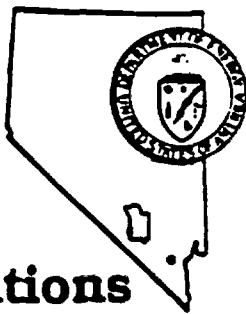


**Nevada
Nuclear
Waste
Storage
Investigations**



A U.S. DOE PROJECT

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UNCONTROLLED

**TRAINING
MANAGEMENT
PLAN**

MAY 1988

**UNITED STATES DEPARTMENT OF ENERGY
NEVADA OPERATIONS OFFICE
LAS VEGAS, NEVADA**

NEVADA NUCLEAR WASTE STORAGE INVESTIGATIONS PROJECT
TRAINING MANAGEMENT PLAN

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Prepared by Nevada Nuclear Waste Storage Investigation (NWSI) Project Participants as part of the Civilian Radioactive Waste Management Program. The NWSI Project is managed by the Waste Management Project Office of the U.S. Department of Energy, Nevada Operations Office. NWSI Project work is sponsored by the Office of Geologic Repositories of the DOE Office of Civilian Radiological Waste Management.

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NEVADA NUCLEAR WASTE STORAGE INVESTIGATIONS PROJECT
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FOREWORD

The purpose of the Nevada Nuclear Waste Storage Investigations (NNWSI) Project Training Management Plan is to set forth the requirements for a comprehensive training program for the NNWSI Project to be utilized by the Waste Management Project Office (WMPD), a project element of the Civilian Radioactive Waste Management Program being managed by the Nevada Operations Office of the Department of Energy. This plan is effective upon approval by the undersigned and shall remain in full force and effect for the execution of this Project. This plan shall be revised as required and shall be reviewed as appropriate by the WMPD to ensure that it is current. Recommended changes shall be submitted to the WMPD Project Manager, who shall be responsible for the coordination and resolution of proposed changes and the implementation of approved changes.

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NEVADA NUCLEAR WASTE STORAGE INVESTIGATIONS PROJECT

TRAINING MANAGEMENT PLAN

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NEVADA NUCLEAR WASTE STORAGE INVESTIGATIONS PROJECT
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1.0 INTRODUCTION

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1.1 PURPOSE

This Training Management Plan (TMP) provides the requirements, plans, and systems by which training programs for the Nevada Nuclear Waste Storage Investigations (NNWSI) Project will be developed.

1.2 OBJECTIVE

The objective of this TMP is to provide a framework for a fully qualified and auditable Project training program. The TMP has been developed to establish minimum requirements for qualification and training programs, to describe a systematic approach to training for identification, development, implementation, evaluation and documentation of Project training, and to describe responsibilities of the training organizations for each Project Participant.

1.3 SCOPE

This TMP applies to the NNWSI Project Office and to all Participants in the NNWSI Project. Participants will be responsible for developing implementing plans and procedures to ensure the requirements of this TMP are met.

2.0 TRAINING PROGRAM REQUIREMENTS

2.1 GENERAL REQUIREMENTS

A qualification and training program shall be developed that is adequate to meet the following general requirements:

2.1.1 Quality Assurance Proficiency Requirements

Selection, indoctrination and training for employees performing and verifying activities that affect quality shall be developed to ensure personnel achieve and maintain a satisfactory level of proficiency in accordance with 10 CFR 50, Appendix B, 10 CFR 60, Subpart G, and NVD-196-17, NNWSI Project Quality Assurance Plan.

2.1.2 Conformance with Industrial Codes/Standards

Training for employees that is required to meet applicable industry codes, standards, and regulations shall be developed in accordance with the Department of Energy's (DOE's) responsibilities under the Nuclear Waste Policy Act, 10 CFR Part 60 and 40 CFR Part 191. Examples of these industrial codes and standards include, but are not limited to, American Society of Mechanical Engineers (ASME) codes, American National Standards Institute (ANSI) standards, Mine Safety and Health Administration (MSHA) standards, and Federal, State, and local environmental, health and safety requirements.

2.1.3 Contract Requirements

Training for personnel that is required to meet individual contract requirements, general and specific Project requirements, and management directives outside the scope of quality requirements shall be conducted as necessary following directives contained in DOE Orders 3410.1A and 4700.1 and DOE Guidelines for Evaluating DOE Non-Reactor Nuclear Facility Training Programs (DOE Guidelines).

2.2 SPECIFIC REQUIREMENTS

2.2.1 Education and Experience

Personnel performing or verifying activities affecting quality shall have the education and experience commensurate with the minimum requirements specified by the job description (NNWSI Project QA Plan, Section II).

