

CONF-9007106-68

WHC-SA-0875-FP

Received by OSTI

SEP 17 1990

# Training Plans and Programs: Performance or Promises?

DO NOT MICROFILM  
COVER

Prepared for the U.S. Department of Energy  
Assistant Secretary for Defense Programs



**Westinghouse**  
**Hanford Company** Richland, Washington

Hanford Operations and Engineering Contractor for the  
U.S. Department of Energy under Contract DE-AC06-87RL10930

**Copyright License** By acceptance of this article, the publisher and/or recipient acknowledges the U.S. Government's right to retain a nonexclusive, royalty-free license in and to any copyright covering this paper.

Approved for Public Release

DISTRIBUTION OF THIS DOCUMENT IS UNLIMITED

## **DISCLAIMER**

**This report was prepared as an account of work sponsored by an agency of the United States Government. Neither the United States Government nor any agency thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights. Reference herein to any specific commercial product, process, or service by trade name, trademark, manufacturer, or otherwise does not necessarily constitute or imply its endorsement, recommendation, or favoring by the United States Government or any agency thereof. The views and opinions of authors expressed herein do not necessarily state or reflect those of the United States Government or any agency thereof.**

---

## **DISCLAIMER**

**Portions of this document may be illegible in electronic image products. Images are produced from the best available original document.**

**DISCLAIMER**

---

This report was prepared as an account of work sponsored by an agency of the United States Government. Neither the United States Government nor any agency thereof, nor any of their employees, nor any of their contractors, subcontractors or their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or any third party's use or the results of such use of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights. Reference herein to any specific commercial product, process, or service by trade name, trademark, manufacturer, or otherwise, does not necessarily constitute or imply its endorsement, recommendation, or favoring by the United States Government or any agency thereof or its contractors or subcontractors. The views and opinions of authors expressed herein do not necessarily state or reflect those of the United States Government or any agency thereof.

---

Printed in the United States of America

DISCLM-2.CHP (2-89)

WHC-SA--0875

DE90 017266

# Training Plans and Programs: Performance or Promises?

B. J. T. Johnson

Date Published  
July 1990

To be presented at  
31<sup>st</sup> Annual Meeting -  
Institute of Nuclear Materials  
Management (INMM)  
Los Angeles, CA  
July 15-18, 1990

Prepared for the U.S. Department of Energy  
Assistant Secretary for Defense Programs



**Westinghouse  
Hanford Company**

P.O. Box 1970  
Richland, Washington 99352

Hanford Operations and Engineering Contractor for the  
U.S. Department of Energy under Contract DE-AC06-87RL10930

---

**Copyright License** By acceptance of this article, the publisher and/or recipient acknowledges the U.S. Government's right to retain a nonexclusive, royalty-free license in and to any copyright covering this paper.

Approved for Public Release

MASTER

*dk*

DISTRIBUTION OF THIS DOCUMENT IS UNLIMITED

## TRAINING PLANS AND PROGRAMS: PERFORMANCE OR PROMISES?

B.J.T. Johnson

Westinghouse Hanford Company

Richland, Washington

### ABSTRACT

The U.S. Department of Energy (DOE)/Office of Safeguards and Security Training Advisory Committee and DOE ORDER 5633.3 are generating interest within the Material Control and Accountability (MC&A) community to examine current and future MC&A training needs. Producing a consistent training standard should be a common concern for those responsible to provide training. The Westinghouse Hanford Company Safeguards Training Plan provides a formally documented custodian training program that specifies the audience, pre-determined objectives, and purposeful learning activities based on realistic training needs assessment, such as on-the-job training. It also includes a thorough record of participation and results for internal and external audit and inspection purposes. Custodian training designed to convey basic MC&A concepts and philosophy broadens understanding and improves performance of those providing the first line of defense against insider threats. Custodian performance is often the key factor used to evaluate the effectiveness of the overall MC&A system. Adequate resources must be applied by management to develop and provide a training program standard that reflects the importance of MC&A responsibilities within the DOE complex.

### BACKGROUND

In November of 1988 the Director of the Office of Safeguards and Security issued a letter announcing the DOE training doctrine. Since then, due to the combined efforts of the Training Advisory Committee (TAC), the Central Training Academy (CTA), and working groups from the DOE community, the development of a formal standardized training program for protective forces has progressed rapidly to meet the future requirements of a draft DOE ORDER 5630.XX "Safeguards and Security Training System." Currently, the DOE Order providing MC&A requirements, DOE ORDER 5633.3, simply states "that each facility shall have 'a program' to assure that personnel performing MC&A functions are trained and/or qualified to perform their duties and responsibilities, and are knowledgeable of the requirements and procedures related to their functions." The new Order will formalize the training doctrine and affect all Safeguards and Security (SAS) training. Basically, it establishes a standardized approach to SAS training, providing DOE policy, objectives, responsibilities and authority for that training process. Briefly, it states that DOE/Office of Safeguards and Security (OSS) will develop a SAS training accreditation program and that DOE contractors will develop, implement, and manage comprehensive and standardized safeguards and security training programs. The CTA will have the oversight responsibility to accredit standardized courses...the key words being "accredit" and

"standardized." These two words will be driving factors in the evolution of future MC&A training and are generating many common concerns to those responsible for providing this training.

