  
**(Continued)**

**OBJECTIVE 9—CONDUCT OF CLASSROOM AND INDIVIDUALIZED INSTRUCTION**  
**(Continued)**

**Suggested Response**—Briefly describe to what extent training is implemented and how each aspect of the program is conducted as specified in the program description or training plan. Attach supporting procedures or other documentation.

**Criterion 2:**

Training activities encourage direct trainee participation in the learning process.

**Suggested Response**—Briefly describe how training activities and materials encourage or require direct trainee participation in the learning process. Attach examples or other supporting documentation.

**Criterion 3:**

Instructors prepare adequately to ensure effective and consistent delivery of the material.

**Suggested Response**—Briefly describe how instructors prepare, prior to conducting classroom training activities. Attach supporting procedures or other documentation.

**Criterion 4:**

The instructor uses instructional techniques appropriate to the lesson content and learning objectives.

**Suggested Response**—Briefly describe what techniques are used and how they are selected.

**Criterion 5:**

When individualized instruction is used, either the training materials contain the information to be learned or referenced texts are readily available.

**Suggested Response**—Briefly describe how individualized instruction programs (if used), are developed and administered. Attach supporting documentation.

**Criterion 6:**

Trainee mastery of learning objectives is evaluated regularly using written or oral examinations and quizzes.

**Suggested Response**—Briefly describe the methods used to evaluate a trainee's progress towards mastery of established—classroom and individualized—instruction learning objectives. Attach supporting documentation.

**Criterion 7:**

Subcontracted training is evaluated to ensure that trainees are achieving the specified learning objectives as measured by appropriate written or oral examinations and quizzes.

**Suggested Response**—Briefly describe how subcontracted training is monitored and evaluated. Attach supporting procedures or other documentation.

## **ATTACHMENT I-4 CONTRACTOR SELF-EVALUATION REPORT GUIDELINES (Continued)**

### **OBJECTIVE 10—CONDUCT OF ON-THE-JOB TRAINING**

On-the-job training (OJT) is effectively and consistently presented.

**Criterion 1:**

OJT is delivered using well-organized and current performance-based training materials.

**Suggested Response**—Briefly describe to what extent OJT is implemented and how each aspect of the program is conducted, as specified in the program description or training plan. Attach supporting procedures or other documentation.

**Criterion 2:**

Designated personnel who are instructed in program standards and methods conduct OJT.

**Suggested Response**—Briefly describe how personnel who conduct OJT are qualified and designated to perform training, and how consistency is maintained. Attach supporting documentation.

**Criterion 3:**

Completion of OJT and task qualification is by actual task performance. When the actual task cannot be performed but is simulated or walked-through, the conditions of task performance, references, tools, and equipment reflect the actual task to the extent possible.

**Suggested Response**—Describe how OJT and task qualification by actual task performance is ensured. Include the number of “must perform” tasks. Also describe how the training program prepares the trainee to perform job tasks which cannot be performed on actual plant equipment. Attach supporting documentation.

### **OBJECTIVE 11—CONDUCT OF SIMULATOR TRAINING**

Simulator training is effectively and consistently presented.

**Criterion 1:**

An appropriate simulator is used for hands-on training to demonstrate operational characteristics and for recognition and control of normal, abnormal, and emergency facility/process conditions. Differences between the simulator and the facility/process are accommodated in the training session.

**Suggested Response**—If there is a facility-referenced simulator available, briefly discuss how simulator training is conducted. Address significant differences between the simulator and the facility/process and how these differences are accommodated in the training. Attach supporting documentation.

**Criterion 2:**

The training program content is implemented as outlined by approved performance-based training materials and is well-organized and current.

**Suggested Response**—Briefly discuss how simulator training is conducted. Include discussion of how simulator configuration, procedures, and references are controlled to keep them current. Attach supporting procedures or other documentation.

## **ATTACHMENT I-4 CONTRACTOR SELF-EVALUATION REPORT GUIDELINES (Continued)**

### **OBJECTIVE 11—CONDUCT OF SIMULATOR TRAINING (Continued)**

**Criterion 3:**

Instructors prepare adequately for simulator sessions to ensure effective and consistent training.

**Suggested Response**—Briefly discuss how contractor and subcontractor (if used) instructors prepare to conduct simulator training activities. Attach supporting documentation.

**Criterion 4:**

The instructor uses instructional techniques appropriate to the situation.

**Suggested Response**—Briefly discuss what techniques are used and how they are selected.

**Criterion 5:**

Individual trainee and team performance is evaluated regularly against established learning objectives.

**Suggested Response**—Describe how students are evaluated in individual and team evolutions against established learning objectives. Attach supporting documentation.

**Criterion 6:**

Subcontracted training is evaluated to ensure that trainees are achieving the specified learning objectives, as measured by appropriate evaluation methods and performance standards.

**Suggested Response**—Briefly describe how subcontractor-supplied simulator training is monitored and evaluated. Attach supporting procedures or other documentation.

### **OBJECTIVE 12—CONDUCT OF LABORATORY TRAINING**

Laboratory training is effectively and consistently presented.

**Criterion 1:**

The training program content is implemented as outlined by approved training materials and is well-organized, current, and structured to provide practical experience.

**Suggested Response**—Briefly discuss to what extent laboratory training is implemented and how each aspect of the program is conducted, as specified in the program description or training plan. Attach supporting procedures or other documentation.

**Criterion 2:**

Conditions of task performance, references, tools, and equipment reflect the actual job to the extent possible.

**Suggested Response**—Briefly describe how the training program prepares the student to perform specific job tasks and how instructors compensate for differences between training and actual on-the-job conditions.

**ATTACHMENT I-4**  
**CONTRACTOR SELF-EVALUATION REPORT GUIDELINES**  
**(Continued)**

**OBJECTIVE 12—CONDUCT OF LABORATORY TRAINING**  
**(Continued)**

**Criterion 3:**

Training activities encourage direct trainee participation in the learning process.

**Suggested Response**—Briefly describe how training activities and materials encourage or require direct student participation in the learning process. Attach examples and other supporting documentation.

**Criterion 4:**

Instructors prepare adequately to ensure effective and consistent delivery of the material.

**Suggested Response**—Briefly describe how instructors prepare prior to conducting laboratory or workshop training activities. Attach supporting procedures and/or other documentation.

**Criterion 5:**

The instructor uses instructional techniques appropriate to the situation.

**Suggested Response**—Briefly describe what techniques are used and how they are selected.

**Criterion 6:**

Trainee performance is evaluated regularly against established learning objectives.

**Suggested Response**—Briefly describe how trainee performance is evaluated during laboratory or workshop training. Attach supporting documentation.

**Criterion 7:**

Subcontracted training is evaluated to ensure that trainees are achieving the specified learning objectives, as measured by appropriate evaluation methods and performance standards.

**Suggested Response**—Briefly describe how subcontractor-supplied laboratory or workshop training is monitored and evaluated. Attach supporting procedures or other documentation.

**OBJECTIVE 13—EXAMINATIONS AND EVALUATIONS LEADING  
TO QUALIFICATION/CERTIFICATION**

Examinations and OJT/laboratory/simulator performance evaluations are content valid, administered consistently, controlled, and documented.

**Criterion 1:**

Development, approval, security, administration, and maintenance of examinations and examination question banks are systematically controlled.

**Suggested Response**—Briefly describe the system used for the development, approval, security, administration, and maintenance of examinations and examination question banks. Attach supporting documentation.

**ATTACHMENT I-4**  
**CONTRACTOR SELF-EVALUATION REPORT GUIDELINES**  
**(Continued)**

**OBJECTIVE 13—EXAMINATIONS AND EVALUATIONS LEADING  
TO QUALIFICATION/CERTIFICATION**  
**(Continued)**

**Criterion 2:**

Examinations and OJT/laboratory/simulator performance evaluations contain a representative cross-section of knowledge, skills, and abilities (KSAs) required for the position.

**Suggested Response**—Briefly describe the methods used to develop content valid examinations which contain a representative cross-section of KSAs required for the position. Attach supporting documentation.

**Criterion 3:**

Trainees and incumbents who fail examinations or OJT/laboratory/simulator performance evaluations are provided structured remedial training and reevaluated. Minimum progress standards are established.

**Suggested Response**—Briefly describe the procedures or policies for trainees and incumbents who fail examinations or OJT/laboratories/simulator evaluations. Attach supporting documentation.

**Criterion 4:**

All examination questions are referenced to one or more learning objectives.

**Suggested Response**—Describe the method or procedure used to ensure that examination questions test the associated learning objectives. Attach examples or supporting documentation.

**Criterion 5:**

The content of examinations is changed at intervals sufficient to prevent compromise.

**Suggested Response**—Briefly describe the method or procedure used to ensure that examination content is not compromised. Attach supporting documentation.

**Criterion 6:**

Examinations and OJT/laboratory/simulator performance evaluations are administered and graded in a consistent manner. Acceptance criteria to be used are defined before the examination and performance evaluation.

**Suggested Response**—Provide procedures or a discussion of the method used to ensure that examinations and performance evaluations are administered and graded in a consistent manner. Attach supporting documentation.

## **ATTACHMENT I-4 CONTRACTOR SELF-EVALUATION REPORT GUIDELINES (Continued)**

### **OBJECTIVE 14—SYSTEMATIC EVALUATION OF TRAINING EFFECTIVENESS**

A systematic evaluation of training effectiveness and its relation to on-the-job performance is used to ensure that the training program conveys all required skills and knowledge.

#### **Criterion 1:**

A comprehensive evaluation of individual training programs is conducted by qualified individuals on a periodic basis to identify program strengths and weaknesses.

**Suggested Response**—Briefly discuss how the effectiveness of the training program is evaluated. Include in the discussion the frequency of the evaluation, what elements are evaluated, and how the results of the findings are used to improve subsequent training. Attach supporting procedures or other documentation.

#### **Criterion 2:**

Training delivery is monitored in all instructional settings and evaluated with regard to instruction, materials, and instructor performance.

**Suggested Response**—Briefly describe how the training organization monitors and evaluates the quality of instruction, including training materials and instructor performance. Attach supporting procedures or other documentation.

#### **Criterion 3:**

Feedback from trainee performance during training is used to evaluate and refine the training program.

**Suggested Response**—Briefly describe how trainee performance during training is used to evaluate and improve the training program. Attach supporting documentation.

#### **Criterion 4:**

Feedback from former trainees and their supervisors is used to evaluate and refine the training program.

**Suggested Response**—Briefly describe how feedback from former trainees and their supervisors is used to evaluate and refine the training program. Attach supporting documentation.

#### **Criterion 5:**

Change actions (e.g., procedure changes, equipment changes, facility modifications) are monitored and evaluated for their applicability to the development or modification of initial and continuing training programs and are incorporated in a timely manner.

**Suggested Response**—Briefly describe how change actions are monitored, evaluated, and incorporated into the appropriate training programs. Attach supporting documentation.

## **ATTACHMENT I-4 CONTRACTOR SELF-EVALUATION REPORT GUIDELINES (Continued)**

### **OBJECTIVE 14—SYSTEMATIC EVALUATION OF TRAINING EFFECTIVENESS (Continued)**

**Criterion 6:**

Facility and industry operating experience is monitored and evaluated for applicability to development, or modification of initial and continuing training programs, and is incorporated in a timely manner.

**Suggested Response**—Briefly describe how facility and industry operating experience is monitored, evaluated, and incorporated into the appropriate training programs. Attach supporting documentation.

**Criterion 7:**

Improvements and changes to initial and continuing training are systematically initiated, evaluated, tracked, and incorporated to correct training deficiencies and performance problems.

**Suggested Response**—Briefly describe how improvements and changes to initial and continuing training are systematically initiated, evaluated, tracked, and incorporated. Attach supporting documentation.

**Criterion 8:**

Changes in job scope are evaluated to determine the need for development or modification of initial and continuing training programs.

**Suggested Response**—Briefly describe the method or procedure used to track and evaluate changes in job scope, to determine the need for development or modification of initial and continuing training programs. Attach supporting documentation.

**Criterion 9:**

Subcontracted training is evaluated for its contribution to meeting job performance requirements, and to ensure that its quality is consistent with the facility training standards.

**Suggested Response**—Briefly describe how the facility evaluates subcontracted training. Describe how changes to objectives or training materials supplied by subcontractors are identified, tracked, and incorporated into the existing program. Attach supporting documentation.



## CHAPTER II

# ACCREDITATION REVIEW TEAM DATA COLLECTION GUIDELINES

In order to remove a degree of the subjective interpretation and application of the objectives and criteria, data collection guidelines have been developed. They will be used by Accreditation Review Team Members during accreditation team visits, and are intended to ensure that the same standards of evaluations are applied at each facility. These guidelines can also be used by the contractor during the self-evaluation process to more effectively and objectively evaluate training programs requiring accreditation. The simplified numbering system used for the accreditation objectives and criteria has been followed here to aid in the use of the guidelines.

### Notes to Accreditation Review Team Members

**CAUTION:** This is not amplification of accreditation criteria. Do not interpret or infer additional requirements from the questions. This questionnaire is designed as a job aid only.

Based on your experience you have been selected to assist an Accreditation Review Team in evaluating DOE nuclear facility training programs. During the team visit, you will interview training and plant personnel; review training materials, procedures, and records; and observe training sessions to gather information about these programs. At the end of the week, you will submit the results of your evaluation to the appropriate team manager assistant. These guidelines have been developed to help you schedule your activities, record your findings, and prepare your final report.

As you use the guidelines, you will notice that all activities and questions are based on the accreditation objectives and criteria. Your job during the team visit is to gather information about how the facility conducts training and to assess how well the facility has done in meeting the accreditation objectives.

Each page of the questionnaire contains an accreditation criterion evaluation process, and a list of activities to be accomplished and questions to be answered.

During the team visit, use the guidelines to help you establish your daily schedule. While performing the suggested activities, take good notes, obtain copies of documents that illustrate the information you are gathering, and answer the questions listed under each activity. While a few questions may be answered by a simple "yes" or "no," most require amplification and description of the process used. Many questions will require quantifiable data, for example, the number of tasks evaluated, total number of lesson plans reviewed, or the number of student records reviewed. In these cases make sure that you keep records of the number of items reviewed or the number of times a particular type of problem or deficiency is discovered. If you are having trouble finding information, you can ask one of the team manager assistants, or the team manager.

Observation of training in progress is a team priority. Every effort should be made to observe training in all settings used at the facility. If observation in a setting is not possible, alternative methods such as interviews with trainees, supervisors, and instructors should be used to gather information on the content, conduct, and quality of presentations.

### **TAP 3**

At the end of the week, you will be expected to turn in your notes, materials collected, responses to the data gathering questions, and your final report.

# 1. ORGANIZATION AND MANAGEMENT OF THE TRAINING SYSTEM

Using the Organization and Management of the Training System checklists below, determine if all of these criteria are being met by the facility.

**Criterion:**

- ☐ 1.1 Line management is responsible for the effective conduct of training and qualification programs.
- ☐ 1.1.1 Determine who is responsible for effective conduct of the training and qualification programs, as follows:
  - ☐ 1. Review facility supervisor and manager job descriptions. Describe training-related responsibilities.
  - ☐ 2. Interview instructors and their supervisors to determine how line management provides oversight of instructional activities.
  - ☐ 3. Do facility procedures detail line-management training responsibilities?
  - ☐ 4. Determine if scheduled facility training sessions are conducted as scheduled:
    - a. Are postponed training sessions rescheduled and completed in a timely manner?

**Comments:**

# **1. ORGANIZATION AND MANAGEMENT OF THE TRAINING SYSTEM (Continued)**

**Criterion:**

- ☐ **1.2** Line management ensures that the content and conduct of the training and qualification programs will produce competent and professional workers and supervisors.
- ☐ **1.2.1** Determine the degree of involvement of line management in ensuring that training content and conduct are satisfactory, as follows:
  - ☐ 1. Does the facility management routinely input to the training program content?
  - ☐ 2. Is training material reviewed by the facility management for accuracy and adequacy prior to approval for use?
  - ☐ 3. Describe the system or mechanism that ensures line management involvement in the training program.
  - ☐ 4. Does line management routinely monitor the conduct of training?

**Comments:**

# **1. ORGANIZATION AND MANAGEMENT OF THE TRAINING SYSTEM (Continued)**

**Criterion:**

- ☐ **1.3**      **Actions needed to achieve high quality, job-related, performance-based training programs eligible for accreditation have been identified through a systematic evaluation of existing programs.**
  
- ☐ **1.3.1**      **Determine how the facility identified actions needed to achieve high quality, job-related training programs eligible for accreditation, as follows:**
  - ☐ **1.**      **Discern if there is evidence that a thorough self-evaluation of existing programs was conducted:**
    - a.**      **Describe the process.**
  - ☐ **2.**      **Who participated in the self-evaluation? (Use position titles, not names.)**
  - ☐ **3.**      **Were action plans used to resolve deficiencies? Do they indicate any uncompleted actions?**

**Comments:**

# 1. ORGANIZATION AND MANAGEMENT OF THE TRAINING SYSTEM (Continued)

## Criterion:

- ☐ **1.4** Written contractor and facility goals establish the required character and quality of key aspects of the training system. Supporting objectives are procedurally implemented at each organizational level.
- ☐ **1.4.1** Determine how facility and contractor goals detailing training aspects are implemented, as follows:
  - ☐ 1. Examine the contractor and facility objectives and goals that are related to training:
    - a. How are objectives and goals established and implemented at each organization level, including the training unit?
    - b. Are the supporting objectives specific and measurable, and are results oriented?
  - ☐ 2. Describe the facility's training goals and objectives that relate to training. Include the goals and objectives for any facility department with training responsibilities.
  - ☐ 3. Examine and then describe the action plans or the mechanisms used for management review and tracking:
    - a. How often and by whom is organizational performance evaluated?
    - b. How often are goals revised?
  - ☐ 4. Evaluate and describe the status of goal/objective achievement:
    - a. Are goals/objectives being completed in a timely manner?
    - b. Does management take actions to get goals accomplished on schedule?

## Comments:

# 1. ORGANIZATION AND MANAGEMENT OF THE TRAINING SYSTEM (Continued)

## Criterion:

- ☐ **1.5** The job function, responsibilities, authority, and accountability of personnel involved in managing, supervising, and implementing training are clearly defined in writing.
- ☐ **1.5.1** Determine the facility's organizational structure, reporting relationships and responsibilities, as follows:
  - ☐ 1. Obtain or draw an organizational chart to show the organizational relationship of all facility units with any responsibility for training (Senior VP/General Manager down through instructors including applicable plant positions, etc.).
  - ☐ 2. Review position descriptions, conduct interviews, and describe the reporting relationship between the training department managers and supervisors and the facility management, as applicable.
  - ☐ 3. Describe the responsibilities of the training managers and supervisors. Reference applicable position descriptions and procedures:
    - a. Do the individuals' actual job functions agree with the content of the position descriptions?
    - b. Does evidence exist that training personnel have the authority to carry out their assigned duties?
  - ☐ 4. Evaluate the effectiveness of the organizational structure and describe any noteworthy coordination techniques between training and the facility:
    - a. What interfaces exist between the training organization and facility managers and supervisors?
    - b. What documentation exists showing how these interfaces work (records, minutes, letters, etc.)?
  - ☐ 5. Review training and development schedules:
    - a. Have schedules been adhered to? (If not, have postponed events been promptly rescheduled and conducted?)
    - b. Is development of materials on schedule? (If not, ask why as given below.)
  - ☐ 6. Interview instructors, trainees, and facility training supervisors:
    - a. Have schedules been adhered to? (If not, determine why not?) Were schedule modifications made and adhered to?