2.2.2 Indoctrination

Prior to assigning personnel to perform activities affecting quality, they shall be indoctrinated as to the purpose, scope, methods of implementation, and applicability of Quality Assurance Program Plans, procedures applicable to the individual's responsibilities, regulations and Project level documents (QA Plan, Section II).

2.2.3 Training

Prior to assigning personnel to perform activities affecting quality, training shall be conducted to gain required proficiency (QA Plan, Section II).

2.2.4 Evaluations

Annual proficiency evaluations shall be conducted to ensure that personnel performing or verifying activities affecting quality maintain job proficiency (QA Plan, Section II).

2.2.5 Training Program

A systematic approach to training shall be implemented which addresses program definition, program development, program delivery, program assessment, and program documentation (DOE Guidelines).

2.2.6 Documentation

Records of personnel qualification evaluations and proficiency evaluations, as well as indoctrination and training records shall be retained (QA Plan, Section II).

3.0 SELECTION, QUALIFICATION AND PROFICIENCY

In accordance with NNWSI Project Quality Assurance Plan, each Participant shall establish procedures for ensuring that qualified employees are hired and that they maintain proficiency in the tasks to be performed. This section outlines the methods to be used in assuring qualified personnel as described in paragraph 2.2 above.

3.1 POSITION DESCRIPTION

A detailed position description shall be developed for all current and projected positions. Position descriptions will define duties and responsibilities, and will establish the minimum education, experience, and professional certification required for the position. The position description may be developed in conjunction with the Job Task Analysis described in Section 4 of this TMP.

3.2 QUALIFICATION EVALUATION

Personnel selected for employment shall have the education and experience commensurate with the minimum requirements specified in the position description. Supervisors shall conduct a qualification evaluation to determine and verify that the employee meets all minimum requirements for the position. Evaluations shall be documented by the supervisor responsible for the activities to be performed.

3.3 INDOCTRINATION AND TRAINING

Prior to assigning personnel to perform activities affecting quality, they shall be indoctrinated to the Project. The indoctrination program will familiarize personnel with the various management and administrative methods, regulatory issues, and organizational responsibilities associated with the Project. Information will be presented at an introductory level, emphasizing general concepts as opposed to training related to specific job functions. Participants should develop their own indoctrination curriculum to meet this requirement.

Training shall be conducted to qualify the employee to independently perform the job or task to which he/she is assigned. Training shall include the principles, techniques, and requirements of the activity. Evaluation of the individual's ability to perform the task should be performed, such as a written or performance based test. Project Participants should establish a training matrix of required training for each job position.

3.4 PROFICIENCY EVALUATION

After initial personnel qualification evaluation, the job proficiency of personnel shall be evaluated at least annually. Proficiency evaluations may be performed in conjunction with periodic or day-to-day employee performance evaluations. Proficiency evaluations shall be performed by managers or supervisors who have responsibility for the activities being performed or verified. Based on this evaluation, requirements for additional or refresher training will be identified if needed.

4.0 TRAINING PROGRAM CONTENT AND CONDUCT

Many variables affect the development of a training program, including type of training, level of training, size of class, entry level or experience of trainees, job classification, etc. All of these variables, and many others, must be considered in developing training. Numerous methods exist to this end; collectively, they are known as Systematic Approaches to Training. The DOE Guidelines for Evaluating DOE Non-Reactor Nuclear Facility Training Programs require a systematic approach to training which includes program definition, training development, training delivery, training program evaluation, and training program documentation.

4.1 PROGRAM DEFINITION

4.1.1 Needs Analysis

Needs analysis shall be conducted. This entails a systematic examination of circumstances, problems and practices which will lead to a determination of train/do not train.

4.1.2 Job Task Analysis

Job Task Analysis shall be performed. This is a systematic analysis of the knowledge and skills necessary to perform each job.

4.1.3 Priority and Sequencing

Training needs shall be prioritized in terms of importance, frequency and difficulty to determine sequencing of training to be developed and presented.

4.1.4 Organization

The training organization, lines of authority, and specific responsibilities for meeting training requirements shall be identified. Managers shall ensure that their personnel receive the required training.

4.2 TRAINING DEVELOPMENT

4.2.1 Objectives

Performance based training objectives shall be identified.

4.2.2 Type of Training

Type of training shall be determined. Examples include formal classroom instruction, informal briefings, on-the-job training, self-study, multi-media presentations, and computer based training.

4.2.3 Resources

Resources required to implement the training shall be determined and acquired.

4.2.4 Training materials

Lesson plans or training guides, as applicable, shall be developed.

4.3 TRAINING DELIVERY

4.3.1 Instructors

Training shall be conducted by qualified instructors using approved training materials. Instructors shall possess knowledge of the subject and be capable presenters. Requirements for the selection, training, and qualification of instructors shall be established.

4.3.2 Facilities

Training environments conducive to learning shall be provided.