## DISCUSSION

As an MC&A instructor at the Hanford Site for the past seven years, circumstances have allowed me to review some of the evolution of training requirements. Perhaps by sharing with you a few experiences and their results, some of these common concerns will be considered common goals or opportunities.

After approximately two years of instructing the nuclear material custodian and Technical Information Division (TID) training courses at the Hanford Site, the training was audited by the Westinghouse Hanford Company (Westinghouse Hanford) Quality Assurance (QA) office. The observations of this audit served as an introduction to QA documentation requirements. Although we had courses approved by the company technical training group and tested custodians annually, our training program was lacking in some very important areas. It is important to understand that professional training practitioners use specific terminology that is often misused and results in miscommunication. For instance, the words "certified" and "qualified" are often used interchangeably, and therefore, incorrectly. A training program is not the same as a training program plan. After learning some of the QA language, studying the basics of a "quality" training program plan and with the patient assistance of our technical training group, we were able to develop a credible Safeguards Training Program Plan. The training plan documents the training program by stating the purpose, policies, prerequisites and requirements for implementation and records. It describes the program curriculum and defines responsibilities. The training program outlines the formal set of activities designed to improve skills through testing, demonstrated learning, on-the-job training (OJT) checklists and most importantly, thorough documentation of all activities.

The development and implementation of the training program plan resulted in the following benefits:

- The managers of custodians attend training and are more directly involved; job descriptions of custodians were revised to give recognition to their MC&A responsibilities, thus eliminating problems previously experienced as a result of "tacked-on titles."
- Custodian performance improved as evidenced by fewer source-document reporting errors and inventory problems.
- The MC&A audits routinely indicated fewer problems with custodian performance.

The improved custodian performance must be considered as a direct and positive result of this structured approach to their training. We still do not have an accredited program, however, we are one credible step further ahead than we were.

About the time DOE was working to revise and reissue the DOE ORDER 5630.2 as 5633.3, the Operations & Engineering functions of the Hanford Site were consolidated under Westinghouse Hanford Company. With separate operations contractors there had been three different accounting systems and, of course, three entirely different and unique training programs. It seemed sensible to continue providing three courses designed for specific application to each operational division. But the next DOE survey indicated that we were not truly consolidated if our training was not consistent throughout the site. So the formal custodian training program was revised to generically conform to requirements and was directed to the basic concepts of MC&A. The specific tasks and applicable procedures for each Material Balance Area (MBA) are addressed in the MBA OJT checklists by the custodian managers. The checklists are approved and documented through our Safeguards organization.

The benefits of establishing a consistent standard for all custodians are evidenced as follows:

- Standardized formal training has established broader custodian understanding and improved communication.
- Custodians are easily transferred from one division to another and are easily requalified for new MBA assignments with the completion of OJT checklists.
- Latest DOE surveys and Inspection & Evaluation (I&E) results have been positive.
- Recent reorganization of divisions within the company has not necessitated any further changes to the training program or the program plan.

The improved performance and attitude of the custodians are attributed to the consistency of formal training designed to convey the importance of their role and broaden understanding of MC&A requirements, beyond the specific operation of their MBA. The use of MBA OJT checklists by line management further reinforces the importance of MC&A in the work area.

#### **SUMMARY**

There is an unfortunate tendency to overlook the importance of MC&A training and avoid the discomfort and inconvenience of change. However, a recent MC&A assessment report cites MC&A training as a weakness, stating "while certain strengths exist across the complex, the overall MC&A program performance does not meet the intention of the DOE Orders. This condition is partially attributable to deficiencies in training for both process and MC&A personnel.. the training for MC&A personnel is not structured or adequately documented.. often exists with minimal involvement of the MC&A organization." So the evolution of MC&A training is inevitable and the time to take substantial corrective action is now. Resources must be allocated to bring MC&A trainers together so standards and requirements are understood and applied consistently throughout the DOE community and not regarded as

imposed restrictions. The DOE TAC Safeguards Working Group was recently formed to identify MC&A training program needs and coordinate the development of consistent training standards.

It is more important than ever before to provide the best training possible to the personnel responsible for providing the first line of defense against insider threat. Because the evaluations of MC&A systems are often centered on the performance of the custodian, and the performance of the custodian is reflected by the training provided, the MC&A training must be recognized as an important indicator of our commitment.

When we declare that we have training programs that qualify personnel to perform MC&A activities, we are, in effect, making a promise. The tangible evidence that we have fulfilled our promise is in the "world class" performance of those who received that training.