EMPLOYEE CONCERNS

SPECIAL PROGRAM

VOLUME 4
MATERIAL CONTROL CATEGORY

SUBCATEGORY REPORT 40800
TRAINING

UPDATED

TVA

NUCLEAR POWER

TVA EMPLOYEE CONCERNS
SPECIAL PROGRAM

REPORT NUMBER: 40800

REPORT TYPE: Material Control Subcategory (Final)

REVISION NUMBER: 2

TITLE: Training

REASON FOR REVISION:

Revision 1: To Incorporate Available SRP Comments and To Incorporate WBN DNC Corrective Action Plan CATD 40800-WBN-01.

Revision 2: To Incorporate Additional SRP comments.

PREPARATION

PREPARED BY:

B. J. Hensley 5/17/87

REVIEWS

PEER:

Charles W. Hutzler 5/19/87
SIGNATURE DATE

TAS:

Martha J. Martin 5/20/87
SIGNATURE DATE

CONCERRENCES

SIGNATURE	DATE	SIGNATURE	DATE
		CEG-H: Joseph E. Engel / Earl T. Horner	5/20/87 5/19/87
		SRP: Jimmie W. Fyke*	5/20/87

APPROVED BY:

ECSP MANAGER 5/20/87
DATE

N/A
MANAGER OF NUCLEAR POWER CONCURRENCE (FINAL REPORT ONLY) DATE

*SRP Secretary's signature denotes SRP concurrences are on files.

2092T

TABLE OF CONTENTS

TABLE OF CONTENTS

TABLE OF CONTENTS

TABLE OF CONTENTS

Executive Summary

Material Control Category

Subcategory Report 40800 "Training"

I. SUMMARY OF THE ISSUES

There were seven employee concerns addressed by this subcategory. They were further divided into three issues to facilitate evaluation of similar concerns. These issues were "Warehouse Personnel/Clerks," "Receipt Inspections" and "Persons Authorized to Approve Nuclear Power Stores Requisition-575."

II. MAJOR FINDINGS

The issue, "Warehouse Personnel/Clerks," addressed two concerns regarding the lack of training for their respective positions within the WBN Construction Division. The evaluation found this to be not factual. The evaluation did find isolated cases of deficiencies in material handling and control but could not substantiate a program problem attributable to lack of training. The NSRS/ERT report identified some discrepancies which have been addressed and corrected by WBN Construction or are being tracked for corrective action. These discrepancies were determined to be isolated cases not resulting from a lack of training. Additionally, Warehouse Personnel did not perform Quality Control activities. The training program in the early years was not well defined and was not error free, but considering the deficiencies found versus the thousands of items handled, it functioned rather well. R2

The second issue, "Receipt Inspections," addressed four concerns expressed about material receiving inspections. These concerns addressed both Construction Warehouse and Power Stores with regard to the lack of training of receipt inspectors. The evaluation of this issue determined that receipt inspection training existed and was conducted by the individual engineering units until the establishment of a separate Materials Service Unit in 1982. The evaluation of this issue determined that persons performing receiving inspections were required to be trained and certified. Records indicated that personnel performing this function were trained and certified from 1975 until the present. The material issued prior to the training and certification (1975) was primarily non-quality-related. The quality-related material (primarily re-bar) received and issued before certification, received a record search for discrepancies. This search did not reveal any recurring problem

4334T

conditions. The third issue, "Persons Authorized to Approve Nuclear Power Stores Requisition-575," addressed one concern about the knowledge of these authorized persons in regard to the completion of the requisition form, if they were receiving the proper material, and if these persons needed training. The evaluation determined that training was not required for people authorizing requisitioning of supplies or material.

III. COLLECTIVE SIGNIFICANCE OF MAJOR FINDINGS

In conclusion, the evaluation noted some problems which were corrected and some inconsistencies in certification of training which were caused by inattention to detail. These type problems should be limited considerably with the revised procedures, programs, and auditing systems which are now in place. R2

The deficiencies and discrepant conditions determined through the NSRS/ERT/ECTG evaluations have been corrected or are being tracked for corrective action via the Tracking and Reporting of Open Items (TROI) system.

Preface

This subcategory report is one of a series of reports prepared for the Employee Concerns Special Program (ECSP) of the Tennessee Valley Authority (TVA). The ECSP and the organization which carried out the program, the Employee Concerns Task Group (ECTG), were established by TVA's Manager of Nuclear Power to evaluate and report on those Office of Nuclear Power (ONP) employee concerns filed before February 1, 1986. Concerns filed after that date are handled by the ongoing ONP Employee Concerns Program (ECP).

The ECSP addressed over 5800 employee concerns. Each of the concerns was a formal, written description of a circumstance or circumstances that an employee thought was unsafe, unjust, inefficient, or inappropriate. The mission of the Employee Concerns Special Program was to thoroughly investigate all issues presented in the concerns and to report the results of those investigations in a form accessible to ONP employees, the NRC, and the general public. The results of these investigations are communicated by four levels of ECSP reports: element, subcategory, category, and final.

Element reports, the lowest reporting level, will be published only for those concerns directly affecting the restart of Sequoyah Nuclear Plant's reactor unit 2. An element consists of one or more closely related issues. An issue is a potential problem identified by ECTG during the evaluation process as having been raised in one or more concerns. For efficient handling, what appeared to be similar concerns were grouped into elements early in the program, but issue definitions emerged from the evaluation process itself. Consequently, some elements did include only one issue, but often the ECTG evaluation found more than one issue per element.

Subcategory reports summarize the evaluation of a number of elements. However, the subcategory report does more than collect element level evaluations. The subcategory level overview of element findings leads to an integration of information that cannot take place at the element level. This integration of information reveals the extent to which problems overlap more than one element and will therefore require corrective action for underlying causes not fully apparent at the element level.

To make the subcategory reports easier to understand, three items have been placed at the front of each report: a preface, a glossary of the terminology unique to ECSP reports, and a list of acronyms.

Additionally, at the end of each subcategory report will be a Subcategory Summary Table that includes the concern numbers; identifies other subcategories that share a concern; designates nuclear safety-related, safety significant, or non-safety related concerns; designates generic applicability; and briefly states each concern.

Either the Subcategory Summary Table or another attachment or a combination of the two will enable the reader to find the report section or sections in which the issue raised by the concern is evaluated.

The subcategories are themselves summarized in a series of eight category reports. Each category report reviews the major findings and collective significance of the subcategory reports in one of the following areas:

- management and personnel relations
- industrial safety
- construction
- material control
- operations
- quality assurance/quality control
- welding
- engineering

A separate report on employee concerns dealing with specific contentions of intimidation, harassment, and wrongdoing will be released by the TVA Office of the Inspector General.

Just as the subcategory reports integrate the information collected at the element level, the category reports integrate the information assembled in all the subcategory reports within the category, addressing particularly the underlying causes of those problems that run across more than one subcategory.

A final report will integrate and assess the information collected by all of the lower level reports prepared for the ECSP, including the Inspector General's report.