4.3.3 Scheduling

Training shall be scheduled and the persons who are to attend them should be designated. Management shall ensure that their personnel attend the designated training.

4.4 TRAINING PROGRAM EVALUATION

4.4.1 Individual Evaluation

As necessary and appropriate, individuals who have received training shall be evaluated to assure that they have met the learning objectives.

4.4.2 Program Evaluation

The effectiveness of the training program and its resources shall be periodically assessed, and appropriate changes made.

4.4.3 Instructor Evaluation

The effectiveness of the delivery of individual courses shall be evaluated.

4.4.4 Audits

Periodic audits of the training program shall be performed.

5.0 TRAINING PROGRAM DOCUMENTATION

The training program shall be documented in sufficient detail to permit independent evaluation of the scope of the training program. This section provides guidance on the types of records that should be maintained by each Participant.

5.1 INDIVIDUAL TRAINING RECORDS

Records of personnel qualification evaluations, proficiency evaluations, indoctrination, and training shall be retained as lifetime Quality Assurance records (NNWSI QAP, Section II). These records shall include the following.

5.1.1 Qualification Evaluation Records

These records include the verification and evaluation of an employee's education, experience, and training, compared with the requirements of the position description.

5.1.2 Proficiency Evaluation Records

These records shall contain an annual assessment of the employee's proficiency in performing assigned tasks.

5.1.3 Individual Indoctrination and Training Records

A separate file shall be maintained for each employee which documents the indoctrination and training received. All forms of training will be documented, including training received offsite from outside vendors.

5.2 TRAINING PROGRAM RECORDS

In addition to the above employee records, documentation of the overall training program shall be maintained. These records shall include the following elements:

5.2.1 Records of Program Definition

The program definition record details how training requirements were determined. Includes documentation of activities performed in needs analysis and/or job task analysis.

5.2.2 Training Course Record

This is a complete record of all documents relating to the design and delivery of a training course. It includes approvals by management (if required), objectives, lesson plan or training guide, audio-visual materials used, tests or other evaluation methods, and resources required to conduct the training.

5.2.3 Training Attendance Record

For each course, a record of the following information shall be maintained: title of the course, instructor, date conducted, length of training, description of training, and list of attendees.

5.2.4 Training Evaluation Records

For each course, a record of evaluation shall be maintained showing that the course meets its desired objectives and is presented in a satisfactory manner. Examples include student critiques, instructor critiques, and follow-up surveys.

5.2.5 Instructor Qualification Records

These records document the qualification of instructors and include, for each qualified instructor, a record of instructor training attended and courses qualified to teach.

6.0 RESPONSIBILITIES

6.1 SCOPE OF RESPONSIBILITIES

The NNWSI Project Manager shall be responsible for ensuring that training is conducted to meet the requirements of this plan.

Project Participants shall be responsible for the development, implementation, and evaluation of their respective training programs. Implementing procedures should be developed to address the following areas.

1. Conduct of initial qualification evaluations for personnel selected to perform or verify activities affecting quality, and for other personnel as applicable.
2. Conduct of annual proficiency evaluations for personnel performing activities affecting quality, and for other personnel as applicable.
3. Definition, development, delivery and evaluation of training.
4. Requests for training.
5. Scheduling and announcing training.
6. Documentation of qualification and training activities.
7. Qualification and training of instructor personnel who will develop and/or conduct the actual training.

7.0 QUALIFICATION AND TRAINING REQUIREMENTS REFERENCES

The following documents contain guidance or directives pertaining to qualification and training which are applicable to the the NNWSI Project.

ANSI/ASME NQA-1, 1986, Quality Assurance Program Requirements for Nuclear Facilities

DOE Guidelines for Evaluating DOE Non-Reactor Nuclear Facility Training Programs

DOE Office of Civilian Radioactive Waste Management: Generic Requirements for a Mined Geologic Disposal System

DOE Order 3410.1A, Training

DOE Order 4700.1, Project Management Systems

DOE Order 5700.6B, Quality Assurance

NNWSI Project Quality Assurance Plan, NNWSI 88/9 (Formerly NVO-196-17)

Nuclear Regulatory Commission Review Plan: Quality Assurance Programs for Site Characterization of High Level Nuclear Waste Repositories

OGR/B3 OGR Quality Assurance Plan, Supplement 1, Indoctrination and Training

10 CFR 29, Occupational Safety and Health Act of 1970 (OSHA), revised 1985

10 CFR 30, Federal Mine Safety and Health Act of 1977 (MSHA)

10 CFR 50, Appendix B, Quality Assurance Criteria for Nuclear Power Plants and Fuel Reprocessing Plants

10 CFR 60, Subpart G, Quality Assurance

10 CFR 60, Subpart H, Training and Certification of Personnel

Supplementary Distribution Sheet

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