# **1. ORGANIZATION AND MANAGEMENT OF THE TRAINING SYSTEM (Continued)**

**Comments:**



# 1. ORGANIZATION AND MANAGEMENT OF THE TRAINING SYSTEM (Continued)

## Criterion:

- ☐ 1.6 A performance-based training system is implemented as the primary management tool for analyzing, designing, developing, conducting, and evaluating training.
- ☐ 1.6.1 Obtain a description of the facility training system, as follows:
  - ☐ 1. Briefly describe the training model, plan or system used to systematically develop, conduct, and evaluate training [see the attached—"Sample Training System Description" (Attachment II-1)]:
    - a. What documents, procedures, or formal policies are used to implement the system? List key procedures and their purposes in the form of a chart as attached. [See the attached—"Sample Training Program References" (Attachment II-2).]
    - b. Determine if all phases of the training plan or system are fully implemented:
      - (1) List any activities not fully implemented.
      - (2) Identify any action plans to complete the implementation.

## Comments:

# 1. ORGANIZATION AND MANAGEMENT OF THE TRAINING SYSTEM (Continued)

**Criterion:**

- ☐ 1.7 Procedures are documented and implemented to ensure that all phases of instructional activities can be conducted reliably and consistently.
- ☐ 1.7.1 Determine the extent and effectiveness of procedural guidance on instructional activities, as follows:
  - ☐ 1. Review the procedures used to cover the instructional and administrative activities needed to support the training system or training plan:
    - a. Are sufficient procedures developed and implemented in order to ensure that all aspects of the training system can be effectively accomplished? List these procedures in a separate appendix. [See the attached—"Sample Training Program References" (Attachment II-2).]
    - b. Are procedures sufficiently detailed to ensure uniformity and consistency in implementation?
  - ☐ 2. Evaluate the use and effectiveness of the procedures including the staff familiarity with them.

**Comments:**

# 1. ORGANIZATION AND MANAGEMENT OF THE TRAINING SYSTEM (Continued)

## Criterion:

- ☐ 1.8 Training to be completed prior to qualification/certification is clearly defined. Trainee and incumbent exceptions from training may be granted when justified and supported by a documented assessment of prior training and experience.
- ☐ 1.8.1 Determine how training and exception requirements are established and/or documented and implemented, as follows:
  - ☐ 1. Review program descriptions, interview the appropriate supervisors, and determine how/where position qualification and training requirements for newly hired personnel are described:
    - a. What are the stated position qualification and training requirements?
    - b. Are they clearly defined?
    - c. How are prerequisites established and used?
  - ☐ 2. Describe how training requirements are established and documented for newly-hired personnel. Review program and trainee records for exceptions from training.
  - ☐ 3. Describe how exceptions are granted and comment on how effectively/consistently exceptions are granted and documented:
    - a. How and by whom are exceptions from training granted and documented?
    - b. Do procedures exist to ensure proper and consistent examination of trainee/incumbent skills, knowledge, and experience?
    - c. Are exceptions adequately justified and documented?
  - ☐ 4. Describe the process and cite supporting documentation used by the facility to review the training needs of incumbent personnel who may perform tasks independently in the facility.

# **1. ORGANIZATION AND MANAGEMENT OF THE TRAINING SYSTEM (Continued)**

**Comments:**

# 1. ORGANIZATION AND MANAGEMENT OF THE TRAINING SYSTEM (Continued)

## Criterion:

- ☐ 1.9 Training records are maintained in an auditable manner consistent with DOE requirements. Training records support management information needs and provide required data on each individual's training participation, performance, and verification of medical evaluations.
- ☐ 1.9.1 Determine how the training records system is administered, as follows:
  - ☐ 1. Review the training records procedures and examine the trainee and program records.
  - ☐ 2. Describe the training records and how they are maintained. List the main items included in each type of record:
    - a. How does the training organization maintain an effective, audit-able training records management system?
    - b. Do program records include:
      - (1) Student rosters and attendance records?
      - (2) Lesson plans used and other training materials?
      - (3) Records of examination and keys?
      - (4) Results of student evaluations?
      - (5) Program evaluation documents?
    - c. Do student records include:
      - (1) A complete training history?
      - (2) Documentation of exemptions and waivers?
      - (3) Qualifications obtained?
      - (4) Records of evaluations for initial, continuing and requalifi-cation training?
      - (5) Verification of medical evaluations?
  - ☐ 3. Determine the effectiveness of the records management system:
    - a. How does the organization control access and security of training records?

# **1. ORGANIZATION AND MANAGEMENT OF THE TRAINING SYSTEM (Continued)**

**Comments:**

# **1. ORGANIZATION AND MANAGEMENT OF THE TRAINING SYSTEM (Continued)**

**Criterion:**

- ☐ **1.10** Programs offered under subcontract remain under the control of the sponsoring contractor and are evaluated by it to ensure that the accreditation objectives and criteria are met.
- ☐ **1.10.1** Determine how the training organization evaluates and controls subcontractor-/vendor-supplied training, as follows:
  - ☐ 1. Review subcontract control procedures and interview appropriate training and facility personnel.
  - ☐ 2. How does the training organization assure that the subcontracted training supports the training of facility-specific tasks, skills, and knowledge?
  - ☐ 3. Does the control of subcontracted training include review and approval of learning objectives, training materials, evaluation instruments, and instructor qualifications, prior to implementation of training?
  - ☐ 4. Does it include periodic monitoring and evaluation of the training by plant or training personnel?
  - ☐ 5. Describe how subcontracted training is integrated into the facility training system. Determine the effectiveness of subcontractor control.

**Comments:**

# 1. ORGANIZATION AND MANAGEMENT OF THE TRAINING SYSTEM (Continued)

## Criterion:

- ☐ 1.11 The work load of the training staff indicates that there are sufficient qualified personnel to accomplish assigned duties and responsibilities.
- ☐ 1.11.1 Determine the adequacy of training staffing, as follows:
  - ☐ 1. Review the current staff allocation and any existing staffing or manpower plans. (Include nontraining department personnel with training responsibilities.)
  - ☐ 2. Describe the staffing plans for training and the plant departments with training responsibilities.
  - ☐ 3. Interview instructors, supervisors, and managers to determine:
    - a. Discern how the training organization allocates its manpower to ensure that all assigned training functions are completed, using the items immediately following:
      - (1) Program development and improvement
      - (2) Material development and improvement
      - (3) Trainee evaluation, counseling, and tutoring
      - (4) Preparation for instruction
      - (5) Administrative and clerical duties
      - (6) Staff professional development
      - (7) Test administration and grading
      - (8) Collateral duties.
    - b. Is the staff size sufficient to accomplish all assigned training functions? If not, what functions are not being accomplished properly or in a timely manner?
    - c. Are instructor to trainee ratios appropriate for each training setting used?
  - ☐ 4. Describe backlogs, overtime, incomplete preparation or other indications of staffing problems.



# **1. ORGANIZATION AND MANAGEMENT OF THE TRAINING SYSTEM (Continued)**

**Comments:**

# **1. ORGANIZATION AND MANAGEMENT OF THE TRAINING SYSTEM (Continued)**

**Comments (Continued):**

## 2. TRAINEE SELECTION

Using the Trainee Selection checklists below, determine if all of these criteria are being met by the facility.

**Criterion:**

- ☐ **2.1**      Entry-level criteria include minimum educational, technical, and experience requirements; a medical evaluation; and certification of physical capabilities identified for the position.
- ☐ **2.1.1**      Determine the facility's entry-level criteria, as follows:
  - ☐ 1.      What areas do the entry-level criteria address?
  - ☐ 2.      Determine if trainees meet the entry-level requirements established by the contractor:
    - a.      How is this verified by the contractor?

**Comments:**

## 2. TRAINEE SELECTION (Continued)

**Criterion:**

- ☐ 2.2 Remedial training programs are provided, as necessary, to prepare the trainee to meet the identified training program entry-level requirements for areas where they may be deficient.
- ☐ 2.2.1 Determine the need for and adequacy of remedial training, as follows:
  - ☐ 1. Are personnel hired that do not meet entry-level criteria?
  - ☐ 2. Do personnel, not meeting entry-level criteria, receive remedial training to prepare them for entry into the job training program?
  - ☐ 3. Is the remedial training satisfactory to bring trainees to entry-level for the job training program?

**Comments:**

### 3. DEVELOPMENT AND QUALIFICATION OF TRAINING STAFF

Using the Development and Qualification of Training Staff checklists below, determine if all of these criteria are being met by the facility.

**Criterion:**

- ☐ **3.1** Training staff responsible for program management, supervision, and development have and maintain the education, experience, and technical qualifications required for their jobs.
  - ☐ **3.1.1** Determine the qualifications of the training staff, as follows:
    - ☐ 1. Review and examine the educational, technical, and experiential position requirements for each management, supervisory, and program developer. (Given in position descriptions, procedures, etc.)
    - ☐ 2. Describe how training staff qualifications are delineated:
      - a. How do staff members maintain or enhance their qualifications?
      - b. What type of continuing training takes place for staff members?
    - ☐ 3. For each training management/supervisory position, identify educational degrees held and number of years of related technical and training experience.
    - ☐ 4. Identify the number of training program developer positions, educational degrees held, and an average number of years of related technical and instructional experience.
    - ☐ 5. Compare training staff records to their respective position requirements.
    - ☐ 6. Assess how well training staff personnel are qualified for their assignments:
      - a. Do the incumbent staff members possess qualifications consistent with the requirements delineated for their respective positions?
      - b. Are exceptions allowed for educational, technical, and experience requirements? If so, how are they controlled and documented?

### **3. DEVELOPMENT AND QUALIFICATION OF TRAINING STAFF (Continued)**

**Comments:**

### 3. DEVELOPMENT AND QUALIFICATION OF TRAINING STAFF (Continued)

**Criterion:**

- ☐ 3.2 Instructors have the technical qualifications that include adequate theory, practical knowledge, and experience, for the subject matter that they are assigned to teach.
- ☐ 3.2.1 Assess how well instructors are technically qualified for their positions, as follows:
  - ☐ 1. Review the educational, technical, and experiential position requirements for instructors (including simulator instructors):
    - a. Identify the number of permanent instructors and contracted instructors assigned to each program. Include educational degrees held and the number of years of related technical and training experience for each incumbent.
  - ☐ 2. Compare instructor qualifications to the technical qualifications listed in respective position requirements and to the "Instructors' Technical Qualifications" (Attachment II-3A), and assess how well instructors are qualified or certified for the subject matter they are assigned to teach.
  - ☐ 3. Describe and evaluate any technical training programs used to meet technical qualification requirements.

**Comments:**

### 3. DEVELOPMENT AND QUALIFICATION OF TRAINING STAFF (Continued)

**Criterion:**

- ☐ **3.3** Developmental and instructional qualifications of instructors include theory, practical knowledge, and evaluated work experience in analyzing, designing, developing, conducting, and evaluating training, as appropriate to their job assignments.
- ☐ **3.3.1** Assess how well instructors are instructionally qualified for their positions, as follows:
  - ☐ 1. Interview training supervisors and instructors, and review instructor records and training curricula. Determine the developmental and instructional requirements for each position.
  - ☐ 2. Describe the instructional qualifications, including theoretical training, practical knowledge, and experience in conducting and evaluating training required for instructors.
  - ☐ 3. Evaluate/assess the instructional qualifications of the training staff.

**Comments:**



### 3. DEVELOPMENT AND QUALIFICATION OF TRAINING STAFF (Continued)

**Criterion:**

- ☐ 3.4 Methods are implemented to ensure that individual instructors meet and maintain position qualification requirements.
- ☐ 3.4.1 Determine how instructors meet and maintain position qualification requirements, as follows:
  - ☐ 1. Examine training procedures and interview the training manager and supervisors to determine what methods are used to ensure instructors meet and maintain position qualification requirements.
  - ☐ 2. Describe and evaluate the methods used to determine the effectiveness of this process.
  - ☐ 3. Describe how the facility evaluates, qualifies, or certifies contracted instructors.

**Comments:**

### **3. DEVELOPMENT AND QUALIFICATION OF TRAINING STAFF (Continued)**

**Criterion:**

- ☐ **3.5** When facility or subcontractor instructors have not yet attained the required instructional qualifications or instruct only occasionally, training quality is maintained through appropriate additional assistance and supervision.
  
- ☐ **3.5.1** Determine facility policy on utilization of nonqualified and limited use instructors, as follows:
  - ☐ 1. Review training procedures and interview training supervisors to determine how uncertified or nonqualified instructors are used:
    - a. What procedures exist describing how nonqualified instructors are used?
    - b. What assistance is provided to them and who is responsible for their supervision and evaluation?
  - ☐ 2. Explain how nonqualified and limited-use instructors are used when they do not meet established qualification standards.

**Comments:**

### 3. DEVELOPMENT AND QUALIFICATION OF TRAINING STAFF (Continued)

**Criterion:**

- ☐ **3.6** The instructional skills training program develops the necessary instructor capabilities to fulfill training program requirements.
- ☐ **3.6.1** Determine the effectiveness of the instructional skills training program, as follows:
  - ☐ 1. Examine the content of the instructional skills training program(s), initial and continuing. "Instructors' Training Program Criteria" (Attachment II-3B).
  - ☐ 2. Determine what skills are provided by the initial training program for each instructor position:
    - a. Does the content cover the facility's systematic approach to training?
    - b. Does the content and delivery method include teaching techniques for classroom, simulator, laboratory, workshop, and in-plant training, as needed?
    - c. Who provides instructional skills training?
  - ☐ 3. Are exceptions granted for prior training or instructional experience? How are prior skills assessed and documented?
  - ☐ 4. Describe the instructional skills training programs used to train and qualify instructors (facility and subcontractor).
  - 5. Comment on the effectiveness of the program. Identify any positions that have received the training and discuss the facility's plans for future training.

**Comments:**

### 3. DEVELOPMENT AND QUALIFICATION OF TRAINING STAFF (Continued)

**Criterion:**

- ☐ 3.7 Instructor performance in each training setting in which the individual instructs is evaluated regularly by the individual's supervisor. Results are used to improve performance.
- ☐ 3.7.1 Determine the adequacy of the instructor evaluation process, as follows:
  - ☐ 1. Examine training procedures/records and interview training supervisors and determine how instructor performance is evaluated.
  - ☐ 2. Describe the methods used to evaluate instructors technical and instructional skills.
  - ☐ 3. Determine how instructor performance is evaluated:
    - a. Does the evaluation cover each setting in which the instructor conducts training?
    - b. How often is the instructor evaluated?
    - c. How does the instructor receive feedback on the evaluation?
  - ☐ 4. Interview the responsible training supervisors to determine how feedback from instructor performance is factored into the continuing training program.
  - ☐ 5. Based on instructor evaluations and end-of-course critiques, explain and assess how evaluation results are factored into continuing instructor training requirements.

**Comments:**

### 3. DEVELOPMENT AND QUALIFICATION OF TRAINING STAFF (Continued)

**Criterion:**

- ☐ **3.8** Continuing instructor training maintains, improves, and advances required knowledge and skills and is based in part on evaluations of instructor performance.
- ☐ **3.8.1** Determine the effectiveness of instructor continuing technical and instructional training, as follows:
  - ☐ 1. Review continuing instructor development activity.
  - ☐ 2. Describe the continuing training program used to maintain and improve instructional knowledge and skills for instructors:
    - a. How was the content developed?
    - b. How is the instructor performance feedback used to develop continuing development programs?
  - ☐ 3. Describe how instructors maintain and improve their technical skills and qualifications. Comment on the use of structured in-plant time to maintain the instructor's technical knowledge and abilities in the facility:
    - a. How do instructors stay up-to-date on facility/industry events and facility change actions?
    - b. How do instructors maintain their proficiency on difficult/complex tasks?
    - c. Does the continuing instructor training program include periodic, structured in-facility activities to maintain and improve the instructor's skills and knowledge of job requirements?

**Comments:**

### 3. DEVELOPMENT AND QUALIFICATION OF TRAINING STAFF (Continued)

**Criterion:**

- ☐ 3.9 The training staff maintains facility technical qualifications and familiarity with job requirements as appropriate to their job assignments.
- ☐ 3.9.1 Determine the effectiveness of instructor continuing technical and instructional training, as follows:
  - ☐ 1. Review continuing instructor development activity.
  - ☐ 2. Describe the continuing training program used to maintain and improve instructional knowledge and skills for instructors:
    - a. How was the content developed?
    - b. How is the instructor performance feedback used to develop continuing development programs?
  - ☐ 3. Describe how instructors maintain and improve their technical skills and qualifications. Comment on the use of structured in-plant time to maintain the instructor's technical knowledge and abilities in the facility:
    - a. How do instructors stay up-to-date on facility/industry events and facility change actions?
    - b. How do instructors maintain their proficiency on difficult/complex tasks?
    - c. Does the continuing instructor training program include periodic structured in-facility activities to maintain and improve the instructor's skills and knowledge of job requirements?

**Comments:**

## 4. SUPPORT OF TRAINING WITH FACILITIES, EQUIPMENT, AND MATERIALS

Using the Support of Training with Facilities, Equipment, and Materials checklists below, determine if all of these criteria are being met by the facility.

### Criterion:

- ☐ **4.1** Do classroom and other instructional facilities meet training needs?
  - ☐ **4.1.1** Determine the adequacy of the training facilities, as follows:
    - ☐ 1. Tour the training facilities used for the programs being evaluated. Obtain a simplified floor plan, if available, and determine the status of the following:
      - a. Are there sufficient facilities and resources available to support effective training?
      - b. Are office spaces, furnishings, and resources adequate to support assigned training activities?
      - c. How are training facilities and resources scheduled and used?
    - ☐ 2. Describe the physical layout of the training building(s) emphasizing facilities dedicated to the programs under consideration.
    - ☐ 3. Describe and evaluate how well available space supports training goals and objectives.
    - ☐ 4. Examine the simulator facilities, if applicable, and interview simulator maintenance and training personnel and determine:
      - a. How is simulator fidelity maintained?
      - b. What, if any, significant differences exist between the facility and the simulator? How are the differences handled during training?
      - c. Are modifications incorporated in a timely manner? Is there a significant backlog of modifications?
    - ☐ 5. Describe and evaluate the fidelity of the simulator to physical and operational facility characteristics (e.g., downtime, backlogs).
    - ☐ 6. Discuss the effect of facility-simulator differences on training.

## **4. SUPPORT OF TRAINING WITH FACILITIES, EQUIPMENT, AND MATERIALS (Continued)**

### **Criterion 4.1.1 (Continued):**

- ☐ 7. Describe the operational documents available for use on the simulator.
- ☐ 8. Examine the laboratory facilities and interview laboratory instructors and supervisors.
- ☐ 9. Describe the laboratory facilities (e.g., space, equipment, safety considerations).
- ☐ 10. Compare the similarity of the laboratory facility to physical and operational plant characteristics.