For more detail on the methods by which ECTG employee concerns were evaluated and reported, consult the Tennessee Valley Authority Employee Concerns Task Group Program Manual. The Manual spells out the program's objectives, scope, organization, and responsibilities. It also specifies the procedures that were followed in the investigation, reporting, and closeout of the issues raised by employee concerns.

ECSP GLOSSARY OF REPORT TERMS*

classification of evaluated issues the evaluation of an issue leads to one of the following determinations:

Class A: Issue cannot be verified as factual

Class B: Issue is factually accurate, but what is described is not a problem (i.e., not a condition requiring corrective action)

Class C: Issue is factual and identifies a problem, but corrective action for the problem was initiated before the evaluation of the issue was undertaken

Class D: Issue is factual and presents a problem for which corrective action has been, or is being, taken as a result of an evaluation

Class E: A problem, requiring corrective action, which was not identified by an employee concern, but was revealed during the ECTG evaluation of an issue raised by an employee concern.

collective significance an analysis which determines the importance and consequences of the findings in a particular ECSP report by putting those findings in the proper perspective.

concern (see "employee concern")

corrective action steps taken to fix specific deficiencies or discrepancies revealed by a negative finding and, when necessary, to correct causes in order to prevent recurrence.

criterion (plural: criteria) a basis for defining a performance, behavior, or quality which ONP imposes on itself (see also "requirement").

element or element report an optional level of ECSP report, below the subcategory level, that deals with one or more issues.

employee concern a formal, written description of a circumstance or circumstances that an employee thinks unsafe, unjust, inefficient or inappropriate; usually documented on a K-form or a form equivalent to the K-form.

evaluator(s) the individual(s) assigned the responsibility to assess a specific grouping of employee concerns.

findings includes both statements of fact and the judgments made about those facts during the evaluation process; negative findings require corrective action.

issue a potential problem, as interpreted by the ECTG during the evaluation process, raised in one or more concerns.

K-form (see "employee concern")

requirement a standard of performance, behavior, or quality on which an evaluation judgment or decision may be based.

root cause the underlying reason for a problem.

*Terms essential to the program but which require detailed definition have been defined in the ECTG Procedure Manual (e.g., generic, specific, nuclear safety-related, unreviewed safety-significant question).

Acronyms

AI	Administrative Instruction
AISC	American Institute of Steel Construction
ALARA	As Low As Reasonably Achievable
ANS	American Nuclear Society
ANSI	American National Standards Institute
ASME	American Society of Mechanical Engineers
ASTM	American Society for Testing and Materials
AWS	American Welding Society
BFN	Browns Ferry Nuclear Plant
BLN	Bellefonte Nuclear Plant
CAQ	Condition Adverse to Quality
CAR	Corrective Action Report
CATD	Corrective Action Tracking Document
CCTS	Corporate Commitment Tracking System
CEG-H	Category Evaluation Group Head
CFR	Code of Federal Regulations
CI	Concerned Individual
CMTR	Certified Material Test Report
COC	Certificate of Conformance/Compliance
DCR	Design Change Request
DNC	Division of Nuclear Construction (see also NU CON)

DNE	Division of Nuclear Engineering
DNQA	Division of Nuclear Quality Assurance
DNT	Division of Nuclear Training
DOE	Department of Energy
DPO	Division Personnel Officer
DR	Discrepancy Report or Deviation Report
ECN	Engineering Change Notice
ECP	Employee Concerns Program
ECP-SR	Employee Concerns Program-Site Representative
ECSP	Employee Concerns Special Program
ECTG	Employee Concerns Task Group
EEOC	Equal Employment Opportunity Commission
EQ	Environmental Qualification
EMRT	Emergency Medical Response Team
EN DES	Engineering Design
ERT	Employee Response Team or Emergency Response Team
FCR	Field Change Request
FSAR	Final Safety Analysis Report
FY	Fiscal Year
GET	General Employee Training
HCI	Hazard Control Instruction
HVAC	Heating, Ventilating, Air Conditioning
II	Installation Instruction
INPO	Institute of Nuclear Power Operations
IRN	Inspection Rejection Notice

L/R	Labor Relations Staff
M&AI	Modifications and Additions Instruction
MI	Maintenance Instruction
MSPB	Merit Systems Protection Board
MT	Magnetic Particle Testing
NCR	Nonconforming Condition Report
NDE	Nondestructive Examination
NPP	Nuclear Performance Plan
NPS	Non-plant Specific or Nuclear Procedures System
NQAM	Nuclear Quality Assurance Manual
NRC	Nuclear Regulatory Commission
NSB	Nuclear Services Branch
NSRS	Nuclear Safety Review Staff
NU CON	Division of Nuclear Construction (obsolete abbreviation, see DNC)
NUMARC	Nuclear Utility Management and Resources Committee
OSHA	Occupational Safety and Health Administration (or Act)
ONP	Office of Nuclear Power
OWCP	Office of Workers Compensation Program
PHR	Personal History Record
PT	Liquid Penetrant Testing
QA	Quality Assurance
QAP	Quality Assurance Procedures
QC	Quality Control
QCI	Quality Control Instruction

QCP	Quality Control Procedure
QTC	Quality Technology Company
RIF	Reduction in Force
RT	Radiographic Testing
SQN	Sequoyah Nuclear Plant
SI	Surveillance Instruction
SOP	Standard Operating Procedure
SRP	Senior Review Panel
SWEC	Stone and Webster Engineering Corporation
TAS	Technical Assistance Staff
T&L	Trades and Labor
TVA	Tennessee Valley Authority
TVTLC	Tennessee Valley Trades and Labor Council
UT	Ultrasonic Testing
VT	Visual Testing
WBECSP	Watts Bar Employee Concern Special Program
WBN	Watts Bar Nuclear Plant
WR	Work Request or Work Rules
WP	Workplans

HISTORY OF REVISION

REV NUMBER	PAGES REVISED	REASON FOR CURRENT REVISION
3	i	To clarify that one or more attachments will help the reader find where a particular concern is evaluated

1.0 CHARACTERIZATION

1.1 Introduction

The seven employee concerns addressed by this subcategory report were arranged into three distinct issues with each issue comprising concerns which dealt with identical or closely related concerns. This arrangement was to aid the evaluation process. All the concerns were specific to WBN and were determined not to be applicable to other plants. The three issues were delineated as follows:

1.1.1 Warehouse Personnel/Clerks

1.1.2 Receipt Inspections

1.1.3 Persons Authorized to Approve Nuclear Power Stores Requisition-575

1.2 Description of Issues

1.2.1 Warehouse Personnel/Clerks

There were two concerns expressed regarding the lack of training for warehouse personnel/clerks.

Concern IN-85-369-001 stated that warehouse clerks are untrained and often mix safety and non-safety materials.

Concern IN-85-570-001 stated that warehouse personnel lack an indepth knowledge of material specifications and an indepth knowledge of how to handle the distribution of ASME code materials. This concern also stated that there was a total lack of training and inferred that there was a problem with personnel attitude.

1.2.2 Receipt Inspections

There were four concerns expressed about receiving inspections.