**Comments:**



## 4. SUPPORT OF TRAINING WITH FACILITIES, EQUIPMENT, AND MATERIALS (Continued)

### Criterion:

- ☐ 4.2 Does the training staff have necessary instructional aids and equipment to support training material development and presentation of classroom and practical demonstration training consistent with program learning objectives?
- ☐ 4.2.1 Determine the adequacy of instructional aids and equipment, as follows:
  - ☐ 1. Examine the training staffs' use of instructional aids and equipment, according to the following:
    - a. Are the needed training aids readily available?
    - b. Are training aids kept current and in good repair?
    - c. Are tools and equipment similar to those used in the facility?
  - ☐ 2. Evaluate the adequacy of the instructional aids available and used for training.

### Comments:

## 4. SUPPORT OF TRAINING WITH FACILITIES, EQUIPMENT, AND MATERIALS (Continued)

### Criterion:

- ☐ 4.3 Have technical reference materials, including current facility procedures, drawings, and training manuals, been readily available to the trainees and instructors.
- ☐ 4.3.1 Determine the availability and adequacy of technical reference materials, as follows:
  - ☐ 1. Examine the reference library available to both instructors and trainees.
  - ☐ 2. List categories of reference materials available to both instructors and trainees. Do they include:
    - a. Academic tests?
    - b. Engineering handbooks?
    - c. Facility technology texts and training materials?
    - d. Facility-specific documents?
    - e. Trade, technical and engineering journals?
    - f. Technical regulations, guides, codes, and standards?
    - g. Training related guides, guidelines, standards, and bulletins?
    - h. Materials describing significant industry events?
    - i. Materials on instructional technology, industrial training, and related topics?
    - j. Facility procedures?
    - k. Facility drawings?
  - ☐ 3. Interview clerks, librarians, and appropriate supervisors and determine:
    - a. How does the training organization ensure that technical reference materials are readily available to the trainees and instructors?
    - b. How are technical reference materials selected, acquired, and maintained up to date? Describe briefly.

## **4. SUPPORT OF TRAINING WITH FACILITIES, EQUIPMENT, AND MATERIALS (Continued)**

**Comments:**

## **4. SUPPORT OF TRAINING WITH FACILITIES, EQUIPMENT, AND MATERIALS (Continued)**

**Comments (Continued):**

## 5. CONDUCT OF JOB ANALYSIS AND IDENTIFICATION OF TASKS FOR TRAINING

Using the Conduct of Job Analysis and Identification of Tasks for Training checklists below, determine if all of these criteria are being met by the facility.

**Criterion:**

- ☐ **5.1** Facility personnel, training staff, and other subject matter experts (SMEs), as appropriate and as needed, have conducted a job analysis to develop a valid facility-specific task list.
- ☐ **5.1.1** Verify completion of a job analysis, as follows:
  - ☐ 1. How did the training organization conduct the job analysis?
  - ☐ 2. Determine who was involved in conducting the job analysis:
    - a. Were facility personnel, training staff, and SMEs competent in job analysis regularly involved in the analysis?
  - ☐ 3. How was the facility-specific task list generated and how was it validated?
  - ☐ 4. Were tasks removed from the task lists for one job classification and added to the task lists for that of another job classification in which tasks are now performed?

**Comments:**

## 5. CONDUCT OF JOB ANALYSIS AND IDENTIFICATION OF TASKS FOR TRAINING (Continued)

**Criterion:**

- ☐ **5.2** SMEs (appropriate facility technical personnel, training staff personnel, or knowledgeable outside personnel) assist in the selection of tasks for training.
- ☐ **5.2.1** Determine the involvement of subject matter experts in selecting tasks for training, as follows:
  - ☐ 1. By what method were tasks from the facility-specific task list selected for training?
  - ☐ 2. Who participated in the task selection process?
    - a. Were SMEs, facility technical personnel, training staff personnel, and knowledgeable outside personnel used to select tasks?
    - b. Were personnel knowledgeable in the Job and Task Analysis (JTA) used in the selection process?

**Comments:**

## 5. CONDUCT OF JOB ANALYSIS AND IDENTIFICATION OF TASKS FOR TRAINING (Continued)

**Criterion:**

- ☐ **5.3** Each task selected for training (initial or continuing) from the facility-specific task list is matrixed to supporting procedures and training materials and compared with existing training materials in sufficient depth to determine if existing training adequately supports task performance.
  
  - ☐ **5.3.1** Determine the adequacy of the method used to compare the training tasks to existing training materials, as follows:
    - ☐ 1. How are the tasks selected for training referenced to the training/learning activities? (Is a training matrix used?) What individuals are involved in this activity?
  
    - ☐ 2. Determine if all tasks selected for training are adequately covered by existing training materials:
      - a. Does an action plan exist to develop and implement training for tasks that were selected for training but no training is currently done?
  
      - b. Does an action plan exist to improve training for tasks that are inadequately covered by the existing training program?
  
      - c. How many tasks were deselected that had existing training? What was the duration of the training? How many students were required to attend?<sup>a</sup>
- 
- a. To be used for later accreditation cost/benefit analysis only.

**Comments:**

## 5. CONDUCT OF JOB ANALYSIS AND IDENTIFICATION OF TASKS FOR TRAINING (Continued)

**Criterion:**

- ☐ **5.4** The facility-specific list of tasks selected for training and the comparison to training materials are reviewed periodically and updated, as necessitated by changes in procedures, facility systems/equipment, job scope, and advances in technology.
- ☐ **5.4.1** Determine the adequacy of periodic review/revision of the task-to-training matrix, as follows:
  - ☐ 1. Determine how often the facility-specific task list is reviewed and by whom:
    - a. Do facility staff, training staff, and SMEs participate?
  - ☐ 2. How is the facility-specific list of "tasks selected for training" updated and maintained? Cite references.
  - ☐ 3. How is the task-to-training matrix maintained current?

**Comments:**



## 6. ESTABLISHMENT OF TRAINING PROGRAM CONTENT

Using the Establishment of Training Program Content checklists below, determine if all of these criteria are being met by the facility:

### Criterion:

- ☐ **6.1** DOE and other appropriate training guidelines (e.g., training design specifications) are used as a guide for selecting, sequencing, and verifying training program structure and content.
- ☐ **6.1.1** Determine how the DOE and other appropriate training guidelines for suggested content were used in the selection, sequencing, and verification of the training program, as follows:
  - ☐ 1. Are appropriate guidelines available for use by training instructors and supervisors?
  - ☐ 2. How were the guidelines used to create and modify training programs?
  - ☐ 3. Does the feedback tracking system include review of training programs against new guidelines?
  - ☐ 4. Compare the training program description, curriculum outline, or a list of lesson plans to the guideline topics using the Instructors' "Training Program Criteria" for:
    - a. "Shift Supervisor/Manager–Operator/Technician" (Attachment II–4)
    - b. "Shift Supervisor/Manager–Operator/Technician Requalification" (Attachment II–5)
    - c. "Radiological Protection Technician" (Attachment II–6)
    - d. "Chemistry Technician" (Attachment II–7)
    - e. "Instrument and Control Technician" (Attachment II–8)
    - f. "Electrical Maintenance Technician" (Attachment II–9)
    - g. "Mechanical Maintenance Technician" (Attachment II–10)
    - h. "Technical Staff" (Attachment II–11)

## **6. ESTABLISHMENT OF TRAINING PROGRAM CONTENT (Continued)**

### **Criterion 6.1.1 (Continued):**

- ☐ 5. List any omitted guideline topics as possible concerns.
- ☐ 6. Write a program description. Include a brief narrative of content (initial and continuing), entry-level, and duration. Provide a course outline showing topics, duration, and sequence. "Radiation Chemistry Technician" (Attachment II-12), show suggested format.
- ☐ 7. Obtain numbers for the "Program Status" (Attachment II-13).

**Comments:**

## 6. ESTABLISHMENT OF TRAINING PROGRAM CONTENT (Continued)

**Criterion:**

- ☐ 6.2 Tasks are analyzed, as necessary, to determine the task's supporting skills and knowledge to be included in training programs.
- ☐ 6.2.1 Determine the extent of task analysis performed and content validity of results, as follows:
  - ☐ 1. Based on a review of facility systems, components, job descriptions and interviews with SMEs, identify any tasks that are done at the facility but do not appear on the task list. List these omissions as concerns:
    - a. Identify outside work groups or contractor tasks included in this job position.
  - ☐ 2. Discuss the tasks identified above with SMEs or other personnel involved in the job analysis to determine why those tasks did not appear on the task list.
  - ☐ 3. Interview SMEs, instructional technologists, or other personnel involved in task analysis to determine the extent of task analysis necessary (existing material not sufficient).
  - ☐ 4. For at least 10 randomly selected tasks, using the task-to-training matrix, verify that the training materials listed in the matrix adequately cover the skills and knowledge necessary for task performance:
    - a. Review the training materials and references for one task at a time using the "Training Materials Review Checklists" for "...—Classroom Lesson Plans," "...—OJT Qualification Cards and Guides," and "...—Laboratory Guides" (Attachments II-14 through 16), as appropriate.
    - b. How is prerequisite knowledge covered prior to task performance?
    - c. Are training materials referenced to current facility procedures and other technical and professional references?

## **6. ESTABLISHMENT OF TRAINING PROGRAM CONTENT (Continued)**

**Comments:**

## **6. ESTABLISHMENT OF TRAINING PROGRAM CONTENT (Continued)**

**Criterion:**

- ☐ **6.3** Personnel, qualified in the position for which training is being developed and conducted, help determine training content and confirm its completeness.
- ☐ **6.3.1** Identify involvement by personnel qualified in the position in determining training content, as follows:
  - ☐ 1. Interview facility supervisors and incumbents to determine inputs to training material development.
  - ☐ 2. Determine what system of review is used for completed training materials:
    - a. Do facility SMEs provide feedback on lesson content prior to use?
    - b. Are changes made prior to use?

**Comments:**

## 6. ESTABLISHMENT OF TRAINING PROGRAM CONTENT (Continued)

**Criterion:**

- ☐ 6.4 Current facility procedures, technical and professional references, and facility/industry operating experience are used to identify training content and facility-specific information for use in developing training materials.
- ☐ 6.4.1 Determine the extent of task analysis performed and content validity of results, as follows:
  - ☐ 1. Based on a review of facility systems, components, job descriptions and interviews with SMEs, identify any tasks that are done at the facility but do not appear on the task list. List these omissions as concerns:
    - a. Identify outside work groups or contractor tasks included in this job position.
  - ☐ 2. Discuss the tasks identified above with SMEs or other personnel involved in the job analysis to determine why those tasks did not appear on the task list.
  - ☐ 3. Interview SMEs, instructional technologists, or other personnel involved in task analysis to determine the extent of task analysis necessary (existing material not sufficient).
  - ☐ 4. For at least 10 randomly selected tasks, using the task-to-training matrix, verify that the training materials listed in the matrix adequately cover the skills and knowledge necessary for task performance:
    - a. Review the training materials and references for one task at a time using the "Training Materials Review Checklist—Classroom Lesson Plan," "...—OJT Qualification Cards and Guides," and "Training Materials Review Checklist—Laboratory Guidelines" (Attachments II-14 through 16), as appropriate.
    - b. How is prerequisite knowledge covered prior to task performance?
    - c. Are training materials referenced to current facility procedures and other technical and professional references?

## **6. ESTABLISHMENT OF TRAINING PROGRAM CONTENT (Continued)**

**Comments:**

## 6. ESTABLISHMENT OF TRAINING PROGRAM CONTENT (Continued)

**Criterion:**

- ☐ **6.5** Initial training program content is modified to reflect the results of program review and evaluation by facility and training staff personnel.
- ☐ **6.5.1** Determine how training program feedback has been used to modify or improve the initial and continuing training programs, as follows:
  - ☐ 1. How is the training program evaluated?
  - ☐ 2. How are the evaluation results used to update, modify, or improve the program content?
  - ☐ 3. How are feedback action items controlled?
  - ☐ 4. Are feedback action items tracked?
  - ☐ 5. How are trainee and program evaluation results used to determine continuing training content?
  - ☐ 6. Was on-the-job performance of recent graduates and incumbents used to determine continuing training content?
  - ☐ 7. What inclusions are provided by the facility staff?
  - ☐ 8. Is training staff responsive to facility input?
  - ☐ 9. Obtain copies of documents that show feedback into training program content.
  - ☐ 10. Describe how operating experience is used to modify and improve initial and continuing training programs:
    - a. How are in-house and industry events, plant modifications, procedure changes, etc., incorporated into training materials?
    - b. Track examples of in-house events, industry events, facility modifications, and procedure changes into training materials using "Facility and Industry Events Tracking" and "Facility Modification/Procedure Changes Tracking" (Attachments II-17 and 18).
    - c. How are operating-experience action items controlled?



## **6. ESTABLISHMENT OF TRAINING PROGRAM CONTENT (Continued)**

### **Criterion 6.5.1 (Continued):**

- d. How are operating–experience action items tracked?
- e. Were changes incorporated into the training materials in a timely manner?

### **Comments:**

## 6. ESTABLISHMENT OF TRAINING PROGRAM CONTENT (Continued)

**Criterion:**

- ☐ **6.6** Continuing training content includes refresher training on selected initial training topics, facility and industry events, facility and procedure modifications, retraining addressing task performance deficiencies, and refresher training on infrequently performed tasks.
- ☐ **6.6.1** Determine the content of continuing training and how it is defined, as follows:
  - ☐ 1. Discern how the content of continuing training is determined:
    - a. Who is involved?
    - b. Are pertinent sources of content searched [UOR (Unusual Occurrence Report), SOER (Significant Operating Experience Report), SER (Safety Evaluation Report), PER (Performance Evaluation Report), etc.]?
    - c. Do program evaluations help determine content?
  - ☐ 2. What is the content of continuing training? (Attach schedules from the past two years and current year.)

**Comments:**

## 6. ESTABLISHMENT OF TRAINING PROGRAM CONTENT (Continued)

**Criterion:**

- ☐ **6.7** The results of trainee and program evaluations are used to help determine the content of continuing training.
- ☐ **6.7.1** Determine how training program feedback has been used to modify or improve the initial and continuing training programs, as follows:
  - ☐ 1. How is the training program evaluated?
  - ☐ 2. How are the evaluation results used to update, modify, or improve the program content?
  - ☐ 3. How are feedback action items controlled?
  - ☐ 4. Are feedback action items tracked?
  - ☐ 5. How are trainee and program evaluation results used to determine continuing training content?
  - ☐ 6. Was on-the-job performance of recent graduates and incumbents used to determine continuing training content?
  - ☐ 7. What inclusions are provided by the facility staff?
  - ☐ 8. Is training staff responsive to facility input?
  - ☐ 9. Obtain copies of documents that show feedback into training program content.
  - ☐ 10. Describe how operating experience is used to modify and improve initial and continuing training programs:
    - a. How are in-house and industry events, plant modifications, procedure changes, etc., incorporated into training materials?
    - b. Track examples of in-house events, industry events, facility modifications, and procedure changes into training materials using "Facility and Industry Events Tracking" and "Facility Modification/Procedure Changes Tracking" (Attachments II-17 and 18).
    - c. How are operating-experience action items controlled?

## **6. ESTABLISHMENT OF TRAINING PROGRAM CONTENT (Continued)**

### **Criterion 6.7.1 (Continued):**

- d. How are operating–experience action items tracked?
- e. Were changes incorporated into the training materials in a timely manner?

**Comments:**

## 7. DEVELOPMENT OF LEARNING OBJECTIVES AS THE BASIS FOR TRAINING

Using the Development of Learning Objectives as the Basis for Training checklists below, determine if all of these criteria are being met by the facility:

**Criterion:**

- ☐ 7.1 The minimum trainee entry-level skills, knowledge, and experience for the position are considered when developing learning objectives.
- ☐ 7.1.1 Determine how the minimum trainee entry-level is factored into the development of learning objectives, as follows:
  - ☐ 1. Discern how minimum trainee entry-level skills, knowledge, and experience are used in developing or modifying learning objectives:
    - a. Are the minimum entry-level skills, knowledge, and experience documented?
    - b. Do learning objectives reflect the level of skills and knowledge expected of new trainees?

**Comments:**

## **7. DEVELOPMENT OF LEARNING OBJECTIVES AS THE BASIS FOR TRAINING (Continued)**

**Criterion:**

- ☐ **7.2** Learning objectives are derived from an analysis of job performance requirements and are the basis for trainee/incumbent evaluation.
- ☐ **7.2.1** Determine the bases of learning objectives and trainee/incumbent evaluations, as follows:
  - ☐ 1. Discern how the performance requirements of the job are used in the development or modification of learning objectives:
    - a. Are job and task analysis data reflected in the learning objectives?
  - ☐ 2. How are the learning objectives used in defining evaluation methods?

**Comments:**

## 7. DEVELOPMENT OF LEARNING OBJECTIVES AS THE BASIS FOR TRAINING (Continued)

### Criterion:

- ☐ 7.3 Learning objectives state the action (knowledge or skills) the trainee must demonstrate, the conditions under which the action will take place, and the standards of performance the trainee should achieve upon completion of the training activity.

- ☐ 7.3.1 Determine the adequacy of learning objectives, as follows:

- ☐ 1. Discern if learning objectives are developed such that each objective has the conditions under which: the action will take place, the specific action(s) will be demonstrated, and the standards of performance will be acceptable:
- a. If conditions are implied, is it easily understood what those conditions are?
  - b. If generic standards are used or implied, is it easily understood what the standards are?

### Comments:

## **7. DEVELOPMENT OF LEARNING OBJECTIVES AS THE BASIS FOR TRAINING (Continued)**

**Criterion:**

- ☐ **7.4** Learning objectives are grouped by similar training setting (e.g., classroom, simulator, laboratory, and facility).
- ☐ **7.4.1** Determine the adequacy of learning-objective grouping, as follows:
  - ☐ 1. Discern if learning objectives have been established for programs in each training setting (e.g., classroom, simulator, laboratory, on-the-job training (OJT), self-paced, walkthrough):
    - a. Is the grouping of learning objectives satisfactory?
  - ☐ 2. Are the learning objectives used to select the appropriate setting, teaching practices and trainee exercises?

**Comments:**



## **7. DEVELOPMENT OF LEARNING OBJECTIVES AS THE BASIS FOR TRAINING (Continued)**

**Criterion:**

- ☐ **7.5** Learning objectives are sequenced based on their relationship to one another and help trainees move from one level of skill and knowledge to another.
- ☐ **7.5.1** Determine the adequacy of learning-objective sequencing, as follows:
  - ☐ 1. Are the learning objectives and their associated training materials sequenced in a manner to help trainees progress from learning simple skills and knowledges to performing complex job-related tasks?
  - ☐ 2. Does the program consist of a series of enabling objectives leading to a terminal, performance objective?
  - ☐ 3. Are learning objectives for classroom, simulator, OJT, laboratory, etc., sequenced so that each phase supports training in the next phase?

**Comments:**

## **7. DEVELOPMENT OF LEARNING OBJECTIVES AS THE BASIS FOR TRAINING (Continued)**

**Comments (Continued):**

## 8. ORGANIZATION OF INSTRUCTION USING LESSON PLANS AND OTHER TRAINING GUIDES

Using the Organization of Instruction Using Lesson Plans and Other Training Guides checklists below, determine if all of these criteria are being met by the facility:

**Criterion:**

- ☐ **8.1** Lesson plans for classroom instruction provide for effective, consistent class presentations.
- ☐ **8.1.1** Determine the adequacy of classroom lesson plans, as follows:
  - ☐ **1.** Discern if the lesson plans are of sufficient detail to ensure consistent and repeatable training:
    - a. What process ensures the level of detail?
  - ☐ **2.** Complete "Lesson Plans Checklist" (Attachment II-19), for at least 10 lesson plans:
    - a. Include a sample of initial and continuing training lesson plans.