Concern IN-85-606-001 stated that receiving inspections were not performed in an adequate manner by trained, experienced, or certified personnel from the beginning of WBN construction until the establishment of the Materials Service Unit in 1982. It also stated that the receiving activities performed before 1982 consisted of accountability verification only.

Concern IN-85-145-001 questioned why WBN did not establish a quality receiving unit prior to three years ago. (The Receiving Inspection Unit was established in 1982).

Concern IN-86-011-001 questioned why there was not a receiving inspection group in existence prior to April 1982. The individual was also concerned that "Q" materials received prior to 1982 do not meet the acceptance criteria of purchase specifications and/or documentation/hardware verification. It is probable they have been installed in the field.

Concern HI-85-077-N12 was identified by the Nuclear Regulatory Commission (NRC) during their review of the Quality Technology Company (QTC) file. The concern was that it appeared as if Power Stores personnel were doing receipt inspection of material and documentation for which they had not been properly trained.

1.2.3 Persons Authorized to Approve Nuclear Power Stores Requisition-575

There was one concern expressed pertaining to the training of persons authorized to approve Nuclear Power Stores Requisition-575.

Concern IN-85-412-001 stated that 200-300 people are authorized to sign "Power Store Requisition-575" for material at the warehouse. A large percentage of them do not understand how to fill out the requisition and are uncertain whether they are receiving the proper material. This could result in the wrong type or quality Level material being installed in the plant. The concern questioned the large number of people now authorized to sign for material.

2.0 SUMMARY

2.1 Summary of Issues

The basic perceived problems expressed by the employee concerns in this subcategory are:

- Warehouse personnel/clerks and receiving inspectors were not properly trained for their jobs.

- Why was a receiving inspection unit not established at WBN prior to 1982? Also, did materials issued and installed prior to 1982 have the proper certification or documentation?

- People authorized to approve Nuclear Power Stores Requisition 575s were not properly trained for their jobs.

2.2 Summary of Evaluation Process

The concerns addressed by this subcategory report were evaluated in accordance with the Material Control Evaluation Plan. Because each element was evaluated independently, the evaluation process utilized varied somewhat with respect to the nature of each issue. In general, the concerns relating to Warehouse Personnel/Clerks, Receiving Inspectors, and people authorized to approve Nuclear Power Stores Requisition-575 were evaluated as follows:

- Requested QTC to provide any additional information they could

- Reviewed applicable ERT/NSRS Reports to determine if these issues were addressed

- Reviewed procedures to determine training requirements

- Reviewed pertinent training and inspection records

- Reviewed the NRC expurgated and NSRS unexpurgated files

- Conducted interviews with people knowledgeable in the areas of the concerns

- Concerns relative to receiving inspection unit at WBN before 1982 were evaluated by the above plus a search of Nuclear Regulatory Commission (NRC) violations and deviations for the years 1979 through 1982 for any NRC requirements for establishing a separate receiving inspection unit. |R2

2.3 Summary of Findings

There were three issues raised by the various employee concerns contained in this subcategory. The following is a summary of the findings for the three issues contained in this subcategory.

2.3.1 Warehouse Personnel/Clerks

Training requirements for warehouse personnel/clerks were found in a memorandum dated March 16, 1971. Interviews and reviews of personnel records documented on-the-job training. An investigation report on employee concern IN-85-369-001 issued by the Employee Response Team/Nuclear Safety Review

Staff (ERT/NSRS) contained three NSRS recommendations for corrective action for concern IN-85-369-001. A memorandum from Guenter Wadewitz to R. P. Denise titled "Watts Bar Nuclear Plant - Request For Investigation/Evaluation" dated March 12, 1986, contained a construction response to IN-85-369-001 in which WBN construction addressed the three NSRS recommendations. The corrective actions have either been completed or are being tracked by a Corrective Action Tracking Document (CATD). These corrective actions were taken to correct isolated findings and to enhance warehouse personnel's training at the election of DNC. See summary of Corrective Action in Section 2.6.

2.3.2 Receipt Inspections

It was determined that persons performing receiving inspections at WBN construction warehouse before the establishment of the receiving unit in 1982 were required to be trained and certified. Training for WBN construction personnel was provided by the individual engineering units. It was determined that receipt inspections were performed at the WBN construction warehouse prior to the initiation of a formal certification program for receipt inspectors. Formal certification began in the early months of 1975.

There is an existing training and certification program for Nuclear Power personnel who perform receipt inspection at WBN Power Stores. Receipt inspections at WBN-ONP were governed by Standard Practice 4.1 (WB-4.1) and Administrative Instruction 5.2 (AI-5.2) from 12-06-77 to the present.

2.3.3 Persons Authorized to Approve Nuclear Power Stores Requisition-575

The approval of Nuclear Power Stores Requisition-575s by authorized personnel does not require special training. Nuclear Power Stores personnel who issue material are required to be trained and certified. Their responsibilities include verifying that the Nuclear Power Stores Requisition-575 contains the correct Quality Assurance (QA) level of the material issued when appropriate.

2.4 Summary of Collective Significance

2.4.1 Management Effectiveness

The findings in this subcategory revealed that management was dilatory in initiating necessary WBN site procedures to provide training and certification as required for Material Receipt Inspectors. Training was not well defined or documented. Both WBN Construction and WBN Power Stores were in operation approximately ten months before the establishment of site Receipt Inspection Training procedures. It is noteworthy to mention that these two groups engaged in this "Learning Process" four years apart. |R2

2.4.2 Employee Effectiveness

Employee effectiveness is not applicable to this subcategory.

2.4.3 Technical Adequacy

Technical adequacy is not applicable to this subcategory.

2.5 Summary of Causes

The concerns resulted from a misunderstanding of the functions of warehouse personnel, confusing "Receiving" of materials with "Receipt Inspection" of materials and from questions regarding why the receiving inspection program changed in 1982. Items identified in NSRS report on concern IN-85-369-001 identified problems related to lack of attention to detail and not to lack of training of warehouse personnel. |R2

2.6 Summary of Corrective Action

2.6.1 Warehouse Personnel/Clerks

CATD number 40800-WBN-01 was issued to track open items in WBN construction response to concern IN-85-369-001 investigated by ERT/NSRS.

The Corrective Action Plan as proposed by WBN DNC and concurred with by ECTG is summarized below:

Standard Operating Procedures (SOP) for training of WBN warehouse personnel have been developed. The initial training of all material clerks on the new SOPs has been completed. The ledger system has been computerized. The review of inventory material is in progress. Identification and consolidation of material are being accomplished at the present time. Material that cannot be properly identified will not be used.

2.6.2 Receipt Inspections

No corrective action was required.

2.6.3 Persons Authorized to Approve Nuclear Power Stores Requisition -575

No corrective action was required.

3.0 EVALUATION PROCESS

3.1 Evaluation Methodology

The various issues raised by the employee concerns within this subcategory were evaluated according to the Material Control Category evaluation plan. Seven concerns were evaluated in this subcategory. These concerns were grouped into 3 major elements as described in section 1.

3.1.1 Warehouse Personnel/Clerks

This element was derived from concern numbers IN-85-369-001 and IN-85-570-001. The perceived problems were that warehouse personnel/clerks are untrained and often mix safety and non-safety materials. The method used to evaluate these concerns is as follows:

A. Nuclear Safety Review Staff/Employee Response Team (NSRS/ERT) investigation reports were reviewed to ensure the responses fully addressed the problem area.

B. Quality Control Procedures were reviewed and interviews with WBN construction warehouse supervision were conducted to determine training requirements for warehouse personnel/clerks.

C. Reviewed NRC expurgated and NSRS unexpurgated files to determine if additional information was available.

D. A selected number of WBN construction warehouse personnel/clerks were interviewed. These included the Warehouse Supervisor, Training Officer, Materials Officer, Materials Clerks, and Material Clerk trainees.

E. A random sample of training records for WBN construction warehouse personnel/clerks was reviewed.

F. Information from the NSRS/ERT report and from the WBN construction response to concern number IN-85-369-001 relative to the mixing of safety and non-safety material was reviewed.

3.1.2 Receipt Inspections

This element was derived from concerns IN-85-606-001, IN-85-145-001, IN-86-011-001 and HI-85-077-N12. The perceived problems were that receiving inspections were not performed adequately and were not performed by trained, experienced or certified personnel before 1982. Why was a receiving inspection unit not established at WBN before 1982? Material received before 1982 may not have met purchase specifications. Power Stores personnel performed receipt inspection of material and documentation for which they had not been trained. The method used to evaluate these concerns is as follows:

A. Quality Technology Company (QTC) was contacted to determine if there was additional information available on these concerns.

B. Determined if ERT/NSRS reports were available for the concerns.

C. Reviewed NRC expurgated and NSRS unexpurgated files to determine if additional information was available.

D. A WBN construction response to concern IN-85-145-001 was reviewed.

E. Training requirements for persons performing receiving inspections at the WBN construction warehouse before 1982 were determined.

F. Training records of a selected number of persons performing receiving inspections before 1982 were reviewed.

G. A random sample of personnel who performed receiving inspections at WBN construction warehouse was interviewed.

H. A comprehensive effort was made to discover a requirement for establishing a separate materials inspection unit.

I. "Receiving Reports," "Over, Short, Damaged, or Defective Reports," and "Non-Conforming Reports" were reviewed for material received that did not meet contract specifications and was subsequently installed in the field.

J. Procedures were reviewed to determine training requirements for Nuclear Power personnel who perform receiving inspections at WBN Power Stores.

K. Interviews were conducted with WBN Power personnel to obtain information relating to training and certification for Nuclear Power personnel who perform receiving inspections or provided Technical Assistance for Receipt Inspections.

3.1.3 Persons Authorized to Approve Nuclear Power Stores Requisition-575

This element was derived from concern IN-85-412-001. The perceived problems were:

- Persons authorized to approve Power Stores Requisition-575 are not trained to complete the forms properly.

- People who are issued material do not know if they have been issued the correct material and this could result in the use of the wrong Quality Assurance Level Materials. |R2

- There are too many people authorized to approve Power Stores Requisition-575.

The method used to evaluate this concern is as follows:

A. QTC was contacted to determine if there was additional information available on this concern.

B. Determined if ERT/NSRS Reports were available for the concerns.

C. Reviewed NRC expurgated and NSRS unexpurgated files to determine if additional information was available.

D. Nuclear Power procedures for the requirements for using Power Stores Requisition-575 were reviewed for limitations on the number of people who may be authorized to sign Power Stores Requisition-575.

E. Nuclear Power personnel were interviewed to determine if a training program existed on the use of Power Stores Requisition-575.

F. A selected number of Power Stores Requisition-575s were reviewed for compliance with procedures.

G. Interviews were conducted with Power Stores personnel.

H. Nuclear Power personnel were interviewed to determine what methods were used to ensure that QA level was maintained. A visual inspection of the storage of some QA material was performed.

I. QA personnel were interviewed and QA activity surveys were reviewed.

3.2 Requirements or Criteria Established For Individual Issues

3.2.1 Warehouse Personnel/Clerks

The criteria for training for warehouse personnel/clerks were in a memorandum from W. F. Baker dated March 16, 1971. A training program to qualify warehouse clerical personnel for a newly established Materials Control Clerk, SB-4 position was in a memorandum from C. Boyce Corn, dated June 24, 1980. (PLR800624016)

3.2.2 Receipt Inspections

The training requirements for people who performed receiving inspections at WBN construction warehouse before 1982 were defined in the Division of Construction Quality Control procedure DEC-QCP-1.11, Revision 0, dated August 14, 1974. DEC-QCP-1.11, Revision 1, dated March 24, 1975, contained details of training, personnel certification, and certification in revised procedures. DEC-QCP-1.11, Revision 1 was approved by the WBN construction project manager and implemented at WBN but was not approved by corporate management. WBN site procedure WBN-QCP-1.11, Revision 0 superseded DEC-QCP-1.11, on June 13, 1975. Training requirements of this procedure were very similar to training requirements of DEC-QCP-1.11, Revision 1 that was being used at WBN.

The Operational Quality Assurance Manual (N-OQAM) dated March 1, 1973 stated that the Power Stores Supervisor is responsible for receipt inspections and that technical assistance shall be provided by the originator of the purchase request. The Office of Power Quality Assurance Procedure 7.1, dated July 7, 1976 required personnel performing receipt inspections to receive Quality Assurance Training and to be certified by the plant QA staff. Training requirements for Receipt Inspectors at WBN Power Stores are in WBM Administrative Procedure (AI)-5.2 which replaced WBN Standard Practice 4.1 (WB-4.1) in 1982. WB-4.1 was dated December 6, 1977. No WBN site procedure for receipt inspection was found dated before December 6, 1977.

3.2.3 Persons Authorized to Approve Nuclear Power Stores Requisition-575

Training was not a requirement for persons authorized to approve Nuclear Power Stores Requisition-575. There was no limitation on the number of people who could approve WBN Power Stores Requisition-575.

3.3 Justification of the Evaluation Process

The concerns in this subcategory report (Training) questioned the adequacy and lack of training for WBN Construction warehouse personnel/clerks, for receipt inspectors in both WBN Construction and Nuclear Power, for WBN Power Stores personnel who issue material, and for WBN Power personnel authorized to approve WBN Power Stores Requisition – 575. The evaluation process was designed to determine the training requirements for personnel who performed the above mentioned activities. Review of procedures and records and interviews with knowledgeable individuals were conducted to gather the information contained in this subcategory evalnation report.

4.0 FINDINGS

4.1 Warehouse Personnel/Clerks

4.1.1 Generic

Not applicable.

4.1.2 Site-Specific - WBN (Construction, DNC)

It was determined that training requirements for WBN warehouse clerks, prior to 1980, were contained in a memorandum dated March 16, 1971, from W. F. Baker, Chief, Construction Accounting Branch - "Recruitment and Training Program - Division of Construction." The progress of individual employees in training was recorded by means of service review. On June 24, 1980, C. Boyce Corn, Personnel Officer, Division of Construction, issued a memorandum, "Consideration of Warehouse Clerk-Trainees for Positions in Engineering Organizations," which was a training program to qualify warehouse clerical personnel for the newly established Materials Control Clerk, SB-4 position. No other requirement for formal training for warehouse personnel/clerks was found. No requirement for certification of warehouse personnel/clerks on the use of quality control procedures was found during this evaluation.