**Comments:**

## 8. ORGANIZATION OF INSTRUCTION USING LESSON PLANS AND OTHER TRAINING GUIDES (Continued)

### Criterion:

- ☐ 8.2 Lesson plans or equivalent training guides are used for laboratory training, OJT, and simulator training, and also include standards for evaluating proper trainee performance.
- ☐ 8.2.1 Determine the adequacy of lesson materials for laboratory, OJT, and simulator training, as follows:
  - ☐ 1. Discern if lesson plans or equivalent training guides exist for each type of training conducted (e.g., simulator, laboratory, OJT, self-paced):
    - a. Describe their use.
  - ☐ 2. Discern if the training guides provide standards for evaluating proper trainee performance:
    - a. Are the standards used?
    - b. Are the standards based on job performance requirements?
  - ☐ 3. Complete "Laboratory Guide Checklist," "OJT Guide Checklist," and "Simulator Guide Checklist" (Attachments II-20 through 22, respectively) as applicable for at least 10 lesson guides each, involving OJT, laboratory, and simulator training:
    - a. Include a sample of initial and continuing training lesson plans.

### Comments:

## 8. ORGANIZATION OF INSTRUCTION USING LESSON PLANS AND OTHER TRAINING GUIDES (Continued)

### Criterion:

- ☐ **8.3** Lesson plans and other training materials are developed or modified using learning objectives derived from job performance requirements.
- ☐ **8.3.1** Determine how lesson materials are developed and modified:
  - ☐ **1.** Discern how learning objectives, derived from the plant-specific task lists, are used to develop or modify lesson plans and other training materials:
    - a. Are on-the-job performance data obtained from job and task analysis used in program development and modification?
    - b. Does training material content support the stated learning objectives?

### Comments:

## **8. ORGANIZATION OF INSTRUCTION USING LESSON PLANS AND OTHER TRAINING GUIDES (Continued)**

**Criterion:**

- ☐ **8.4** Review and approval requirements are established and used for all lesson plans, training guides, and other training materials prior to their issue and use.
- ☐ **8.4.1** Determine review and approval requirements established for lesson materials:
  - ☐ 1. Discern if review and approval requirements are established for all lesson materials (e.g., classroom, laboratory, OJT, self-paced, workshop):
    - a. Describe the process.
  - ☐ 2. Are all lesson materials approved prior to issue and use?

**Comments:**

## 9. CONDUCT OF CLASSROOM AND INDIVIDUALIZED INSTRUCTION

Using the Conduct of Classroom and Individualized Instruction checklists below, determine if all of these criteria are being met by the facility.

**Criterion:**

- ☐ **9.1** Training is implemented as outlined by approved performance-based training materials and is well-organized and current.
- ☐ **9.1.1** Verify implementation of training as outlined in lesson materials.

**Comments:**

## **9. CONDUCT OF CLASSROOM AND INDIVIDUALIZED INSTRUCTION (Continued)**

**Criterion:**

- ☐ **9.2** Training activities encourage direct trainee participation in the learning process.
- ☐ **9.2.1** Verify if training activity encourages direct trainee participation.

**Comments:**



## **9. CONDUCT OF CLASSROOM AND INDIVIDUALIZED INSTRUCTION (Continued)**

**Criterion:**

- ☐ **9.3** Instructors prepare adequately to ensure effective and consistent delivery of the material.
- ☐ **9.3.1** Determine the adequacy of instructor preparation.

**Comments:**

## 9. CONDUCT OF CLASSROOM AND INDIVIDUALIZED INSTRUCTION (Continued)

**Criterion:**

- ☐ **9.4** The instructor uses instructional techniques appropriate to the lesson content and learning objectives.
- ☐ **9.4.1** Determine the adequacy of instructional techniques, as follows:
  - ☐ **1.** Observe two or more classroom training sessions. (Conduct a review of all lesson materials prior to the observation.) Complete "Instructor Evaluation Instrument" (Attachment II-23), for each observation:
    - a. Did the instructor use current and approved lesson plans?
    - b. Are other training materials maintained current?
    - c. Are training schedules adhered to?
    - d. Did the instructor actively involve the trainees in the lesson?
    - e. Was the instructor adequately prepared?
    - f. Did the instructor follow the lesson plan?
  - ☐ **2.** Discern how instructors maintain instructional and technical qualifications:
    - a. Do instructors participate in structured in-facility training?
    - b. How do instructors maintain familiarity with job requirements, facility changes, operating experience, and technical specifications?
    - c. What topics are covered in instructor continuing training? How often do instructors receive continuing training?
  - ☐ **3.** Review end of class/course critiques to determine the overall effectiveness of instructors:
    - a. Do qualified evaluators provide specific feedback on instructor performance using established critique forms?

## **9. CONDUCT OF CLASSROOM AND INDIVIDUALIZED INSTRUCTION (Continued)**

**Comments:**

## 9. CONDUCT OF CLASSROOM AND INDIVIDUALIZED INSTRUCTION (Continued)

**Criterion:**

- ☐ **9.5** When individualized instruction is used, either the training materials contain the information to be learned, or referenced texts are readily available.
- ☐ **9.5.1** Determine the adequacy of individualized training, as follows:
  - ☐ 1. Is individualized instruction used? (e.g., self-paced, remedial, or class makeup sessions)
  - ☐ 2. Discern if the individualized instruction training materials contain needed information:
    - a. Do the materials contain sufficient guidance to enable the trainee to effectively utilize the materials?
  - ☐ 3. Are referenced text or training materials readily available?
  - ☐ 4. How is trainee progress evaluated?
  - ☐ 5. Is the conduct of individualized instruction controlled by procedure?
  - ☐ 6. Are instructors available to answer questions and evaluate trainee progress?

**Comments:**

## 9. CONDUCT OF CLASSROOM AND INDIVIDUALIZED INSTRUCTION (Continued)

**Criterion:**

- ☐ **9.6** Trainee mastery of learning objectives is evaluated regularly, using written or oral examinations and quizzes.
- ☐ **9.6.1** Verify regularity of trainee evaluation against learning objectives, as follows:
  - ☐ 1. Are written or oral examinations and quizzes given on a regular basis?
  - ☐ 2. Do the exam questions accurately measure trainee mastery of the learning objectives?

**Comments:**

## **9. CONDUCT OF CLASSROOM AND INDIVIDUALIZED INSTRUCTION (Continued)**

**Criterion:**

- ☐ **9.7** Subcontracted training is evaluated to ensure that trainees are achieving the specified learning objectives, as measured by appropriate written or oral examinations and quizzes.
- ☐ **9.7.1** Determine how subcontracted or vendor training is controlled, as follows:
  - ☐ 1. How are the course objectives selected?
  - ☐ 2. How are the program materials developed, reviewed, and approved?
  - ☐ 3. How is the effectiveness of subcontracted training evaluated?
  - ☐ 4. How are subcontracted trainers/evaluators selected and monitored?
  - ☐ 5. Are trainees evaluated against the program learning objectives during subcontracted training?
  - ☐ 6. Are the evaluations conducted by subcontractors approved by training management?
  - ☐ 7. How does the facility work with the subcontractor to ensure feedback is communicated and acted upon effectively?

**Comments:**

## 10. CONDUCT OF ON-THE-JOB TRAINING

Using the Conduct of On-the-Job Training checklists below, determine if all of these criteria are being met by the facility:

**Criterion:**

- ☐ **10.1** OJT is delivered using well-organized and current performance-based training materials.
  - ☐ **10.1.1** Verify implementation of training as outlined in lesson materials, as follows:
    - ☐ 1. Observe one or more in-facility training sessions. (Conduct a review of all lesson materials prior to the observation.) Complete "OJT and Laboratory Training Observation Checklist" (Attachment II-24), for each observation:
      - a. Did the instructor use current and approved lesson materials?
      - b. Do evaluations check trainee knowledge?
      - c. Do the Training/Evaluation Standards (TESs) provide adequate standards for knowledge and performance items? (Standards may be given in plant procedures versus the TESs. In this case evaluate the adequacy of the procedure standards.)
      - d. Are plant procedures used for performance checkouts?
    - ☐ 2. Interview trainees and recent graduates. Determine their degree of satisfaction with the training program:
      - a. Are instructors knowledgeable of the technical aspects of the training material/job?
      - b. Do the instructors present material in an understandable manner?
      - c. Is the material taught in the classroom relevant to job performance?
      - d. Does the in-facility qualification program prepare them adequately for the job?
      - e. What changes or embellishments would they make to improve the program?

## **10. CONDUCT OF ON-THE-JOB TRAINING (Continued)**

**Comments:**



## 10. CONDUCT OF ON-THE-JOB TRAINING (Continued)

**Criterion:**

- ☐ **10.2** Designated personnel who are instructed in program standards and methods conduct OJT.
  - ☐ **10.2.1** Interview trainees and instructors/evaluators to determine how the OJT is conducted. Also determine the qualification and knowledge level of personnel conducting OJT, as follows:
    - ☐ 1. How do trainees prepare for in-facility training/OJT?
    - ☐ 2. How is training conducted for items identified for in-facility training or OJT?
    - ☐ 3. Are similar or like tasks grouped for training and qualification purposes? If so, is the grouping practical?
    - ☐ 4. How does the training program prepare the trainee to perform job tasks that cannot be performed on the actual facility equipment?
    - ☐ 5. Are the tools, equipment, technical manuals, facility procedures, and reference materials used in training similar to those used on the job?
    - ☐ 6. When technical knowledge in addition to skills is to be gained, is appropriate supporting material provided or referenced?
    - ☐ 7. How do trainers compensate for differences between training and actual on-the-job conditions?
    - ☐ 8. Are the instructor/evaluators aware of the effect that in-facility/OJT iterations may have on the facility?
    - ☐ 9. Is prerequisite training specified and completed prior to qualification on specific tasks or group of tasks?
    - ☐ 10. Do training materials address the differences between training and the actual job conditions?
    - ☐ 11. How are training materials, tools, manuals, reference materials and procedures maintained up-to-date?
    - ☐ 12. How does the training program prepare the trainee to perform surveillance (required by technical specifications) procedures applicable to their job?
    - ☐ 13. Are surveillance procedures selected for in-facility training and qualification representative of job complexity, importance, and difficulty?

## **10. CONDUCT OF ON-THE-JOB TRAINING (Continued)**

### **Criterion 10.2.1 (Continued):**

Besides the interviews:

14. Obtain a list of designated instructors and evaluators.
15. Are designated instructors/evaluators trained?
16. What instructions (published or taught) do the instructors/evaluators receive on the methods of instruction and evaluation standards used in conducting OJT?
17. Are instructors/evaluators periodically evaluated? How often and by whom?

**Comments:**

## 10. CONDUCT OF ON-THE-JOB TRAINING (Continued)

### Criterion:

- ☐ **10.3** Completion of OJT and task qualification is by actual task performance. When the actual task cannot be performed but is simulated or walked-through, the conditions of task performance, references, tools, and equipment reflect the actual task to the extent possible.
  
- ☐ **10.3.1** Determine the number of “must perform” tasks, and for simulated tasks, the fidelity to actual task conditions, references, tools, and equipment, as follows:
  - ☐ 1. Discern if the facility requires a sufficient number of tasks to be performed, regardless of the facility conditions necessary:
    - a. Are key tasks for position qualification included?
    - b. Are the tasks actually being performed using interviews and reviews of completed qualification documents?
  - ☐ 2. For tasks which must be simulated or walked-through, do task conditions duplicate those expected for actual task completion?
  - ☐ 3. For simulated or walked-through tasks, do the references, tools, and equipment used duplicate those used for actual task performance?

### Comments:

## **10. CONDUCT OF ON-THE-JOB TRAINING (Continued)**

**Comments (Continued):**

## 11. CONDUCT OF SIMULATOR TRAINING

Using the Conduct of Simulator Training checklists below, determine if all of these criteria are being met by the facility.

### Criterion:

- ☐ **11.1** An appropriate simulator is used for hands-on training to demonstrate operational characteristics and for recognition and control of normal, abnormal, and emergency facility/process conditions. Differences between the simulator and the facility/process are accommodated in the training session.
- ☐ **11.1.1** Determine the fidelity and effectiveness of the simulator, as follows:
  - ☐ 1. Discern if the simulator has the following capabilities (training features) necessary to effectively conduct training for:
    - a. Snapshot function
    - b. Backup/backtrack function
    - c. Fast/slow time function
    - d. Freeze function
    - e. Override function
    - f. Monitor parameter functions
    - g. Appropriate initial conditions inventory
    - h. Appropriate malfunction inventory (including malfunction variables).
  - ☐ 2. How well do the simulator physical characteristics reflect the facility?
  - ☐ 3. Does the level of simulator fidelity support accomplishment of the learning objectives?
  - ☐ 4. Are the tools, equipment, drawings, reference materials, and plant procedures in the simulator the same as those used in the facility?
  - ☐ 5. What is the extent of the known negative training effect (cite examples as appropriate)?
  - ☐ 6. How are differences between the simulator and the facility accommodated in training sessions?

## 11. CONDUCT OF SIMULATOR TRAINING (Continued)

### Criterion 11.1.1 (Continued):

- ☐ 7. Has an effective configuration control program been established to control simulator fidelity? Address the items listed below to assist you in your assessment:
  - a. Review the administrative aspects of the simulator's configuration control program.
  - b. Identify the backlog of deviations, evaluate relative importance of each, review plans to correct the deviations including any schedules.
  - c. Does the backlog of modifications affect simulator training?
  - d. Has simulator downtime adversely affected simulator training schedules?
  - e. Identify how facility modifications are reviewed for simulator modifications.
  - f. Identify how the fidelity of the simulator is evaluated after a change has been incorporated.
- ☐ 8. Does the maintenance group work closely with the instructional staff to ensure maintenance activities have a minimal effect on simulator availability?

Comments:

## 11. CONDUCT OF SIMULATOR TRAINING (Continued)

### Criterion:

- ☐ 11.2 The training program content is implemented as outlined by approved performance-based training materials and is well-organized and current.

- ☐ 11.2.1 Determine the appropriateness and effectiveness of the simulator training materials, as follows:

**Note:** If simulator training is scheduled during the team visit observe a complete simulator training session (including any associated classroom training). Complete a review of all training materials prior to the observation. Use the attached "Simulator Training Observation Checklist" (Attachment II-25), to guide evaluation.

- ☐ 1. Determine if the format of the simulator training materials is appropriate for the type of training being conducted. Review as many of the training materials as possible (>30%).
- ☐ 2. Identify the current development and revision status of the simulator training materials.
- ☐ 3. Are simulator scenarios, exercise guides, and associated classroom lesson plans reviewed and revised, and are presentations practiced prior to actual training?
- ☐ 4. Are newly developed and significantly revised exercise guides/scenarios validated on the simulator prior to their use in training?
- ☐ 5. Are sufficient time and resources provided to the instructors to keep the simulator training materials current and to develop new materials as required?
- ☐ 6. Is unstructured time available (roughly 25%) in the training schedule for correcting deficiencies, reinforcement, and student requests?
- ☐ 7. Are the simulator exercise guides and scenarios developed using standardized formats?
- ☐ 8. Has a proper selection of scenarios and malfunctions been developed to ensure that all learning objectives can be effectively covered?
- ☐ 9. Do the classroom training materials complement the associated simulator exercise guides?

## 11. CONDUCT OF SIMULATOR TRAINING (Continued)

### Criterion 11.2.1 (Continued):

- ☐ 10. Are the initial simulator training activities sequenced in a manner to help the trainees progress from learning simple skills and knowledge to performing complex interrelated tasks?
- ☐ 11. Is the appropriate simulator training method (demonstration, unannounced casualty, component or system operation, integrated plant operation, case study, etc.) incorporated in the simulator exercise to effectively cover the learning objectives?
- ☐ 12. Do the exercise guides apply to use of previously learned skills and knowledge? Specifically, is theoretical knowledge learned in the classroom incorporated into the exercise guide content?
- ☐ 13. Have appropriate plant and industry events been effectively incorporated into the simulator training materials?
- ☐ 14. Do the exercise guides used in continuing training reflect and reinforce the operating philosophy and standards of the facility?
- ☐ 15. During initial training, are specific simulator exercises used to reinforce fundamentals of teamwork and diagnostic skills taught in the classroom?
- ☐ 16. Are sample questions included as part of the simulator exercise guides?
- ☐ 17. Determine if the preexercise briefings include the following kinds of instructional activities to ensure consistency and effectiveness:
  - a. Team assignments
  - b. Facility conditions
  - c. Learning objectives (training situations only)
  - d. Simulator differences
  - e. Control-board walkdown
  - f. Ground rules that apply in any training session on the simulator.
- ☐ 18. Is team instruction normally used by the simulator instructors? (Example: One instructor performs trainee evaluations while the other operates the simulator and role plays outside personnel.)



## **11. CONDUCT OF SIMULATOR TRAINING (Continued)**

**Comments:**

## 11. CONDUCT OF SIMULATOR TRAINING (Continued)

### Criterion:

- ☐ **11.3** Instructors prepare adequately for simulator sessions to ensure effective and consistent training.
- ☐ **11.3.1** Determine the effectiveness and capabilities of the simulator instructional staff, as follows:
  - ☐ 1. Does the selection process ensure appropriate individuals are selected for simulator instructor qualification?
  - ☐ 2. Determine if the simulator instructor initial training program includes:
    - a. Senior reactor operator or equivalent level training (as appropriate)
    - b. Basic instructional platform skills training
    - c. Training on the simulator hardware and software
    - d. Specific instructional techniques associated with simulator instruction and evaluation
    - e. Requirements for simulator instructor certification.
  - ☐ 3. Determine if the continuing training program includes:
    - a. Operator level of continuing training
    - b. Periodic training on selected instructional topics
    - c. Continued awareness of the facility's current operational philosophy
    - d. Correction of observed simulator instructional performance deficiencies.
  - ☐ 4. Identify how the simulator instructors are periodically evaluated (include informal and formal evaluations).

## **11. CONDUCT OF SIMULATOR TRAINING (Continued)**

**Comments:**

## 11. CONDUCT OF SIMULATOR TRAINING (Continued)

**Criterion:**

- ☐ **11.4** The instructor uses instructional techniques appropriate to the situation.
  - ☐ **11.4.1** Determine the appropriateness and effectiveness of the simulator training materials, as follows:
 

**Note:** If simulator training is scheduled during the team visit observe a complete simulator training session (including any associated classroom training). Complete a review of all training materials prior to the observation. Use the attached "Simulator Training Observation Checklist" (Attachment II-25), to guide evaluation.

    - ☐ 1. Determine if the format of the simulator training materials is appropriate for the type of training being conducted. Review as many of the training materials as possible (>30%).
    - ☐ 2. Identify the current development and revision status of the simulator training materials.
    - ☐ 3. Are simulator scenarios, exercise guides, and associated classroom lesson plans reviewed and revised, and are presentations practiced prior to actual training?
    - ☐ 4. Are newly developed and significantly revised exercise guides/scenarios validated on the simulator prior to their use in training?
    - ☐ 5. Are sufficient time and resources provided to the instructors to keep the simulator training materials current and to develop new materials as required?
    - ☐ 6. Is unstructured time available (roughly 25%) in the training schedule for correcting deficiencies, reinforcement, and student requests?
    - ☐ 7. Are the simulator exercise guides and scenarios developed using standardized formats?
    - ☐ 8. Has a proper selection of scenarios and malfunctions been developed to ensure that all learning objectives can be effectively covered?
    - ☐ 9. Do the classroom training materials complement the associated simulator exercise guides?