Eight interviews conducted with WBN construction warehouse personnel revealed that their training consisted primarily of on-the-job training. The individuals interviewed were satisfied with their training with one exception. This person was the same working level as the people performing receiving and could not remember being assigned to an experienced clerk for training. This person thought that clerks were not given enough responsibility and that this person should have received training on procurement, pricing, and transmitting receiving documents.

The only training record found for the WBN warehouse personnel/clerks prior to 1982 was the employee service review (TVA Form 3031) which contained the number of hours of on-the-job training received by the employee in order to be eligible for a promotion from SB-2 to SB-3.

An investigation was performed and a report prepared by the Employee Response Team (ERT) on employee concern IN-85-369-001 - "Warehouse clerks are not trained and often mix safety and non-safety material." The ERT report (see attachment D) concluded that the concern was "substantiated." The deficiencies on which the conclusion was based were as follows:

- Lack of knowledge of Material Control Clerks about QA requirements as they relate to the receipt, storage and handling of materials.
- The lack of an established program for training of Material Control Clerks prior to 1980.
- The common practice of having two trainees teamed together instead of one experienced clerk and one trainee teamed together during the 1980 Training Program.
- The lack of formal training in procedures prior to 1980.
- The lack of formally issued and controlled procedures to describe the activities of Materials Control Clerks.
- The current lack of adherence to the established training program requirements.
- The lack of material separation (safety and non-safety) prior to 1977-1979 timeframe.

- The uncontrolled storage of material in the "DC Construction" and "Engineering Cable" areas.
- The misidentification of items in stock.
- The lack of identification of items in stock.
- The mislocation of items of stock.

The ERT report also contained a list of nine (9) items that they noted as being discrepant. Those items were as follows:

Item		Discrepancy
1.	1/2" ball valve, SA479-316 SW 600#. Mark 37W2061218	Stored in non-safety location.
2.	14" sch 140 pipe, #2809-1-2, HT Lot #72376	HT Mismarked as ASTM A312-376 when material was ASME Sec III Class I
3.	Concentric Reducers, HT Code AEA	Filled with water
4.	Flange, Orifice Union, HT #216841-MHA	Stored in wrong location
5.	I Beam 5" x 14.75, HT #1815151	Wrong HT number. Should be 181S151
6.	Piping Material Yard #1B-6, Yard #1C-5	Uncapped or ends split
7.	The roof of Building D-6 Yard #1	Brace of roof resting on piping material
8.	I Beam in uncontrolled D.C. Laydown area identified as PM/QA/04 R 551661, 10' X 10" X 1/2", A500 Gr B, HT 77H14	Completely uncontrolled
9.	Non-conforming cable - various types.	Uncontrolled

The NSRS prepared three recommendations for WBN action/disposition for employee concern number IN-85-369-001. Those recommendations were as follows:

Q-85-369-001-01: "Warehouse Operations"

The deficiencies in segregation, labeling, and storage of materials identified in this report need to be corrected via a quality assurance document.

Q-85-369-001-02: "Training of Warehouse Clerks"

Warehouse clerks should be trained in the applicable QA requirements of their jobs. This training should be formal, documented, and completed under the QA program.

Q-85-369-001-03: "Adequacy of Issued Materials"

Since warehouse clerks were not properly trained, materials were found mislabeled and mislocated; an evaluation of the adequacy of material issued needs to be made and documented under the QA program. |R2

WBN construction prepared a response to the NSRS recommendations. In response to recommendation Q-85-369-001-01 - "Warehouse Operations," WBN Construction listed the corrective action taken for the nine items that the ERT report listed as being discrepant. This evaluation verified that those actions had been completed. The construction response stated that 486 items had been selected at random from ledger cards and checked for proper location and proper identification. Only 1.9 percent of the sample could not be accounted for. The construction response stated that material with ASME marking was stored in an ASTM location (see Attachment D, page 5 of 9, sections 10.b and 10.c) because that was its intended uses. |R2

In response to NSRS recommendation Q-85-369-001-02 - "Training of Warehouse Clerks," the response stated the intent of the training program for warehouse clerks. It stated that prior to 1980, the training was as described in W. F. Baker's memorandum to Those listed dated March 16, 1971. WBN Construction felt that their training program could be strengthened and committed to do so.

In response to Q-85-369-001-03 - "Adequacy of Issued Material," construction took exception with the concern that a lack of training for the warehouse clerks resulted in mislocated and mislabeled material. The response stated that this issue is not the training of the clerks but the controls on procurement, receipt, and installation. A QC Inspector assists with the receipt of materials. The inspector verifies the heat number. Inspectors perform installation inspection including cable inspection.

WBN construction listed twelve actions they would take to enhance the process. They prepare a written response every two weeks to report their progress on these items to the Director of Nuclear Construction. These items will also be tracked by the Employee Concern Task Group.

Eleven items were selected from the WBN warehouse ledger book for a survey on the storage of safety and non-safety material. All items were found in the warehouse at the location taken from the ledger book. No additional mixing of safety and non-safety material was found by this evaluation.

Conclusions:

Training requirements and training methods for warehouse personnel/clerks were not well defined. Training for warehouse clerks prior to 1980 existed in the form of on-the-job training based on a memorandum by W. F. Baker, dated March 16, 1971, as evidenced by observation of training schedules on Personnel Service Reviews (TVA Form 3031). The training was informal and no formal training records for WBN warehouse clerks exist for the time prior to 1982. Formal training records after 1982 indicated training on procedures. Requirements for personnel certification on the procedures did not exist.

The training program for Materials Clerk, established in 1980, was for the purpose of preparing warehouse clerks for a newly created SB-4 position. On-the-job training was the primary training method for this program according to the material clerk interviews. Only one of eight WBN construction warehouse material clerks interviewed indicated a dissatisfaction with the training received.

The ERT Report on concern number IN-85-369-001 identified a problem with mixing of safety and non-safety material which was an isolated incident which involved one safety-related valve that was checked out of the warehouse and then returned to the warehouse and stored in a non-safety-related storage area. WBN - Office of Construction addressed the problem and has corrected it. A survey on the storage of safety and non-safety material was conducted and found no other deficiencies. No additional problems with the mixing of safety and non-safety materials were identified during this evaluation. |R2

The final check for the installatibn of the proper material is the field inspection performed by the QC Inspection Unit. No requirement for certification of warehouse personnel/clerk on the use of Quality Control Procedures was found during this evaluation.

WBN - Office of Construction response to employee concern number IN-85-369-001 recognized that their training program could be strengthened [by enhancing the training program although this training is not required and is not associated with the Quality Assurance Program] and construction committed to a formalized training program with written exams pending approval by the Division of Personnel. Other problems identified by the ERT/NSRS report were adequately addressed by the WBN response to concern IN-85-369-001. Corrective actions have been completed or are being tracked by CATD number 40800-WBN-01. |R2

This was found to be a Class A issue.

4.2 Receipt Inspections

4.2.1 Generic

Not applicable.

4.2.2 Site-Specific - WBN

4.2.2.1 Construction

The expressed concerns relating to receiving inspections applied to material received by the WBN construction warehouse before 1982. The concerns were that the receipt inspectors were not trained and why was no separate Receipt Inspection Unit established at WBN Construction Warehouse before 1982. Quality Technology Company (QTC) provided a copy of a WBN construction response to concern IN-86-011-001. The response stated that WBN construction had always had individuals assigned to receiving inspection and this evaluation agreed with the response. |R2

It was determined that persons performing receiving inspections at WBN construction warehouse before 1982 were required to be trained and certified. Quality control procedure DEC-QCP-1.11, Revision 0, "Quality Assurance Training," dated August 14, 1974, defined the approach for formal training of construction site personnel in QA and control

requirements. However, it was not until QC procedure WBN-QCP-1.11, Revision 0, was issued on June 13, 1975, that details of training and personnel certification were included in the procedure. WBN-QCP-1.11, Revision 2, was in effect until April 1982.

Training records obtained for ten individuals performing receiving inspections at WBN construction warehouse before 1982 consisted of Personnel Certification Records retrieved from the construction QA storage vault. These records listed the QC Procedures to which the individual had been certified. The records dated back to the early months of 1975. WBN-QCP-1.11 required training and personnel certification on applicable QC Procedures before performing the activity. DEC-QCP-1.11, Revision 1 contained provisions for certification in revised procedures. The QA unit reviewed revised procedures and determined if re-certification was required. If re-certification was required, QA notified the Construction Engineer. The individual engineering units provided training and then QA performed re-certification. During an interview, a former QA unit supervisor said that this procedure was used for re-certification on revised procedures. Certification records showed that re-certification to revised procedures had been performed at WBN.

Interviews indicated that before the issuance of DEC-QCP-1.11, Revision 0, "Quality Assurance Training," dated August 14, 1974, the engineering units provided training within the individual units. The training (QCP-1.6) consisted of discussion and on-the-job training. No records of this training were found. DEC-QCP-1.11, Revision 0, did not provide details for training and personnel certification on the use of QC Procedures. WBN-QCP-1.11, Revision 0, dated June 13, 1975, contained details for training and certification.

Attachment A to WBN-QCP-1.11 was a personnel certification record. Interviews and a failure to find personnel certification records on the use of QC procedures before early 1975 indicated that there was not a program for personnel certification before 1975.

Receiving reports obtained from the Records Information Management System (RIMS) verified that some permanent QA material was received before a formal QA Training Program with personnel certification was established. Much of the early QA material received was rebar.

A search of procedures, interviews with the past and the present supervisors of the Materials Inspection Unit, a search of NRC violations and deviations for the years 1979 through 1982, and an interview with an engineer from the Nuclear Licensing Branch in Knoxville did not reveal a requirement for establishing the Materials Inspection Unit as a separate unit. Material receiving inspections existed before 1982. The receiving inspections were the responsibility of the individual engineering units who were responsible for the material. Receiving reports were signed by the engineering representative performing the inspection. QC Procedure DEC-QCP-1.6, "Receiving Inspections," was issued on January 11, 1974. Training records indicated that training on DEC-QCP-1.6 was provided by the Civil Engineer Unit as early as February 14, 1975 with QA certification on DEC-QCP-1.6 following on March 6, 1975. This same record contained certification to revisions on DEC-QCP-1.6. Training records for the Electrical Engineering Unit showed training and certification on DEC-QCP-1.6, on March 24, 1975 and March 26, 1975.

A review of seven "Over, Short, Damaged, or Defective Reports," (OSD or D) was made. The review of the OSD or D reports revealed that the material receiving inspectors had detected the following problems: The wrong material, shortage, substitution, heat code letters illegible, mill certifications did not conform to specification and incomplete certification. Eleven receiving reports (TVA Form 209) for QA material were reviewed to determine if documentation was provided with the material. All eleven 209s listed Certificate of compliance or Certified Material Test Reports as being received with the material.

Eight nonconforming reports (NCRs) written for material that did not meet contract specifications were reviewed. The NCRs indicated that receiving inspections were being performed before 1982. The OSD or D Reports were written between October 4, 1975, and May 25, 1979. The receiving reports were written between May 15, 1973, and October 6, 1981, and the nonconforming reports were written between November 4, 1975 and April 28, 1981.

An interview with a cognizant receiving inspector revealed that material without proper documentation had been installed in the field on at least one occasion. This resulted in the writing of NCR 6069 when it was discovered that the Certified Material Test Report did not reflect the heat-treated condition as required for tubing that was received at WBN in March 1979. The problem was not discovered until 1985 when some of the material was transferred to Sequoyah Nuclear Plant (SQN) where the error was found. The material was acceptable and the correct documentation was provided by the supplier. Further evaluation was made on the adequacy of the receiving inspections at WBN construction warehouse before 1982. Twenty-two NCRs written against installation between March 6, 1975, and October 30, 1978, were reviewed to see if improper material was accepted by receipt inspection and installed in the field. Two of the twenty-two NCRs were for material that should have been caught by the receiving inspection. NCR 852R was written because two beams did not have the proper heat numbers stenciled on them. NCR 1002R was written because the vendor sent two relays that did not meet the requirements specified in the procurement document.

4.2.2.2 WBN Power Stores

The QTC expurgated file for concern HI-85-077-N12 indicated that WBN Power Stores personnel were receiving material for which they had not been trained as opposed to field Quality Engineering (QE) people performing receipt inspection.

Part III, Section 2.2 of the Operational Quality Assurance Manual (N-OQAM) dated March 1, 1973 was reviewed and it stated that the supervisor of the Power Stores Unit at the nuclear plant is responsible for receipt inspection and that assistance of a technical nature shall be provided to the Power Stores Unit by the originator of the purchase request to verify acceptability of the shipment.

The TVA Office of Power Quality Assurance Procedure 7.1 (OP-QAP-7.1) Revision 0, dated July 7, 1976 stated that the Division of Power Production through the Power Stores Unit Supervisor at the nuclear plants is responsible for the receipt and inspection of safety-related materials and that personnel performing receiving inspections shall receive Quality Assurance training and be certified by the plant Quality Assurance Staff.

WBN Power Stores was initially staffed approximately February 13, 1977. A Receipt Inspection Report dated April 12, 1977 was obtained indicating that some material was being received within two months after the initial staffing of WBN Power Stores. The report referred to Administrative Instruction 11 (AI-11). No WBN AI-11 could be retrieved but an AI-11 for Sequoyah Nuclear Plant, Material-Receipt Inspection, was obtained. An interview indicated that the Receipt Inspection at WBN could have been made to the specifications of the SNP procedure since the two plants were working together at that time but the interviewee was not certain because of the long timeframe involved. A copy of a QA Certified Receipt Inspection List dated February 23, 1978 containing a list of personnel that was trained to the requirements of WBA84 was obtained. (It is believed that WBA84 was a Watts Bar Standard Practice because a copy of another Watts Bar Standard Practice WBA36 dated March 22, 1977 was obtained); however, the Document and Control Unit has not been able to retrieve a copy of WBA84.