## 11. CONDUCT OF SIMULATOR TRAINING (Continued)

### Criterion 11.4.1 (Continued):

- ☐ 10. Are the initial simulator training activities sequenced in a manner to help the trainees progress from learning simple skills and knowledge to performing complex interrelated tasks?
- ☐ 11. Is the appropriate simulator training method (demonstration, unannounced casualty, component or system operation, integrated plant operation, case study, etc.) incorporated in the simulator exercise to effectively cover the learning objectives?
- ☐ 12. Do the exercise guides apply to use of previously learned skills and knowledge? Specifically, is theoretical knowledge learned in the classroom incorporated into the exercise guide content?
- ☐ 13. Have appropriate plant and industry events been effectively incorporated into the simulator training materials?
- ☐ 14. Do the exercise guides used in continuing training reflect and reinforce the operating philosophy and standards of the facility?
- ☐ 15. During initial training, are specific simulator exercises used to reinforce fundamentals of teamwork and diagnostic skills taught in the classroom?
- ☐ 16. Are sample questions included as part of the simulator exercise guides?
- ☐ 17. Determine if the preexercise briefings include the following kinds of instructional activities to ensure consistency and effectiveness:
  - a. Team assignments
  - b. Facility conditions
  - c. Learning objectives (training situations only)
  - d. Simulator differences
  - e. Control-board walkdown
  - f. Ground rules that apply in any training session on the simulator.
- ☐ 18. Is team instruction normally used by the simulator instructors? (Example: One instructor performs trainee evaluations while the other operates the simulator and role plays outside personnel.)

## **11. CONDUCT OF SIMULATOR TRAINING (Continued)**

**Comments:**

## 11. CONDUCT OF SIMULATOR TRAINING (Continued)

**Criterion:**

- ☐ **11.5** Individual trainee and team performance is evaluated regularly against established learning objectives.
  - ☐ **11.5.1** Verify regularity of trainee and team performance evaluation against learning objectives, as follows:
    - ☐ 1. Are trainees routinely evaluated against established learning objectives?
    - ☐ 2. Are teams routinely evaluated against established learning objectives?
    - ☐ 3. What are the total number of simulator contact hours provided in initial and continuing training?
    - ☐ 4. Is simulator training distributed throughout the year to maximize its effectiveness?
    - ☐ 5. Discern if posttraining critiques of simulator training sessions include the following kinds of instructional activities to ensure consistency and effectiveness:
      - a. Positive reinforcement of actions performed correctly and student/team progress
      - b. Review of student/team performance as measured against the learning objectives
      - c. Correction of student/team knowledge weaknesses
      - d. The student's/team's self-evaluation of their performance
      - e. Identification of areas that need improvement
      - f. Solicitation of student questions and discussion of answers
      - g. Solicitation of student comments concerning simulator fidelity and procedural adequacy.

## **11. CONDUCT OF SIMULATOR TRAINING (Continued)**

**Comments:**



## 11. CONDUCT OF SIMULATOR TRAINING (Continued)

**Criterion:**

- ☐ **11.6** Subcontracted training is evaluated to ensure that trainees are achieving the specified learning objectives, as measured by appropriate evaluation methods and performance standards.
- ☐ **11.6.1** Determine the effectiveness of subcontracted simulator training using a nonfacility-referenced simulator (if applicable), as follows:
  - ☐ 1. Determine if the following specification considerations are incorporated into simulator vendor training subcontracts:
    - a. Learning objectives to be covered
    - b. Training materials to be developed and used
    - c. Instructor technical and instructional qualification
    - d. Trainee and program evaluations to be performed
    - e. Required temporary modification of the vendor's simulator.
  - ☐ 2. Does the vendor's simulator have sufficient fidelity to ensure that learning objectives can be met with minimal negative learning?
  - ☐ 3. Are temporary software and hardware modifications made to the vendor's simulator in order to enhance the simulator's fidelity? Listed below are several possible examples:
    - a. Home facility labels are affixed to the boards and annunciators.
    - b. Systems and components not in the home facility are deactivated where possible.
    - c. Simulator software is modified to reflect the home facility's set-points, constants, and capacities.
  - ☐ 4. Are the materials, including procedures, curve books, drawings, logs, and operational aids, used on the simulator the same ones that are used in the facility? Are these materials revised to ensure they remain up-to-date?
  - ☐ 5. Is a listing of simulator and facility similarities and differences provided to the trainees prior to the beginning of instruction?

## **11. CONDUCT OF SIMULATOR TRAINING (Continued)**

**Criterion 11.6.1 (Continued):**

- ☐ 6. Have the vendor instructors been trained on the trainees' home facility?
- ☐ 7. Are facility training instructors qualified to conduct training and evaluations on the vendor's simulator?
- ☐ 8. Are members of the facility training staff present at all vendor training sessions to settle any conflicts that arise?
- ☐ 9. Are the vendor instructors knowledgeable of the facility policies and standards on the conduct of operations? Do the vendor instructors enforce these standards during the training?
- ☐ 10. After completion of initial training, are the trainees adequately debriefed concerning the differences between the simulator and the home facility?

**Comments:**

## 12. CONDUCT OF LABORATORY TRAINING

Using the Conduct of Laboratory Training checklists below, determine if all of these criteria are being met by the facility.

### Criterion:

- ☐ **12.1** The training program content is implemented as outlined by approved training materials and is well-organized, current, and structured to provide practical experience.
- ☐ **12.1.1** Verify implementation of training structured to provide practical experience as outlined in lesson materials, and verify the adequacy of instructor preparation and instructional techniques, as follows:
  - ☐ **1.** Observe one or more laboratory training sessions. (Conduct a review of all lesson materials prior to the observation.) Complete "OJT and Laboratory Training Observation Checklist" (Attachment II-24), for each observation:
    - a. Did the instructor use current and approved exercise guides and procedures?
    - b. Was the training guide adhered to?
    - c. Are training schedules adhered to?
    - d. Are training materials maintained current?
    - e. Did the training provide the trainees with structured, practical experience?
    - f. Did the instructor use the full capabilities of the laboratory or workshop facilities and equipment?
    - g. Was the instructor adequately prepared?
  - ☐ **2.** Discern how instructors maintain instructional and technical qualifications:
    - a. Do instructors participate in structured in-facility training?
    - b. How do instructors maintain familiarity with job requirements, facility changes, operating experience, and technical specifications?
    - c. What topics are covered in instructor continuing training? How often do instructors receive continuing training?

## **12. CONDUCT OF LABORATORY TRAINING (Continued)**

### **Criterion 12.1.1 (Continued):**

- ☐ 3. Review end of class/course critiques to determine the overall effectiveness of instructors.
  - a. Does the critique form require specific feedback on instructor performance?
- ☐ 4. What techniques do laboratory and workshop instructors use to ensure effective laboratory or workshop training?
- ☐ 5. Are visual aids or demonstrations used effectively?

**Comments:**

## 12. CONDUCT OF LABORATORY TRAINING (Continued)

**Criterion:**

- ☐ **12.2** Conditions of task performance, references, tools, and equipment reflect the actual job to the extent possible.
  - ☐ **12.2.1** Determine the degree of fidelity between actual plant conditions of task performance and those in the laboratory, as follows:
    - ☐ 1. Are the laboratory exercises relevant to the performance of in-plant tasks?
    - ☐ 2. Are the tools, equipment, technical manuals, plant procedures, and reference materials used in training similar to those used on the job?
    - ☐ 3. How do instructors compensate for differences—between training and actual on-the-job conditions?
    - ☐ 4. How do training activities and materials encourage or require direct trainee participation in the learning process?
    - ☐ 5. Who is responsible for maintaining lab or workshop equipment?
    - ☐ 6. How well does training equipment match equipment used in the plant?
    - ☐ 7. How are differences between plant and training facilities handled?
    - ☐ 8. Describe the laboratory or shop facilities.
    - ☐ 9. Evaluate the similarity of the laboratory and shop facilities to the physical and operational plant characteristics.

**Comments:**

## 12. CONDUCT OF LABORATORY TRAINING (Continued)

**Criterion:**

- ☐ **12.3** Training activities encourage direct trainee participation in the learning process.
  - ☐ **12.3.1** Verify training activity encouragement of direct trainee participation, as follows:
    - ☐ 1. Are trainees merely shown how to perform tasks or do they actually perform them?
    - ☐ 2. Are trainees given the opportunity to participate in training activities?
    - ☐ 3. Are trainees given the opportunity to practice?
    - ☐ 4. Are instructors directed to encourage student participation?
    - ☐ 5. Is trainee–instructor interaction maximized?

**Comments:**

## 12. CONDUCT OF LABORATORY TRAINING (Continued)

### Criterion:

- ☐ **12.4** Instructors prepare adequately to ensure effective and consistent delivery of the material.
  - ☐ **12.4.1** Verify implementation of training structured to provide practical experience as outlined in lesson materials, and verify the adequacy of instructor preparation and instructional techniques, as follows:
    - ☐ **1.** Observe one or more laboratory training sessions. (Conduct a review of all lesson materials prior to the observation.) Complete "OJT and Laboratory Training Observation Checklist" (Attachment II-24), for each observation:
      - a. Did the instructor use current and approved exercise guides and procedures?
      - b. Was the training guide adhered to?
      - c. Are training schedules adhered to?
      - d. Are training materials maintained current?
      - e. Did the training provide the trainees with structured, practical experience?
      - f. Did the instructor use the full capabilities of the laboratory or workshop facilities and equipment?
      - g. Was the instructor adequately prepared?
    - ☐ **2.** Discern how instructors maintain instructional and technical qualifications:
      - a. Do instructors participate in structured in-facility training?
      - b. How do instructors maintain familiarity with job requirements, facility changes, operating experience, and technical specifications?
      - c. What topics are covered in instructor continuing training? How often do instructors receive continuing training?

## **12. CONDUCT OF LABORATORY TRAINING (Continued)**

### **Criterion 12.4.1 (Continued):**

- ☐ 3. Review end of class/course critiques to determine the overall effectiveness of instructors.
  - a. Does the critique form require specific feedback on instructor performance?
- ☐ 4. What techniques do laboratory and workshop instructors use to ensure effective laboratory on workshop training?
- ☐ 5. Are visual aids or demonstrations used effectively?

**Comments:**



## 12. CONDUCT OF LABORATORY TRAINING (Continued)

**Criterion:**

- ☐ **12.5** The instructor uses instructional techniques appropriate to the setting.
  - ☐ **12.5.1** Verify implementation of training structured to provide practical experience as outlined in lesson materials, and verify the adequacy of instructor preparation and instructional techniques, as follows:
    - ☐ 1. Observe one or more laboratory training sessions. (Conduct a review of all lesson materials prior to the observation.) Complete "OJT and Laboratory Training Observation Checklist" (Attachment II-24), for each observation:
      - a. Did the instructor use current and approved exercise guides and procedures?
      - b. Was the training guide adhered to?
      - c. Are training schedules adhered to?
      - d. Are training materials maintained current?
      - e. Did the training provide the trainees with structured, practical experience?
      - f. Did the instructor use the full capabilities of the laboratory or workshop facilities and equipment?
      - g. Was the instructor adequately prepared?
    - ☐ 2. Discern how instructors maintain instructional and technical qualifications:
      - a. Do instructors participate in structured in-facility training?
      - b. How do instructors maintain familiarity with job requirements, facility changes, operating experience, and technical specifications?
      - c. What topics are covered in instructor continuing training? How often do instructors receive continuing training?

## 12. CONDUCT OF LABORATORY TRAINING (Continued)

**Criterion 12.5.1 (Continued):**

- ☐ 3. Review end of class/course critiques to determine the overall effectiveness of instructors.
  - a. Does the critique form require specific feedback on instructor performance?
- ☐ 4. What techniques do laboratory and workshop instructors use to ensure effective laboratory on workshop training?
- ☐ 5. Are visual aids or demonstrations used effectively?

**Comments:**

## 12. CONDUCT OF LABORATORY TRAINING (Continued)

**Criterion:**

- ☐ **12.6** Trainee performance is evaluated regularly against established learning objectives.
  - ☐ **12.6.1** Verify regularity of trainee evaluation against objectives, as follows:
    - ☐ 1. Are trainees evaluated on a regular basis?
    - ☐ 2. Do the evaluations use the standards specified in the learning objectives?
    - ☐ 3. Are evaluations conducted to measure trainee performance against job performance-based standards?

**Comments:**

## 12. CONDUCT OF LABORATORY TRAINING (Continued)

**Criterion:**

- ☐ 12.7 Subcontracted training is evaluated to ensure that trainees are achieving the specified learning objectives, as measured by appropriate evaluation methods and performance standards.
- ☐ 12.7.1 Determine how subcontracted laboratory training is controlled, as follows:
  - ☐ 1. How are the laboratory objectives selected?
  - ☐ 2. What training is conducted by subcontractors?
  - ☐ 3. How are the program materials developed, reviewed, and approved?
  - ☐ 4. How is the program evaluated by the training organization?
  - ☐ 5. How are subcontracted trainers/evaluators selected and monitored?
  - ☐ 6. Are trainees evaluated? How?
  - ☐ 7. Are the evaluations conducted by subcontractors approved by training management?
  - ☐ 8. How does the facility work with the subcontractor to ensure feedback is communicated and acted upon effectively?

**Comments:**

## 13. EXAMINATIONS AND EVALUATIONS LEADING TO QUALIFICATION/CERTIFICATION

Using the Examinations and Evaluations Leading to Qualification/Certification checklists below, determine if all of these criteria are being met by the facility.

### Criterion:

- ☐ **13.1** Development, approval, security, administration, and maintenance of examinations and examination question banks is systematically controlled.
  - ☐ **13.1.1** Verify the adequacy of methods for systematically controlling examinations and examination question banks, as follows:
    - ☐ 1. Are methods in place for the development, approval, security, administration, and maintenance of oral and written examinations and examination question banks?
    - ☐ 2. Does the system of controlling examinations and exam question banks describe methods in sufficient detail to promote consistency?
    - ☐ 3. Describe or attach procedures or policies covering examinations and exam questions banks.
    - ☐ 4. Describe the academic honesty policy of the facility:
      - a. Is this policy known by trainees?

### Comments:

# 13. EXAMINATIONS AND EVALUATIONS LEADING TO QUALIFICATION/CERTIFICATION (Continued)

## Criterion:

- ☐ 13.2 Examinations and OJT/laboratory/simulator performance evaluations contain a representative cross-section of knowledge, skills, and abilities required for the position.

- ☐ 13.2.1 Determine the content validity of written and oral examinations and performance evaluations

—Based on a comparison of written and oral examinations to associated lesson plans and learning objectives (three minimum), as follows:

- ☐ 1. Do the exam questions accurately measure the trainee's mastery of the learning objectives?
- ☐ 2. Are examination keys used?

—Based on a review of laboratory and facility OJT performance evaluations, as follows:

- ☐ 1. Do qualification criteria reflect actual job performance standards?
- ☐ 2. Are the evaluation methods (perform, simulate, discuss, etc.) defined and appropriate to the task being evaluated?
- ☐ 3. Are their specific "perform only" items identified? How many? What percentage?
- ☐ 4. Are the evaluations intended to check the trainee knowledge and skills?

—Based on a review of simulator exercise evaluations, as follows:

- ☐ 1. Discern if the following types of criteria are used as part of the simulator exercise guides to assess individual performance:
  - a. Control-board awareness
  - b. Event diagnosis
  - c. Supervisory skills
  - d. Communications
  - e. Attention to detail

# 13. EXAMINATIONS AND EVALUATIONS LEADING TO QUALIFICATION/CERTIFICATION (Continued)

## Criterion 13.2.1 (Continued):

- f. Technical knowledge
  - g. Decisionmaking and problem solving
  - h. Procedure use and compliance
  - i. Immediate and subsequent actions.
- ☐ 2. During initial and continuing training, determine if the following kinds of standards are used as part of the simulator exercise guides to assess team performance, as follows:
- a. Conflict resolution
  - b. Positive reinforcement
  - c. Promotion of winning attitudes
  - d. Influencing team decisions
  - e. Communication monitoring
  - f. Providing feedback.
- ☐ 3. Discern if written performance evaluation forms are specifically designed to support assessment of the trainee to established standards
- For all types of examinations/evaluations, as follows:
- ☐ 1. Are enough lesson learning objectives tested to predict trainee performance in the area?

Comments:

## **13. EXAMINATIONS AND EVALUATIONS LEADING TO QUALIFICATION/CERTIFICATION (Continued)**

**Criterion:**

- ☐ **13.3** Trainees and incumbents who fail examinations and/or OJT/laboratory/simulator performance evaluations are provided structured remedial training and reevaluated. Minimum progress standards are established.
- ☐ **13.3.1** Determine the adequacy of trainee and incumbent remediation and reevaluation methods, as follows:
  - ☐ 1. Are trainees/incumbents provided with remedial training or tutoring? Describe the procedure.
  - ☐ 2. Are trainees/incumbents reexamined on the material where they could not demonstrate adequate knowledge or performance?
  - ☐ 3. Are reexamination questions varied?
  - ☐ 4. How is this remedial training, reexamination, and repeat performance documented?
  - ☐ 5. Are the number of reexaminations limited?

**Comments:**



## 13. EXAMINATIONS AND EVALUATIONS LEADING TO QUALIFICATION/CERTIFICATION (Continued)

### Criterion:

- ☐ 13.4 All examination questions are referenced to one or more learning objectives.
- ☐ 13.4.1 Determine the relationship of exam questions to learning objectives, as follows:
  - ☐ 1. Discern if each written exam question is referenced to one or more learning objectives, as follows:
    - a. Does the exam question accurately measure trainee mastery of the objective?
  - ☐ 2. Discern if each oral exam question is referenced to one or more learning objectives, as follows:
    - a. Does the exam question accurately measure trainee mastery of the objective?
    - b. Is the question worded such that it can be repeated consistently by different evaluators?
  - ☐ 3. Do knowledge evaluations, conducted during performance checkoffs, relate directly to objectives?

### Comments:

## **13. EXAMINATIONS AND EVALUATIONS LEADING TO QUALIFICATION/CERTIFICATION (Continued)**

**Criterion:**

- ☐ **13.5** The content of examinations is changed at intervals sufficient to prevent compromise.
- ☐ **13.5.1** Determine facility procedures for varying examination content, as follows:
  - ☐ 1. Does the facility require change in exam content from one exam to the next?
  - ☐ 2. Is the content of exams changed from one exam to the next?
  - ☐ 3. What percentage of change is required? (Is this based on point value or the number of questions?)
  - ☐ 4. Is there any evidence of exam compromise?

**Comments:**

## 13. EXAMINATIONS AND EVALUATIONS LEADING TO QUALIFICATION/CERTIFICATION (Continued)

**Criterion:**

- ☐ **13.6** Examinations and OJT/laboratory/simulator performance evaluations are administered and graded in a consistent manner. Acceptance criteria to be used are defined before the examination and performance evaluation.