During the timeframe from February 1977 to December 1977, there were four people who performed receipt inspections at WBN Power Stores. One individual had worked in Power Stores at a steam plant, had worked in the Chattanooga Power Stores Classification section, had been assistant supervisor at a TVA nuclear plant and had been Power Stores supervisor at a steam plant before coming to Watts Bar Nuclear Plant. He had approximately 28 years experience in Power Stores work. Another individual had worked in a TVA construction warehouse, Power Stores at two steam plants, and the Chattanooga Power Stores Classification Section before coming to WBN Power Stores. He had approximately 15 years experience in Power Stores. Another had served as a storekeeper for three years in the U.S. Navy, worked eight years in materials in private industry and worked more than four years in Power Stores at a TVA steam plant before coming to WBN Power Stores at the top TVA grade level for a storeroom clerk. The other person worked five years at a TVA steam plant before he came to WBN Power Stores at the top TVA grade level for a storeroom clerk.

The earliest Watts Bar Nuclear Plant procedure for Receipt Inspection that was retrieved was Watts Bar Standard Practice 4.1 (WB-4.1) dated December 6, 1977. WB-4.1 delineated the requirements and plant responsibilities of plant personnel for receipt of material. The Power Stores Unit Supervisor was responsible for the receipt of materials. The items received were to be checked against the packing list or shipping ticket by part number, tags, stampings, markings, etc., which shall agree with the TVA purchase contract or work order authorizing procurement. The inspection shall be conducted by Power Stores personnel with assistance of a technical nature provided, as needed, by the originating section of the purchase request. The originator of the purchase request or his representative shall participate in the receipt inspection for materials assigned Quality Assurance Level I and Level II substituted (a replacement part or component not identical to the purchased part or component) items. Criteria for receipt inspection of these Level I and Level II items were contained in the Standard Practice WB-4.1. |R2

Training and Certification Records (TVA Form 1453) were available for Power Stores personnel dating back to February 21, 1978. QA provided training and performed certification.

Personnel from the Engineering Units provided technical assistance for receipt inspection for QA Level I and Level II substituted items. An interview with a mechanical engineer who had provided technical assistance for receipt inspections revealed that he had not received formal training and certification for receipt inspection but that he had informal training on the procedures. This training was provided by the individual engineering unit and that he had some on-the-job training provided by his supervisor before he performed the task individually.

An interview with an Instrumentation General Foreman who was the initial Instrument Mechanic Foreman on the job revealed that he did not have any formal training for providing Technical Assistance for Receipt Inspection but said that he depended on his background and vendor manuals. He has a technical background in instrumentation.

An interview with a Senior Instrument Mechanic Foreman who had provided technical assistance for receipt inspections revealed that he did not receive formal training but he did recall that he had received informal and on-the-job training. He also said that he ordered the materials, verified the correct material at time of receipt and if he had a problem he would also go to the field and look at the part being ordered. He would also have the vendor verify substitution.

The Receipt Inspection section of Watts Bar Standard Practice 4.1 (WB-4.1) was replaced by Administrative Instruction 5.2 (AI-5.2) on May 25, 1982. AI-5.2, Revision 12 dated April 30, 1986 was reviewed. From this it was determined that receipt inspection for QA Level I and II items, and QA Level III items that require the vendor to have an NQAM, Part III, Section 2.1, Appendix E, Attachment 6, COC program, and ECN material that has 10 CFR 21 Applicable status (except for onsite transferred items addressed in paragraph 5.5), shall be performed by QC inspectors who report to the plant QA staff supervisor. Certified Power Stores clerks shall perform receipt inspections for procured items other

than those listed above. WBN Power Stores receiving inspectors must be trained, certified, and recertified every year not to exceed 18 months. The QA unit was involved in the re-certification process. Superceded revisions of AI-5.2 and WBN Standard Practice WB-4.1 were reviewed which disclosed that AI-5.2 replaced WB-4.1 in 1982.

Interviews were conducted with two people who performed receipt inspections at WBN Power Stores after AI-5.2 became the governing document and Quality Control (QC) became responsible for Receipt Inspections for Quality Assurance Level I items, Level II substituted items, Level II items to which Part 21 applies and for ECN material to which Part 21 applies and which is shipped from the vendor to Nuclear Power. These people received training at the Power Operations Training Center (POTC) and then received on-the-job training before they were certified by the Quality Assurance Unit. Both felt that the training was adequate but one indicated that more extensive training would be beneficial. Technical assistance when requested is provided by the Engineering Unit responsible for the material. Both individuals stated that the technical assistance they had received was adequate. |R2 |R2

Interviews with a WBN Power Stores Materials Officer revealed that the clerks were required to complete a training course consisting of 960 hours of on-the-job training and 40 hours of formal training. A portion of this training was devoted to receipt inspection. Training and certification records were observed for the time period from February 1978 to the present time. He said that QA was always responsible for certification of the clerks and that clerks had never actually received any QA Level I material or any material which was 10 CFR 21 applicable without technical assistance. During 1976-1977, before the establishment of a QA group on site, section supervisors received all materials they had ordered.

NOTE: The statement relating to section supervisors receiving the material came from interviews.

Procedure WB-4.1 dated December 6, 1977, stated that the inspection shall be conducted by Power Stores personnel with assistance of a technical nature provided as needed by the originator for materials assigned QA Level I and Level II substituted items.

Two Corrective Action Reports (CAR) were written pertaining to piece part substitution for Class-1E environmental requirements. Past records were reviewed for compliance and according to the interview with an Instrumentation General Foreman, no rework was required in his section as a result of the Corrective Action Report. Some receipt inspection reports for material received at WBN Power Stores during the years 1977 through 1982 were reviewed. Thirty-seven reports were reviewed and the Quality Assurance Level of the material recorded. Of these thirty-seven reports, only two were for QA Level I material. The QA, Level I material was received after training and certification of receipt inspectors had been implemented. On another occasion forty-four receipt inspection reports were reviewed. Only one of these reports was for QA Level I material. Both reviews were random reviews. The Watts Bar Power Stores N3 log which is a listing of nonconforming items of QA Level I and Level II material that required traceability was reviewed. There were seventeen (17) nonconforming items (NCI) written by WBN Power Stores during 1977, which indicates the Receipt Inspection Program was identifying nonconformances.

Conclusions:

I. WBN Construction Warehouse

A formal QA Training Program was not documented before DEC QCP-1.11, Revision 0, dated August 14, 1974. Personnel certification records in the use of QC Procedures dated back only to early 1975. Receiving inspections of permanent material were performed at WBN before the establishing of a formal training and certification program. There was no requirement for establishing a separate Materials Receiving Inspection Unit before 1982.

Interviews and research indicated that material Receiving Inspections performed before 1982 checked purchase specifications, documentations, and identified nonconformances. These inspections were not just an accountability check.