- ☐ **13.6.1** Evaluate the consistency of examination and performance evaluation administration and grading

—For classroom, laboratory, and OJT, as follows:

- ☐ 1. Are clear instructions for administration of examinations and performance evaluations provided to instructors/evaluators?
- ☐ 2. Are examination keys used for grading of exams?
- ☐ 3. Do program procedures ensure consistent grading?
- ☐ 4. Are examinations graded consistently?
- ☐ 5. Do performance evaluations use clearly stated, detailed standards?
- ☐ 6. Do the evaluations adhere to the standards specified?
- ☐ 7. Do the evaluators adhere to facility procedures for the conduct of evaluations?
- ☐ 8. Discern what the criteria are for successful completion of classroom/self-paced, laboratory, simulator, and in-facility training:
  - a. Are the criteria known by the trainee prior to completion of training?

—For simulator training:

- ☐ 1. Are evaluation rating criteria sufficiently detailed to ensure consistent measurement of the trainees?
- ☐ 2. Determine if the frequency is appropriate, in which formal evaluations are conducted, during initial and continuing training.
- ☐ 3. Are individual and shift team performances evaluated on a continuing basis by instructor critiques at the end of each exercise?

## **13. EXAMINATIONS AND EVALUATIONS LEADING TO QUALIFICATION/CERTIFICATION (Continued)**

### **Criterion 13.6.1 (Continued):**

- ☐ 4. Do appropriate operations management personnel participate in the evaluation of the control room teams in continuing training?
- ☐ 5. Are formally documented evaluations for each individual and shift crew completed at the end of each simulator training cycle?
- ☐ 6. Determine whether simulator performance evaluations are effective in determining the ability of each individual and shift team to operate the plant. Look for the following kinds of attributes:
  - a. Are the results of the evaluations analyzed to determine future training needs?
  - b. Is the duration of the evaluation appropriate?
  - c. Is the evaluation evaluated by qualified senior facility management?
  - d. Are both the team and individual formally evaluated?
  - e. Are several evaluation scenarios used to ensure integrity is not compromised between operating crews?
  - f. Is a combined written operational evaluation utilized?

**Comments:**

## 14. SYSTEMATIC EVALUATION OF TRAINING EFFECTIVENESS

Using the Systematic Evaluation of Training Effectiveness checklists below, determine if all of these criteria are being met by the facility.

**Criterion:**

- ☐ 14.1 A comprehensive evaluation of individual training programs is conducted by qualified individuals on a periodic basis to identify program strengths and weaknesses.
  - ☐ 14.1.1 Determine how and by whom training effectiveness is evaluated, as follows:
    - ☐ 1. Are regular, comprehensive program evaluations or audits performed? How often?
    - ☐ 2. Do personnel performing the evaluation have expertise in the program area and knowledge of program development and evaluation techniques?
    - ☐ 3. Does the program evaluation include subcontracted training?
    - ☐ 4. Does the program evaluation include periodic review of training content by facility personnel?
    - ☐ 5. Is trainee in-training performance reviewed?
    - ☐ 6. Are program strengths and weaknesses accurately determined?

**Comments:**

## 14. SYSTEMATIC EVALUATION OF TRAINING EFFECTIVENESS (Continued)

**Criterion:**

- ☐ **14.2** Training delivery is monitored in all instructional settings and evaluated with regard to instructions, materials, and instructor performance.
- ☐ **14.2.1** Determine the adequacy of training delivery evaluations, as follows:
  - ☐ 1. Are instructors evaluated in each setting in which they instruct on a regular basis? How and by whom?
  - ☐ 2. Is the quality of instruction (instructor knowledge, presentation skills, etc.) regularly evaluated? How and by whom?
  - ☐ 3. Are instructors' performance deficiencies corrected? How?
  - ☐ 4. Are instructional materials periodically evaluated? By whom and how?

**Comments:**

## **14. SYSTEMATIC EVALUATION OF TRAINING EFFECTIVENESS (Continued)**

**Criterion:**

- ☐ **14.3** Feedback from trainee performance during training is used to evaluate and refine the training program.
- ☐ **14.3.1** Determine how trainee in-training performance feedback is gathered and used, as follows:
  - ☐ **1.** Discern how in-training feedback from trainee performance is regularly and systematically obtained:
    - a. Is the feedback obtained adequate to determine if improvement is needed?
  - ☐ **2.** Discern how the feedback is used to evaluate and improve the training program:
    - a. Is trainee in-training performance used to identify program deficiencies requiring follow-up action?
    - b. How are specific changes identified and completed?

**Comments:**

## **14. SYSTEMATIC EVALUATION OF TRAINING EFFECTIVENESS (Continued)**

**Criterion:**

- ☐ **14.4** Feedback from former trainees and their supervisors is used to evaluate and refine the training program.
  - ☐ **14.4.1** Determine how feedback from former trainees and their supervisors is gathered and used, as follows:
    - ☐ **1.** Discern how posttraining (after the trainee has returned to their normal duties) job performance feedback is regularly and systematically obtained from the trainee and their supervisor:
      - a.** Is the feedback obtained adequate to determine if improvement is needed?
    - ☐ **2.** Discern how the feedback is used to evaluate and improve the training program:
      - a.** How is the feedback used to identify program deficiencies requiring follow-up action?
      - b.** How are specific changes identified and completed?
    - ☐ **3.** What other methods are used to obtain feedback on trainee posttraining job performance?

**Comments:**



## 14. SYSTEMATIC EVALUATION OF TRAINING EFFECTIVENESS (Continued)

**Criterion:**

- ☐ **14.5** Change actions (e.g., procedure changes, equipment changes, facility modifications) are monitored and evaluated for their applicability to the development or modification of initial and continuing training programs and are incorporated in a timely manner.
- ☐ **14.5.1** Determine how change actions are monitored, evaluated, and incorporated into the training program, as follows:
  - ☐ 1. Discern if the facility personnel monitor the following (describe how):
    - a. Changes to DOE regulatory requirements
    - b. Facility equipment and procedure modifications.
  - ☐ 2. Who is responsible for evaluating and incorporating change actions?
  - ☐ 3. How are needed changes and/or additions made to training materials?
  - ☐ 4. Are the changes/additions made in a timely manner?

**Comments:**

## 14. SYSTEMATIC EVALUATION OF TRAINING EFFECTIVENESS (Continued)

**Criterion:**

- ☐ **14.6** Facility and industry operating experience is monitored and evaluated for applicability to development or modification of initial and continuing training programs and is incorporated in a timely manner.
- ☐ **14.6.1** Determine how facility and industry operating experience is monitored, evaluated, and incorporated into the training program, as follows:
  - ☐ 1. Discern if the facility personnel monitor the following (describe how):
    - a. Industrial events and accidents
    - b. Facility events and unusual occurrences
    - c. Industry events and unusual occurrences
    - d. Personnel performance errors
    - e. Facility internal and external inspection, evaluation, and audit reports
    - f. Facility and industry operating/maintenance experience.
  - ☐ 2. Who is responsible for evaluating and incorporating facility and industry experience?
  - ☐ 3. How are needed changes or additions made to training materials?
  - ☐ 4. Are the changes/additions made in a timely manner?
  - ☐ 5. Are industry events discussed using a case study approach?

**Comments:**

## 14. SYSTEMATIC EVALUATION OF TRAINING EFFECTIVENESS (Continued)

### Criterion:

- ☐ 14.7 Improvements and changes to initial and continuing training are systematically initiated, evaluated, tracked, and incorporated to correct training deficiencies and performance problems.
- ☐ 14.7.1 Determine the adequacy of the system for initiating, evaluating, tracking, and incorporating training improvements and changes, as follows:
  - ☐ 1. Does a system exist for initiating, evaluating, tracking, and incorporating improvements and changes?
  - ☐ 2. How and by whom are these items tracked from identification to being incorporated into training?
  - ☐ 3. Are items pertinent to the training program consistently identified for evaluation?
  - ☐ 4. Are applicable changes and improvements identified, based on the evaluations?
  - ☐ 5. Are changes and improvements routinely made in a timely manner?

### Comments:

## 14. SYSTEMATIC EVALUATION OF TRAINING EFFECTIVENESS (Continued)

**Criterion:**

- ☐ **14.8** Changes in job scope are evaluated to determine the need for development or modification of initial and continuing training programs.
  - ☐ **14.8.1** Determine the adequacy of job–scope monitoring, as follows:
    - ☐ 1. Does the training department monitor job scope for changes?
    - ☐ 2. How does changing job scope initiate systematic evaluation of training change need?
    - ☐ 3. Are changes made to the training program?
    - ☐ 4. Are changes made in a timely manner?

**Comments:**

## 14. SYSTEMATIC EVALUATION OF TRAINING EFFECTIVENESS (Continued)

**Criterion:**

- ☐ **14.9** Subcontracted training is evaluated for its contribution to meeting job performance requirements and to ensure that its quality is consistent with the facility training standards.
- ☐ **14.9.1** Determine the adequacy of subcontracted training evaluation, as follows:
  - ☐ 1. Does the facility adequately and systematically evaluate subcontracted training?
  - ☐ 2. Are needed changes and improvements identified?
  - ☐ 3. Are changes and improvements made to the subcontracted training?
  - ☐ 4. Are changes and improvements made in a timely manner?

**Comments:**

## **14. SYSTEMATIC EVALUATION OF TRAINING EFFECTIVENESS (Continued)**

**Comments (Continued):**

## **ATTACHMENT II-1 SAMPLE TRAINING SYSTEM DESCRIPTION**

The \_\_\_\_\_ Facility uses a six-phase training system to provide a systematic approach to job performance-based training. The training system is based upon the principles of criterion-referenced instruction. The phases are: Personnel Planning, Analysis, Design, Development, Implementation, and Evaluation. An overview of the training system is as follows:

### **Personnel Planning:**

- Needs analysis to forecast staffing and training requirements.

### **Analysis:**

- Job analysis (JA) to identify the tasks that comprise a job and selection of the tasks appropriate for training.
- Task analysis (TA) to define the knowledge and skills required to perform each task.
- Comparison analysis between tasks selected for training and their supporting knowledge and skills to existing training materials to determine adequacy of coverage.

### **Design:**

- Development/revision of learning objectives based on JA and TA results.
- Selection of instructional strategies for the delivery of training.
- Development/revision of tests that measure the learning objectives.
- Establishment of instructional qualifications.

### **Development:**

- Preparation of program/course descriptions to provide an outline and sequence of training.
- Selection/development of media to support training.
- Development/revision of lesson plans and supporting material.

### **Implementation:**

- Delivery of training.
- Use and maintenance of facilities and training resources.
- Maintenance of training documentation.

## **ATTACHMENT II–1 SAMPLE TRAINING SYSTEM DESCRIPTION (Continued)**

**Evaluation:**

- Formative evaluation to assess effectiveness when conducting each phase of the six–phase training system.
- Program evaluation to measure training effectiveness in meeting the learning objectives and improving job performance:
  - Evaluation of training programs, processes, instructors, and trainees.
  - Relevance of training to organizational objectives and job requirements.
  - Identification, control, and assessment of plant change actions and operating experience.
- Revision of training materials based on program evaluation feedback.



## ATTACHMENT II-2

### SAMPLE TRAINING PROGRAM REFERENCES

Publication	Number	Subject
<b>Nuclear Function Directive</b>	NFD-5	"Goals and Objectives for Personal Qualification and Training."
<b>Facility Administrative Procedure</b>	FAP-ZZ-0021	"Training Department Organizational Structure, Responsibilities, and Procedural Controls for Contracted Training."
	FAP-ZZ-0120	"Administration of Training Programs."
	FAP-ZZ-0125	"Guidelines for the Systematic Approach to Training."
	FAP-ZZ-0126	"Training Manual (training records, instructor qualifications, training program formats, training program descriptions)."
<b>Training Department Procedure</b>	TDP-ZZ-00001	"Course and Facility Scheduling."
	TDP-ZZ-00002	"Examination Preparation, Security, Delivery, and Scoring."
	TDP-ZZ-00003	"Examination Failure, Remedial Training, and Reexamination."
	TDP-ZZ-00004	"Instructor Evaluation."
	TDP-ZZ-00005	"Systematic Development and Implementation of Classroom, Laboratory, and Simulator Training."
	TDP-ZZ-00007	"Training Records."
	TDP-ZZ-00008	"Training Waiver Criteria."
	TDP-ZZ-00009	"Review and Revision of Training Materials Using Plant Change Actions and Operating Experience."
	TDP-ZZ-00014	"Awareness of Plant Procedures" (including revisions).
	TDP-ZZ-00015	"Instructor Training and Qualification."
<b>Facility Department Procedure</b>	HDP-ZZ-06017	"Health Physics Department Procedure Qualifications/OJT Program."
	RDP-ZZ-00002	"Radwaste Department Qualification/OJT Program."

**ATTACHMENT II-2**  
**SAMPLE TRAINING PROGRAM REFERENCES**  
**(Continued)**

<b>Publication</b>	<b>Number</b>	<b>Subject</b>
<b>Facility Department Procedure (Continued)</b>	CDP-ZZ-00600	"Chemistry Department Qualification/OJT Program."
	IDP-ZZ-00002	"Instrument and Control Department Qualification/ OJT Program."
	MDP-ZZ-70001	"Maintenance Department (mechanical and electrical) Qualification/OJT Program."
	NSEP-NS-00200	"Shift Technical Advisor Qualification/OJT Program."
	QAP-ZZ-00230	"Technical Staff Qualification."

## ATTACHMENT II-3A

### INSTRUCTORS' TECHNICAL QUALIFICATIONS

<u>Trainees</u>	<u>Subjects Taught</u>	<u>Suggested Instructor Qualifications</u>
Operator/ Technician (O/T)	Academic/Fundamental Subjects	Successful completion of training/education in subjects being taught, at or above the level to be achieved by the trainees,
Reactor Nonreactor		OR Training or experience that provides the instructor with a knowledge of the duties and responsibilities of the trainees.
Shift Supervisor/ Manager (SS/SM)		For SS/SM and TS, it is preferred that the instructors have a bachelor's degree in engineering or related science that includes courses in the subjects being taught.
Technical Staff (TS)	Generic Nuclear Power	Senior O/T certification for a facility of the same facility technology,
		OR Successful completion of Senior O/T training, including simulator (if applicable), for a facility of the same type as the trainee's facility.
Operator/ Technician (O/T)	Facility-Specific Technical Information and Applied Fundamentals	Senior O/T certification for the trainee's facility,
Reactor Nonreactor		OR Successful completion of Senior O/T training, including simulator (if applicable), for the trainee's facility,
		OR For instructors without facility-specific experience, formal training/observation that emphasizes operations and watchstanding practices, shift turnover procedures and practices, use of facility procedures, and normal facility evolutions should be completed.
Shift Supervisor/ Manager (SS/SM)		
Technical Staff (TS)		

## ATTACHMENT II-3A

### INSTRUCTORS' TECHNICAL QUALIFICATIONS (Continued)

<u>Trainees</u>	<u>Subjects Taught</u>	<u>Suggested Instructor Qualifications</u>
Technicians	Fundamentals and Nuclear Power Facility Technology (for trainee's facility or similar facility)	Demonstrated knowledge and skills in the subjects being taught, at or above the level to be achieved by the trainees, as evidenced by previous training/ education and through job performance,  AND Training or experience that provides the instructor with a knowledge of the duties and responsibilities of the trainees.
Mechanical Maintenance		
Electrical Maintenance		
Instrument and Control		
Chemistry		
Radiological Protection		
	Facility-Specific	Demonstrated knowledge and skills in the subjects being taught, at or above the level to be achieved by the trainees, as evidenced by previous training/ education and through job performance,  AND Completion of all certification requirements for the senior-level position or duty area of instructional responsibility at the trainee's facility or a similar facility,  AND Training or experience that provides the instructor with a knowledge of the duties and responsibilities of the trainees.
Instructors	Fundamental or Advanced Instructional Skills Training	Demonstrated knowledge and skills in the subjects being taught, at or above the level to be achieved by the trainees, as evidenced by previous training/ education and through job performance.

## ATTACHMENT II-3B INSTRUCTORS' TRAINING PROGRAM CRITERIA

Topics	Check Items Covered by Course Materials
<b>Initial Instructor Training:</b>	
Role of instructor	<input type="checkbox"/>
Principles of instruction	<input type="checkbox"/>
Assessing trainee entry level	<input type="checkbox"/>
Classroom methods	<input type="checkbox"/>
Presenting classroom instruction	<input type="checkbox"/>
Using lesson plans	<input type="checkbox"/>
Using instructional materials and media	<input type="checkbox"/>
Arranging classrooms	<input type="checkbox"/>
Evaluating trainees	<input type="checkbox"/>
Maintaining and using individual trainee and program records	<input type="checkbox"/>
Other (specify topics) _____	
_____	
_____	
<b>Continuing Instructor Training:</b>	
Learning events	<input type="checkbox"/>
Instructional development process	<input type="checkbox"/>
Planning and developing a unit of instruction	<input type="checkbox"/>
Developing lesson plans	<input type="checkbox"/>
Selecting, developing, and modifying instructional materials and media	<input type="checkbox"/>
Developing instructional measurement instruments	<input type="checkbox"/>
Presenting laboratory instruction	<input type="checkbox"/>
Conducting simulator training	<input type="checkbox"/>
Individualizing instruction	<input type="checkbox"/>
Conducting walk-throughs and facility tours	<input type="checkbox"/>
Conducting and evaluating OJT	<input type="checkbox"/>
Coping with trainee stress	<input type="checkbox"/>
Counseling trainees	<input type="checkbox"/>
Other (specify topics) _____	
_____	
_____	

## ATTACHMENT II-4

### SHIFT SUPERVISOR/MANAGER-OPERATOR/TECHNICIAN TRAINING PROGRAM CRITERIA

<u>Suggested Content Areas</u>	<u>Check Items Covered by Course Materials</u>
<b>Shift Supervisor/Manager:</b>	
Supervisor skills instruction	<input type="checkbox"/>
Procedures and bases	<input type="checkbox"/>
Advanced transient and accident analysis:	<input type="checkbox"/>
Reactor and/or process thermal-hydraulics (as applicable)	<input type="checkbox"/>
Containment of radioactivity	<input type="checkbox"/>
Accident assessment	<input type="checkbox"/>
Advanced operating practices training:	
Facility operations	<input type="checkbox"/>
Facility emergency response	<input type="checkbox"/>
In-facility training	<input type="checkbox"/>
Simulator training	<input type="checkbox"/>
Advanced electrical components and systems	<input type="checkbox"/>
Advanced specialized education:	
Safety assessment skills	<input type="checkbox"/>
Behavioral sciences	<input type="checkbox"/>
Administrative requirements	<input type="checkbox"/>
Industry experiences and modifications training	<input type="checkbox"/>
<b>Operator/Technician:</b>	
Facility Fundamentals:	
Physical processes	<input type="checkbox"/>
Piping systems	<input type="checkbox"/>
Major components	<input type="checkbox"/>
Measurement	<input type="checkbox"/>
Water treatment	<input type="checkbox"/>
Plant electrical distribution	<input type="checkbox"/>
Lubrication	<input type="checkbox"/>
Turbines	<input type="checkbox"/>
Compressors	<input type="checkbox"/>
Diesel engines	<input type="checkbox"/>
Pumps and valves	<input type="checkbox"/>

**ATTACHMENT II-4**  
**SHIFT SUPERVISOR/MANAGER-OPERATOR/TECHNICIAN**  
**TRAINING PROGRAM CRITERIA**  
**(Continued)**

<u>Suggested Content Areas</u>	<u>Check Items Covered by Course Materials</u>
<b>Operator/Technician (Continued):</b>	
Facility Fundamentals (Continued):	
Heat exchangers	<input type="checkbox"/>
Ion exchangers	<input type="checkbox"/>
Motors and generators	<input type="checkbox"/>
Specialized Education:	
Mathematics	<input type="checkbox"/>
Classical physics	<input type="checkbox"/>
Engineering drawings	<input type="checkbox"/>
Prints and schematics	<input type="checkbox"/>
Electrical science	<input type="checkbox"/>
Instrumentation and control	<input type="checkbox"/>
Nuclear physics, reactor and/or process operations theory	<input type="checkbox"/>
Plant chemistry	<input type="checkbox"/>
Heat transfer and fluid flow	<input type="checkbox"/>
Materials science	<input type="checkbox"/>
Radiation detection	<input type="checkbox"/>
Radiological protection	<input type="checkbox"/>
Supervisory and communications skills	<input type="checkbox"/>
Facility technology, systems, and procedures	<input type="checkbox"/>
Administrative requirements and watchstanding practices	<input type="checkbox"/>
Control Room training	<input type="checkbox"/>
Basic diagnostics and transient training	<input type="checkbox"/>
Design-basis protection	<input type="checkbox"/>
Simulator training	<input type="checkbox"/>
Industry experiences and modifications	<input type="checkbox"/>

(Summarize strong points, problem areas, or program content omissions on the next page.)

**ATTACHMENT II-4**  
**SHIFT SUPERVISOR/MANAGER-OPERATOR/TECHNICIAN**  
**TRAINING PROGRAM CRITERIA**  
**(Continued)**

**Comments:**

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## ATTACHMENT II-5

### SHIFT SUPERVISOR/MANAGER-OPERATOR/TECHNICIAN REQUALIFICATION TRAINING PROGRAM CRITERIA

<u>Suggested Content Areas</u>	<u>Check Items Covered by Course Materials</u>
<b>Fundamentals Review:</b>	
Theory and principles of reactor and/or process operation	<input type="checkbox"/>
Heat transfer, fluid flow, and thermodynamics	<input type="checkbox"/>
Features of facility design	<input type="checkbox"/>
Facility operating characteristics	<input type="checkbox"/>
Instrumentation and control systems	<input type="checkbox"/>
Facility protection systems	<input type="checkbox"/>
Engineered safety systems	<input type="checkbox"/>
Radiation control and safety, and plant chemistry	<input type="checkbox"/>
Applicable portions of DOE orders	<input type="checkbox"/>
Fuel handling and core parameters	<input type="checkbox"/>
<b>Essential Plant Operations:</b>	
Normal, abnormal and emergency procedures	<input type="checkbox"/>
Technical specifications	<input type="checkbox"/>
Administrative procedures, conditions, and limitations	<input type="checkbox"/>
Major operational evolutions	<input type="checkbox"/>
Facility design changes	<input type="checkbox"/>
Procedure changes	<input type="checkbox"/>
Operating history and problems	<input type="checkbox"/>
Related nuclear industry operating experience	<input type="checkbox"/>
Accident mitigation	<input type="checkbox"/>
<b>Skills Training:</b>	
Reactivity manipulations (if applicable) and facility evolutions	<input type="checkbox"/>
Simulator exercises	<input type="checkbox"/>
Facility drill programs	<input type="checkbox"/>
<b>Operational Overview:</b>	
Facility modification review	<input type="checkbox"/>
Facility and industry operating experience review	<input type="checkbox"/>

(Summarize strong points, problem areas, or program content omissions on the next page.)

**ATTACHMENT II-5**  
**SHIFT SUPERVISOR/MANAGER-OPERATOR/TECHNICIAN**  
**REQUALIFICATION TRAINING PROGRAM CRITERIA**  
**(Continued)**

**Comments:**

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## ATTACHMENT II-6 RADIOLOGICAL PROTECTION TECHNICIAN TRAINING PROGRAM CRITERIA

<u>Suggested Content Areas</u>	<u>Check Items Covered by Course Materials</u>
<b>Initial Training:</b>	
Basic mathematics:	
Algebra	<input type="checkbox"/>
Mechanics	<input type="checkbox"/>
Chemistry	<input type="checkbox"/>
Nuclear physics	<input type="checkbox"/>
Reactor and/or process technology	<input type="checkbox"/>
Basic electricity	<input type="checkbox"/>
Communications	<input type="checkbox"/>
Health physics theory:	
Radioactivity and radioactive decay	<input type="checkbox"/>
Sources of radiation	<input type="checkbox"/>
Interaction of radiation with matter	<input type="checkbox"/>
Radiation quantities and units	<input type="checkbox"/>
Biological effects and risks with exposure to ionizing radiation	<input type="checkbox"/>
Counting statistics	<input type="checkbox"/>
Radiation protection standards	<input type="checkbox"/>
External radiation exposure control	<input type="checkbox"/>
Contamination control	<input type="checkbox"/>
Decontamination	<input type="checkbox"/>
Airborne radiation control	<input type="checkbox"/>
Respiratory protection	<input type="checkbox"/>
Radiation surveys	<input type="checkbox"/>
Access control and work monitoring	<input type="checkbox"/>
Dosimetry	<input type="checkbox"/>
Radiation materials control	<input type="checkbox"/>
Environmental monitoring	<input type="checkbox"/>

## ATTACHMENT II-6 RADIOLOGICAL PROTECTION TECHNICIAN TRAINING PROGRAM CRITERIA (Continued)

<u>Suggested Content Areas</u>	<u>Check Items Covered by Course Materials</u>
<b>Initial Training (Continued):</b>	
Health physics equipment:	
Radiation survey and monitoring instruments	<input type="checkbox"/>
Calibration sources, procedures, and equipment	<input type="checkbox"/>
Radiation monitoring system	<input type="checkbox"/>
Facility systems	<input type="checkbox"/>
Facility operations and maintenance	<input type="checkbox"/>
Facility procedures	<input type="checkbox"/>
Accident and incident evaluation and control	<input type="checkbox"/>
<b>Continuing Training:</b>	
Facility and industry operating experience	<input type="checkbox"/>
Facility equipment and procedure changes	<input type="checkbox"/>
Refresher training on selected initial training topics	<input type="checkbox"/>
Refresher training on infrequently performed but important tasks	<input type="checkbox"/>
Retraining addressing task performance deficiencies	<input type="checkbox"/>
(Summarize strong points, problem areas, or program content omissions.)	

### Comments:

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## ATTACHMENT II-7 CHEMISTRY TECHNICIAN TRAINING PROGRAM CRITERIA

<u>Suggested Content Areas</u>	<u>Check Items Covered by Course Materials</u>
<b>Initial Training:</b>	
Mathematics and science:	
Mathematics	<input type="checkbox"/>
Chemistry	<input type="checkbox"/>
Mechanics, thermodynamics, and fluid flow	<input type="checkbox"/>
Electricity	<input type="checkbox"/>
Nuclear physics	<input type="checkbox"/>
Reactor and/or process fundamentals	<input type="checkbox"/>
Communications	<input type="checkbox"/>
Facility systems	<input type="checkbox"/>
Facility-specific chemistry:	
Water chemistry	<input type="checkbox"/>
Corrosion and corrosion prevention	<input type="checkbox"/>
Water purification	<input type="checkbox"/>
Water chemistry specifications and bases	<input type="checkbox"/>
General laboratory safety training	<input type="checkbox"/>
Wet chemistry techniques	<input type="checkbox"/>
Instrumental analyses	<input type="checkbox"/>
Analytical procedures	<input type="checkbox"/>
Sampling procedures and considerations	<input type="checkbox"/>
Quality control program	<input type="checkbox"/>
Radiation Detection and Measurement:	
Radioactivity and radioactive decay	<input type="checkbox"/>
Interaction of radiation with matter	<input type="checkbox"/>
Radiation detection principles	<input type="checkbox"/>
Radiochemistry analysis	<input type="checkbox"/>
Laboratory counting equipment	<input type="checkbox"/>
Methods for optimizing analytical accuracy	<input type="checkbox"/>

## ATTACHMENT II-7 CHEMISTRY TECHNICIAN TRAINING PROGRAM CRITERIA (Continued)

<u>Suggested Content Areas</u>	<u>Check Items Covered by Course Materials</u>
<b>Initial Training (Continued):</b>	
Principles of radiation protection:	
Radiation quantities and units	<input type="checkbox"/>
Sources of radiation	<input type="checkbox"/>
Radiation protection standards	<input type="checkbox"/>
Biological effects and risks with exposure to ionizing radiation	<input type="checkbox"/>
Radiation surveys	<input type="checkbox"/>
Decontamination	<input type="checkbox"/>
Respiratory protection	<input type="checkbox"/>
Dosimetry	<input type="checkbox"/>
Accident chemistry considerations	<input type="checkbox"/>
Chemistry Department—conduct of operations	<input type="checkbox"/>
<b>Continuing Training:</b>	
Facility and industry operating experience	<input type="checkbox"/>
Facility equipment and procedure changes	<input type="checkbox"/>
Refresher training on selected initial training topics	<input type="checkbox"/>
Refresher training on infrequently performed but important tasks	<input type="checkbox"/>
Retraining addressing task performance deficiencies	<input type="checkbox"/>

(Summarize strong points, problem areas, or program content omissions.)

### Comments:

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## ATTACHMENT II-8 INSTRUMENT AND CONTROL TECHNICIAN TRAINING PROGRAM CRITERIA

<u>Suggested Content Areas</u>	<u>Check Items Covered by Course Materials</u>
<b>Initial Training:</b>	
Mathematics and science:	
Mathematics	<input type="checkbox"/>
Algebra	<input type="checkbox"/>
Applied geometry	<input type="checkbox"/>
Applied trigonometry	<input type="checkbox"/>
Mechanics	<input type="checkbox"/>
Heat transfer	<input type="checkbox"/>
Chemistry	<input type="checkbox"/>
Reactor and/or process technology	<input type="checkbox"/>
Fundamental calculus	<input type="checkbox"/>
Nuclear physics	<input type="checkbox"/>
Instrument and control technology:	
Basic electricity	<input type="checkbox"/>
Basic electronics	<input type="checkbox"/>
Digital electronics	<input type="checkbox"/>
Electrical and electronic troubleshooting	<input type="checkbox"/>
Electrical maintenance and test equipment	<input type="checkbox"/>
Electrical print reading	<input type="checkbox"/>
Basic analog process control	<input type="checkbox"/>
Mechanical print reading	<input type="checkbox"/>
Hand tools and equipment	<input type="checkbox"/>
Principles of radiation detection	<input type="checkbox"/>
Electrical control and protection logic	<input type="checkbox"/>
Fundamental computer theory	<input type="checkbox"/>
Facility-specific training:	
Process instrumentation and control devices and equipment	<input type="checkbox"/>
Administrative maintenance and calibration procedures	<input type="checkbox"/>

**ATTACHMENT II-8  
INSTRUMENT AND CONTROL TECHNICIAN  
TRAINING PROGRAM CRITERIA  
(Continued)**

<u>Suggested Content Areas</u>	<u>Check Items Covered by Course Materials</u>
<b>Initial Training (Continued):</b>	
Facility-specific training (Continued):	
Facility systems	<input type="checkbox"/>
Surveillance procedures	<input type="checkbox"/>
Soldering, welding	<input type="checkbox"/>
Splicing, terminating	<input type="checkbox"/>
<b>Continuing Training:</b>	
Facility and industry operating experience	<input type="checkbox"/>
Facility equipment and procedure changes	<input type="checkbox"/>
Refresher training on selected initial training topics	<input type="checkbox"/>
Refresher training on infrequently performed but important tasks	<input type="checkbox"/>
Retraining addressing task performance deficiencies	<input type="checkbox"/>

(Summarize strong points, problem areas, or program content omissions.)

**Comments:**

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## ATTACHMENT II-9 ELECTRICAL MAINTENANCE TECHNICIAN TRAINING PROGRAM CRITERIA

<u>Suggested Content Areas</u>	<u>Check Items Covered by Course Materials</u>
<b>Initial Training:</b>	
Mathematics and science:	
Mathematics	<input type="checkbox"/>
General physics	<input type="checkbox"/>
Nuclear/steam cycle fundamentals	<input type="checkbox"/>
Fundamentals:	
Electrical theory	<input type="checkbox"/>
Transformers	<input type="checkbox"/>
Motors and generators	<input type="checkbox"/>
Electronics	<input type="checkbox"/>
Print and schematic reading	<input type="checkbox"/>
Electrical control and protection devices	<input type="checkbox"/>
Safe and proper use of electrical tools	<input type="checkbox"/>
Conduit, cable, and wire	<input type="checkbox"/>
Electrical maintenance techniques	<input type="checkbox"/>
Facility-specific training:	
Reactor and/or process familiarization	<input type="checkbox"/>
Facility electrical systems	<input type="checkbox"/>
Facility mechanical systems	<input type="checkbox"/>
Procedures	<input type="checkbox"/>
Electrical measurement and test equipment	<input type="checkbox"/>
Communications	<input type="checkbox"/>
<b>Continuing Training:</b>	
Facility and industry operating experience	<input type="checkbox"/>
Facility equipment and procedure changes	<input type="checkbox"/>
Refresher training on selected initial training topics	<input type="checkbox"/>
Refresher training on infrequently performed but important tasks	<input type="checkbox"/>
Retraining addressing task performance deficiencies	<input type="checkbox"/>

(Summarize strong points, problem areas, or program content omissions on the next page.)

**ATTACHMENT II-9  
ELECTRICAL MAINTENANCE TECHNICIAN  
TRAINING PROGRAM CRITERIA  
(Continued)**

**Comments:**

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## ATTACHMENT II-10 MECHANICAL MAINTENANCE TECHNICIAN TRAINING PROGRAM CRITERIA

<u>Suggested Content Areas</u>	<u>Check Items Covered by Course Materials</u>
<b>Initial Training:</b>	
Mathematics and science:	
Mathematics	<input type="checkbox"/>
General physics	<input type="checkbox"/>
Heat transfer	<input type="checkbox"/>
Corrosion chemistry	<input type="checkbox"/>
Properties of materials	<input type="checkbox"/>
Fundamentals:	
Mechanical print reading	<input type="checkbox"/>
Tools	<input type="checkbox"/>
Rigging, scaffolding, cranes	<input type="checkbox"/>
Mechanical equipment and components	<input type="checkbox"/>
Facility-specific training:	
Reactor and/or process familiarization	<input type="checkbox"/>
Systems	<input type="checkbox"/>
Procedures	<input type="checkbox"/>
Communications	<input type="checkbox"/>
<b>Continuing Training:</b>	
Facility and industry operating experience	<input type="checkbox"/>
Facility equipment and procedure changes	<input type="checkbox"/>
Refresher training on selected initial training topics	<input type="checkbox"/>
Refresher training on infrequently performed but important tasks	<input type="checkbox"/>
Retraining addressing task performance deficiencies	<input type="checkbox"/>

(Summarize strong points, problem areas, or program content omissions on the next page.)

**ATTACHMENT II-10  
MECHANICAL MAINTENANCE TECHNICIAN  
TRAINING PROGRAM CRITERIA  
(Continued)**

**Comments:**

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## ATTACHMENT II-11 TECHNICAL STAFF TRAINING PROGRAM CRITERIA

<u>Suggested Content Areas</u>	<u>Check Items Covered by Course Materials</u>
<b>Initial Training:</b>	
Facility and corporate organization	<input type="checkbox"/>
Nuclear cycle overview <sup>a</sup>	<input type="checkbox"/>
Facility applications (as applicable):	
Heat transfer, fluid flow, and thermodynamics	<input type="checkbox"/>
Electrical science	<input type="checkbox"/>
Material science	<input type="checkbox"/>
Nuclear reactor physics	<input type="checkbox"/>
Chemistry/chemistry controls	<input type="checkbox"/>
Process controls	<input type="checkbox"/>
Facility systems and components	<input type="checkbox"/>
Facility operations, simulator training (as applicable):	
DOE orders and directives	<input type="checkbox"/>
Codes and standards overview	<input type="checkbox"/>
QA/QC practices	<input type="checkbox"/>
Facility document system	<input type="checkbox"/>
Maintenance control	<input type="checkbox"/>
Material control	<input type="checkbox"/>
Modification control	<input type="checkbox"/>
ALARA program	<input type="checkbox"/>
Radwaste reduction program	<input type="checkbox"/>
<b>Continuing Training:</b>	
Facility and industry operating experience	<input type="checkbox"/>
Facility equipment changes	<input type="checkbox"/>
Refresher training on selected initial training topics	<input type="checkbox"/>
(Summarize strong points, problem areas, or program content omissions on the next page.)	
<b>a. This overview should include:</b>	
• A description of the mission of other DOE fuel and weapons facilities	
• A description of the relationship between the facility and those described above.	

**ATTACHMENT II-11  
TECHNICAL STAFF  
TRAINING PROGRAM CRITERIA  
(Continued)**

**Comments:**

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## ATTACHMENT II-12

### RADIATION CHEMISTRY TECHNICIAN

The \_\_\_\_\_ Facility's Radiation Chemistry Technician Training Program is a combined program addressing both Chemistry Technician and Radiological Protection Technician duties. The training program consists of approximately 18 weeks of classroom and laboratory training at the Training Center and 5 weeks of site-training at the \_\_\_\_\_ Facility. On-the-job training at the facility is presented over a 2-year period.

The entry requirement for the program is a high school diploma or equivalent. Ten Training Center instructors and three \_\_\_\_\_ Facility instructors support the Radiation Chemistry Technician Training Program.

Continuing training is presented at \_\_\_\_\_ and at the Training Center and is designed to address:

- Facility and industry operating experience
- Facility equipment and procedure changes
- Retraining in areas of demonstrated performance weaknesses
- Refresher training on selected initial training topics
- Refresher training on infrequently performed but important tasks.

All 35 technicians are scheduled to attend approximately 10 days of formal continuing training per year. A required reading program and documented weekly department meetings supplement classroom-based continuing training. Facility subject matter experts may act as guest lecturers to present specialized, continuing training topics.

## ATTACHMENT II-12

### RADIATION CHEMISTRY TECHNICIAN

#### (Continued)

At a predetermined time during the classroom training schedule, the trainee will spend approximately 4 weeks at \_\_\_\_\_ Facility practicing facility-specific duties.

#### CLASSROOM TRAINING

<u>Program Component</u>	<u>Setting (duration)</u>	<u>Topics</u>
Facility Orientation	_____ Facility (6 days)	GET, systems overview
General Fundamentals	Classroom (4 weeks)	Mathematics, basic physics radiation theory, biological effects, radiation instruments
General Chemistry	Classroom/ Laboratory (7–12 weeks)	Chemistry, water treatment, radiochemistry, chemical instrumentation, chemistry controls, postaccident sampling, lab safety, quality control
General Radiological Protection	Classroom/ Laboratory (6 weeks)	Radiological applications, air sampling, respiratory protection, internal and external dosimetry, ALARA concepts, radiation work permits, waste shipping, regulations, emergency plan
Site-Specific	_____ Facility Classroom (5 weeks)	Plant systems, administrative procedures, reactor theory; heat transfer, thermodynamics, and fluid flow; chemistry limits, liquid releases, monitors/analyzers, mitigating core damage, radioactive sources, respiratory fit testing, radioactive material shipment, emergency plan, fire brigade, sampling systems
On-the-Job Training <sup>a</sup> (OJT)	_____ Facility (6 weeks)	Task qualification
Oral Board	_____ Facility	Oral evaluation to review qualification

a. The balance of OJT task qualifications are completed as assigned over an approximate 2-year period.



# **ATTACHMENT II-13** **PROGRAM STATUS**

Program	Job Analysis (%)	Task Analysis (Date)	Learning Objectives (%)	L/Ps	Laboratory	OJT	Simulator	Continuing		Comments
								Dev.-Impl. (Date)	Dev.-Impl. (Date)	
H	237/100%	7/90	100%	2/91-4/91	1/91-3/91	3/91-10/91	N/A-N/A	8/91-5/91	17 OJT covered in C	

a. Dev.-Imp. = Developed-Implemented.

**ATTACHMENT II-14**  
**TRAINING MATERIALS REVIEW CHECKLIST**  
**—CLASSROOM LESSON PLANS**

	Lesson Plans and Numbers:				
Are the objectives appropriate for classroom training?					
Are the objectives/lesson plan contents sequenced properly?					
Do the learning objectives describe skills and knowledge appropriate for the position?					
Do the lesson plan contents support the learning objectives?					
Do the lesson plans include adequate teaching and evaluation methods?					
Do the lesson contents include industry events, facility events, other experience-related items?					
<b>Comments:</b> _____					

**ATTACHMENT II-15**  
**TRAINING MATERIALS REVIEW CHECKLIST**  
**—OJT QUALIFICATION CARDS AND GUIDES**

	Qualification Cards and Numbers				
Does the qualification card reflect actual task, skill, and knowledge requirements?					
Does the qualification card or OJT procedure(s) provide adequate guidance for trainees and trainers/evaluators?					
Does the qualification card or OJT guide provide definite acceptance criteria to ensure consistency of evaluations?					
Does the OJT program include a "core" of items that must be performed as part of the qualifications?					
<b>Comments:</b> _____					

**ATTACHMENT II-16**  
**TRAINING MATERIALS REVIEW CHECKLIST**  
**—LABORATORY GUIDES**

	Exercise Guides and Numbers				
Does the guide include appropriate performance items and learning objectives?					
Are the objectives appropriate for laboratory training?					
Do the exercises reflect actual facility conditions and use actual facility equipment?					
Do the exercise guides discuss differences between facility and training equipment?					
Are the exercises organized and sequenced to provide effective, consistent training?					
Do the exercise guides provide for effective and consistent trainee evaluation?					
<b>Comments:</b> _____					

## ATTACHMENT II-17 FACILITY AND INDUSTRY EVENTS TRACKING

	Events					
Has the EVENT been incorporated into initial training?						
Has the EVENT been incorporated into continuing training?						
Date EVENT was incorporated (if possible to determine)						
Was case study method used?						
Date of training						

Case study should include the following elements:

1. Appreciation of the fact that the event occurred and has the potential to recur
2. Description of the event and factors affecting the event (including where it occurred)
3. The sequence of events
4. An understanding of the following types of items:
  - a. Early indications that the event had occurred or was about to occur
  - b. Cause(s) of the event
  - c. Factors that affect the severity of the event
  - d. Lessons learned from the event
  - e. Facility-specific corrective actions to prevent occurrence of this or similar event
  - f. Facility-specific actions to mitigate the severity of the event if it did occur.

## ATTACHMENT II-18

### FACILITY MODIFICATION/PROCEDURE CHANGES TRACKING

	Modifications					
Modification/procedure change number and title						
Has the modification/ procedure change been incorporated into continuing training?						
Date of modification or procedure change						
Date of training						
Comments: _____						

## ATTACHMENT II-19 LESSON PLANS CHECKLIST

	Lesson Plans and Numbers										
Properly sequenced learning objectives											
Outline of effective, consistent, training guidance											
Learning activities											
References and texts											
Use of audiovisual materials											
Use of handouts											
Trainee assignments											
Instructor activities											
Test schedule and use											
Content covering scope of objectives											
Current materials											
Approval signatures											
Comments: _____											

## ATTACHMENT II-20 LABORATORY GUIDE CHECKLIST

	Laboratory Guides and Numbers										
Learning objectives											
Outline of effective, consistent, training guidance											
Learning activities											
Equipment/tool scheduling and use											
References and texts											
Evaluation instruments											
Content covering objectives											
Current material											
Approval signatures											
Comments: _____											



## ATTACHMENT II-21 OJT GUIDE CHECKLIST

	OJT Guides and Numbers										
Properly sequenced objectives											
Effective, consistent, guidance for (a) trainer and (b) trainee											
Learning activities (e.g., observation, participation, demonstration)											
Equipment scheduling and use											
Safety considerations											
References and texts											
Evaluation instruments											
Content covering objectives											
Current material											
Approval signatures											
Comments: _____											

## ATTACHMENT II-22 SIMULATOR GUIDE CHECKLIST

	Simulator Guides and Numbers				
Properly sequenced learning objectives					
Outline of effective, consistent, training guidance					
Learning activities					
References and texts					
Initial facility conditions					
Shift turnover information					
System/equipment operating systems					
Correct responses to exercise(s)					
Malfunctions to be inserted					
Expected conditions at end of exercise					
Evaluation instruments					
Checklist to evaluate individual and team performance					
Content covering objectives					
Current materials					
Approval signatures					
Comments: _____					

# **ATTACHMENT II-23** **INSTRUCTOR EVALUATION INSTRUMENT**

Instructor: _____		Evaluator: _____	
Lesson Title: _____		_____/_____ (Date)	_____ (Time)
		Lesson Type: <input type="checkbox"/> Skill <input type="checkbox"/> Knowledge	
<p><b>Directions:</b> Check the column that best represents the rating of your observations during the conduct of a lesson or an instructional activity. Write comments on all items checked "needs improvement." (Other comments are optional—Use "Comment" section at the end of this attachment or add other attachments, as necessary.)</p>			
	<u>Not Observed</u>	<u>Satisfactory</u>	<u>Needs Improvement</u>
			<u>Comments</u>
1. Planning			
a. Introduction/overview	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Familiarity with technical information covered in the lesson plan	<input type="checkbox"/>	<input type="checkbox"/>	
c. Preparation of materials and problems	<input type="checkbox"/>	<input type="checkbox"/>	
d. Time allocations	<input type="checkbox"/>	<input type="checkbox"/>	
e. Physical setting	<input type="checkbox"/>	<input type="checkbox"/>	
2. Presentation			
a. Learning objectives			
(1) Sufficient explanation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(2) Sufficient coverage	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

# **ATTACHMENT II-23** **INSTRUCTOR EVALUATION INSTRUMENT** **(Continued)**

	<u>Not Observed</u>	<u>Satisfactory</u>	<u>Needs Improvement</u>	<u>Comments</u>
2. Presentation (Continued)				
f. Trainee Handouts				
(1) Adequacy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
(2) Use	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
g. Explanations				
(1) Clarity (examples)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
(2) Use of experienced trainee knowledge	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
h. Questioning	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
i. Trainee reaction				
(1) Response/participation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
(2) Interest	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
(3) Cooperation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
(4) Control	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

**ATTACHMENT II-23**  
**INSTRUCTOR EVALUATION INSTRUMENT**  
**(Continued)**

	<u>Not Observed</u>	<u>Satisfactory</u>	<u>Needs Improvement</u>	<u>Comments</u>
2. Presentation (Continued)				
j. Communication skills				
(1) Oral presentation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
(2) Visual presentation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3. Trainee Evaluation				
a. Oral exam(s)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
b. Written exam(s)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
c. Performance exam(s)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4. Instructor Characteristics				
a. Voice, diction, delivery	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
b. Enthusiasm	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
c. Appearance, mannerisms	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
d. Listening skills	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>Total Items checked:</b> _____				
<b>Commendations and recommendations:</b> _____				

**ATTACHMENT II-23**  
**INSTRUCTOR EVALUATION INSTRUMENT**  
**(Continued)**

**Comments:**

**ATTACHMENT II-23  
INSTRUCTOR EVALUATION INSTRUMENT  
(Continued)**

**Comments (Continued):**

## ATTACHMENT II-24

### OJT AND LABORATORY TRAINING OBSERVATION CHECKLIST

Facility: \_\_\_\_\_ Program: \_\_\_\_\_

Instructor: \_\_\_\_\_ Trainee: \_\_\_\_\_ Date: \_\_\_\_\_

Task: \_\_\_\_\_ Task function observed (check one):

☐ P (Performed)      ☐ S (Simulated)      ☐ O (Observed)      ☐ D (Discussed)

You may not be able to observe all of the areas on this checklist, so be prepared to address these topics through other means (interviews, trainee feedback forms, records, etc.) Check "Yes," "No," or "N/O" (Not Observed) for each item:

#### 1. Preparation:

	<u>Yes</u>	<u>No</u>	<u>N/O</u>
a. Was the instructor trained/designated to conduct OJT, use the laboratory, and to perform evaluations?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Was the instructor prepared?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Were the trainee prerequisites checked/completed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Were procedures, precautions, and limitations reviewed and/or discussed in advance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Were materials prepared in advance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

#### 2. Presentation:

	<u>Yes</u>	<u>No</u>	<u>N/O</u>
a. Were the objectives understood by both the trainee and the instructor?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Did the instructor demonstrate the task?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Did the instructor use proper instructional techniques, in accordance with facility OJT or laboratory training procedures?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Did the instructor use proper work techniques, tools, and procedures?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Was the training performed under appropriate conditions for the task?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

#### 3. Trainee Practice:

	<u>Yes</u>	<u>No</u>	<u>N/O</u>
a. Did the trainee practice the task?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Did the instructor supervise/aid the trainee during practice to ensure the trainee used proper techniques, tools, and procedures?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



## ATTACHMENT II-24

### OJT AND LABORATORY TRAINING OBSERVATION CHECKLIST (Continued)

<b>4. Performance Evaluation:</b>	<u>Yes</u>	<u>No</u>	<u>N/O</u>
a. Did conditions/equipment reflect actual conditions or simulate them as much as possible?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Did the trainee perform the task without help?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Were defined standards used to evaluate the trainee's performance [e.g., qualification card, procedures, job performance measure (JPM)]?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Did the evaluator ask pertinent questions during the task performance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Did knowledge checkouts use preestablished guidelines, including acceptable standards?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
 <b>5. Remediation:</b>	 <u>Yes</u>	 <u>No</u>	 <u>N/O</u>
a. Did the evaluator give appropriate feedback?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Did the evaluator provide/arrange remedial training, as necessary?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
 <b>6. Cleanup/Documentation:</b>	 <u>Yes</u>	 <u>No</u>	 <u>N/O</u>
a. Did the instructor/evaluator document the completion of training, evaluation, and/or remedial training?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Were tools and equipment returned to the original/proper conditions?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Were all training documents/records completed correctly?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Comments:** \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

## ATTACHMENT II-25 SIMULATOR TRAINING OBSERVATION CHECKLIST

Facility: \_\_\_\_\_ Program: \_\_\_\_\_  
 Instructor: \_\_\_\_\_ Trainee: \_\_\_\_\_ Date: \_\_\_\_\_  
 Task: \_\_\_\_\_ Task function observed (check one):

☐ P (Performed)    ☐ S (Simulated)    ☐ O (Observed)    ☐ D (Discussed)

You may not be able to observe all of the areas on this checklist, so be prepared to address these topics through other means (interviews, trainee feedback forms, records, etc.) Check "Yes," "No," or "N/O" (Not Observed) for each item:

<b>1. Preparation:</b>	<u>Yes</u>	<u>No</u>	<u>N/O</u>
a. Was the instructor trained/designated to conduct simulator training?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Was the instructor prepared?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Were the trainee prerequisites checked/completed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Were procedures, precautions, and limitations reviewed and/or discussed in advance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Were materials prepared in advance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. Was the instructor provided with sufficient preparation time?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>2. Presentation:</b>	<u>Yes</u>	<u>No</u>	<u>N/O</u>
a. Were the objectives understood by both the trainee and the instructor?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Did the instructor demonstrate the task?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Did the instructor use proper instructional techniques, in accordance with facility simulator training procedures?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Did the instructor use proper work techniques, tools, and procedures?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Was the training performed under appropriate conditions for the task?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. Did the instructor make effective use of the simulator capabilities such as freeze, runback, record play, etc.?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g. Was role playing used by the instructor to promote a real facility atmosphere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
h. Was the simulator operated in accordance with approved directions or procedures?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
i. Were standards of facility conduct used in the simulator?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## ATTACHMENT II-25

### SIMULATOR TRAINING OBSERVATION CHECKLIST

(Continued)

<b>3. Trainee Practice:</b>	<u><b>Yes</b></u>	<u><b>No</b></u>	<u><b>N/O</b></u>
a. Did the trainee practice the task?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Did the instructor supervise/aid the trainee during practice to ensure the trainee used proper techniques, tools, and procedures?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Were trainees encouraged to routinely practice proper:			
(1) Watch-standing techniques?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(2) Communications?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(3) Use of procedures?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(4) Indication monitoring?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(5) Log keeping?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(6) Formality?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
 <b>4. Performance Evaluation:</b>			
a. Did conditions/equipment reflect actual conditions or simulate them as much as possible?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Did the trainee perform the task without help?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Were defined standards used to evaluate the trainee's performance (e.g., qualification card, procedures, JPM)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Did the evaluator ask pertinent questions during the task performance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Did knowledge checkouts use preestablished guidelines, including acceptable standards?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. Did simulator drill exercises include the facility team/emergency operations facility/technical support center interface?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g. Did the instructor adequately monitor and make notes to aid them in conducting postexercise critiques?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
h. Were operator knowledge weaknesses identified and corrected by the instructor?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Comments:** \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

# **CHAPTER III**

## **TRAINING PROGRAM ACCREDITATION PLAN GUIDELINES**

The Training Accreditation Program Plan establishes the objectives and criteria against which DOE nuclear facility training is evaluated for accreditation. All training programs are evaluated against the accreditation objectives and criteria by facility personnel during the self-evaluation process. From this self-evaluation, decisions are made by the contractor addressing the scope of work to be performed in order to upgrade any deficiencies noted in their training programs. This scope of work is formally documented in the Training Program Accreditation Plan which is submitted to the local Field Organization and cognizant program office for approval and NE-1 for concurrence. This plan then becomes the document which guides accreditation efforts for the contractor.

This guideline has been developed to assist the contractor in the preparation and writing of the Training Program Accreditation Plan. Use of this guideline will provide consistency in plan format and content and will aid in the development and review of plans by DOE and its contractors. It is expected that variations will be required to meet specific facility situations. If variations are required, the Training Program Accreditation Staff can provide guidance during preparation of the plan.

## INITIAL SELF-EVALUATION

Input for the Training Program Accreditation Plan is provided from a thorough and critical self-evaluation of facility training programs, organizational structure, policies, and procedures. Training conducted by the facility, as well as that conducted by subcontractors, should be reviewed. On-the-job training is usually a major part of a training program and should be reviewed as thoroughly as the training organization activities.

Conducting the self-evaluation is a team effort requiring proper planning and preparation. Facility line management, supervisors, and the work force should be active participants. Before beginning the self-evaluation, all participants in the training process should be familiar with the accreditation objectives and criteria, and the accreditation process, and should be knowledgeable about their roles in the self-evaluation.

It is necessary to utilize the Contractor Self-Evaluation Report and Guidelines contained in Chapter I while conducting the self-evaluation. Training programs and activities are first compared with accreditation objectives and criteria. The strengths and weaknesses of the facility's training are then identified and documented for internal planning purposes. Solutions and action plans for the problems that are identified are developed and documented in the Training Program Accreditation Plan. Additional questions considered while addressing the accreditation objectives and criteria are:

- What is the training program specifically attempting to accomplish?
- What knowledge and skills must personnel possess and how are they identified?
- Is the training program effectively designed to enable facility personnel to acquire the knowledge and skills?
- What are the strengths and successes of the training program?
- What are the weaknesses, limitations, and inadequacies? (For example, do the results of the training program meet the needs of operations management? Are they satisfied with the product?)

The Training Program Accreditation Plan must be implemented with action plans in place and problem resolution nearing completion, prior to forwarding a formal Contractor Self-Evaluation Report to the Field Organization Accreditation Coordinator. The Training Program Accreditation Staff will provide consultation and guidance either by phone or by on-site assist visits, if necessary.

- Training Program Accreditation Plan Preparation and Format—The following guidance is offered for preparation and format of the Training Program Accreditation Plan:
- Cover Page—Complete a cover page for the Training Program Accreditation Plan using the "Suggested Cover Page" (Attachment III-1) as a guide.
- Table of Contents—The cover page should be followed by a table of contents, with related examples of attachment forms grouped at the ends of each chapter.
- Definitions—Any terms or words used in the document which are not likely to be known by non-facility personnel should be defined and included in this section.

- **Abstract**—The abstract should be a brief description of the facility and its purpose. A statement of the scope of this plan should be included in the Abstract, for example:
  - This plan, when implemented, will meet all requirements of the Training Program Accreditation Manual for each training program designated in the plan. It identifies short- and long-term development efforts necessary to meet the objectives and criteria for all accreditable programs.
- **Introduction**—The introduction should include a statement of DOE/contractor commitment to maintain safe and efficient operations, and the importance of training in that effort. List any reference material utilized in preparing the Training Program Accreditation Plan and discuss special considerations and the intent of the document.
- **Application**—List all positions at the facility that fall under each of the nine training programs listed in TAP 1, Chapter I, Scope. For those positions that the facility does not want to be part of the accreditation process, a description of the rationale for nonselection should be provided. This rationale should be based on the following considerations:
  - Impact on facility and public safety
  - Degree of facility-specific knowledge required
  - Number of personnel in the position
  - Existence of well-defined industry or professional programs
  - Applicability of the position to the facility
  - Degree to which the position is supervised.
- **Status of Training Administration**—The status of the overall organization and facility training policies and procedures that describe the philosophy and approach to training with respect to the accreditation objectives and criteria should be evaluated. The written description should include a summary of the strengths and weaknesses and the projected scope of work required to address each objective.
- **Status of Individual Programs**—The status of each program as it compares with the accreditation objectives and criteria should be evaluated and described individually. The written description for each program should include:
  - Position descriptions, requirements, and responsibilities
  - Summary of strengths and weaknesses
  - Projected scope of work to address weaknesses and achieve accreditation
  - Manpower projections (including that necessary to provide incumbent retraining and/or remediation)
  - Facility upgrade projections

- Material projections
  - Projections to maintain accreditation
  - Milestones and mechanism used to track accreditation efforts.
- **Accreditation Plan Summary**—The Summary incorporates all program accreditation efforts. The Summary should discuss how the manpower, facility, and material needs identified are to be funded. Milestones reflecting major efforts or phased training program accreditation should be included. It is recommended that a Gantt bar chart or a similar type of schedule, that reflects these efforts, be prepared and attached to the Training Program Accreditation Plan.
  - **Approval of Training Program Accreditation Plan**—Following preparation of the Training Program Accreditation Plan, the responsible Head of the Field Organization and cognizant Program Senior Official must review and approve it. Upon approval and NE-1 concurrence, the plan is formally in effect and shall guide the accreditation efforts for the contractor.

**(CONTRACTOR NAME)**  
**(FACILITY TITLE)**  
**(COGNIZANT DOE FIELD ORGANIZATION)**

Concurrence: \_\_\_\_\_ (NE-1) \_\_\_\_\_ (Date)



**END**

**DATE  
FILMED**

***12 104 191***