Some apparent errors were made during the receiving of material at the WBN construction warehouse, but there were additional means to ensure installation of the correct material such as QC field verification of material and system walkthrough before transfer. The receiving inspection errors evaluated in this report were caught at WBN construction except for one case of improper documentation. Even though research indicated that some material was received improperly at WBN construction warehouse before 1982, this evaluation did not find evidence to conclude that Receiving Inspection Program before 1982 was not adequate.

II. WBN Power Stores

Office of Power Quality Assurance Procedures 7.1 dated July 7, 1976 required personnel performing receipt inspections to receive QA training and to be certified by the plant QA staff.

Some receipt inspections were performed at WBN Power Stores during the early evolution of the WBN Power Stores before training and certification were provided by the QA staff and before WBN Procedures were developed. Watts Bar Standard Practice 4.1 dated December 6, 1977 delineated the requirements for material receipt.

The four individuals who performed receipt inspections at WBN Power Stores between February 1977 and December 1977 all had at least four years of experience working in TVA Power Stores before coming to WBN Power Stores.

Training and certification records (TVA Form 1453) were found for Power Stores personnel dating back to February 21, 1978. QA provided training and performed certification.

There was no formal training program for engineering personnel who provided technical assistance for receipt inspections. Some informal training was provided. The engineering units provided technical assistance only in their field of engineering.

A review of receiving reports indicated that "Over, Short, or Defective Reports," (OS or D) were written for material that did not meet the requirements of the contracts.

The engineering units still provide assistance for receipt inspections when requested.

An interview with a Power Stores Materials Officer revealed that in 1976-1977 (before the establishment of a QA group onsite) section supervisors received QA material they had ordered but that in that timeframe, very little QA material was received.

AI-5.2 replaced WB-4.1 "Receipt Inspection," section on May 25, 1982. At this time Quality Control (QC) inspectors assumed responsibility for Receipt Inspection for QA Level I items, Level II substituted items and Level II items to which Part 21 applies and for ECN material to which Part 21 applies and which is shipped from the vendor to Nuclear Power.

WBN Power Stores clerks and Quality Control inspectors receive training and certification before performing receipt inspections. Training and certification records are in the permanent records system.

This was found to be a Class C issue for WBN Construction and a Class A for WBN Nuclear Power.

4.3 Persons Authorized to Approve Nuclear Power Stores Requisition-575

4.3.1 Generic

Not applicable.

4.3.2 Site-Specific - WBN

QTC provided information that concern IN-85-412-001 applied to Nuclear Power only and is an on-going problem that currently exists.

WBN AI-5.4, "Material Issue, Transfer, and Traceability," was reviewed. The current revision (Revision 12), delineated the requirements and responsibilities of plant personnel in the issuance of materials. AI-5.4 did not establish a limit for the number of people who may be authorized to sign Power Stores Requisition-575 (a form used for requisitioning material from controlled storage). |R2

An interview with the assistant supervisor of Nuclear Power Stores revealed that Power Stores personnel who issue material received formal training on the use of Power Stores Requisition-575 and were certified by the QA group. There were ten people listed as issue clerks. Three of the ten were trainees and worked with a certified clerk when issuing material. A review of the training records showed the other seven issue clerks to be certified.

The supervisors of five units (Mechanical Maintenance, Electrical Maintenance, Instrument Maintenance, Modifications and Operations) whose employees comprised a majority of the 307 persons authorized to approve Power Stores Requisition-575, were interviewed. No formal training on the use of Power Stores Requisition-575 existed for those sections.

Twelve incomplete Power Stores Requisition-575N were provided by the Power Stores personnel. These 575s had been presented to the issuing clerks between March 11, 1986 and April 14, 1986. Six of the 575s were presented on five different days (an estimated 55-60, 575s are received daily by the Power Stores). Eleven of the 12, 575s were for general plant use.

Approximately 30 completed 575s were reviewed. One 575 (Power Stores Requisition Number 628606760) listed the QA Level as NR (Not Required) but the material was actually QA Level III. The issuing clerk detected and corrected the error before issuing the material. It appeared that information had been added to Power Stores Requisition 628606784 which indicated that the Nuclear Power Stores clerks were insuring that the 575s were completed. The authorizing document (MR-499566, WBPE48 45-1) used for material traceability was on both 575s.

Twenty-two Power Stores Purchase Requisition 575N were checked on April 28, 1986. Three of the 575s appeared to have been incomplete but were completed before issuing of any material, and none of the three 575s were written for QA material.

Interviews with Power Stores personnel who issue materials indicated that they had few occasions where Power Requisition-575s were signed by unauthorized personnel and was not considered a problem. Material was not issued for 575s signed by an unauthorized signature.

Fifteen Power Stores storage bins were checked for QA level identification. Fourteen of the fifteen bins were labeled as to their QA level and while the label from one bin was missing, the material in the unlabeled bin was marked with the contract number and date of the contract which maintained traceability.

Interviews with QA personnel did not provide any specific information on the use of the wrong QA level material, but did reference some QA activity surveys. These surveys (16PC(e)-84-1, WBN AS-84-101, WBN AS-84-83 and WBN AS-84-168) dealt with issue of materials, traceability, and preparation of TVA 575D. The surveys listed problems found which included finding some incomplete 575s. A corrective action report and deficiency reports were written which addressed the problems. For QA Levels I and II material, QC Field Inspectors verify that the material was purchased from Nuclear Power Stores and that it matches the Power Stores Purchase Requisition-575.

Conclusions

No formal training on the use of Power Stores Requisition-575 is required for people authorized to approve Power Stores Requisition-575. WBN Power, AI-5.4, "Material Issue, Transfer, and Traceability," contains the information needed to complete the Power Stores Requisition-575. The Power stores Issue Clerks are trained and certified on the use of Power Stores Requisition. Issue Clerks verify that the material is issued to the same QA level that it was purchased to.

AI-5.4 delineates the requirements and responsibilities for using Power Stores Requisition-575. Formal training on the use of Power Stores Requisition is required for Power Stores personnel who issue material. Issue personnel are trained and certified to issue QA Material to the QA level of the material as identified by contract number or the TVA Item Identification Code (TIIC) number and to assure that the correct QA level is on the Power Stores Purchase Requisition. For QA Levels I and II material, QC Field Inspectors verify that the material was obtained from the Power Stores and that the material is as stated on the Power Stores Requisition-575.

There is not an established limit on the number of people who may be authorized to approve Power Stores Requisition-575. The plant manager authorizes personnel on TVA Form 1733 to approve Power Stores Requisition-575. The number of personnel authorized to approve Power Stores Requisition-575 should not adversely affect quality as long as established procedures are followed.

This was found to be a Class A issue.

5.0 COLLECTIVE SIGNIFICANCE

5.1 Significance of each Issue

5.1.1 Construction Warehouse Personnel/Clerks

The significance of this issue is that the CI apparently had a lack of understanding of the responsibilities of the Warehouse clerks. Their responsibilities include inventory, receiving and issuing material but excludes inspection processes required by the respective procedures, codes and standards. These inspections are performed by personnel in other organizations.

The issues addressed by the ERT/NSRS Reports and their respective recommendations of actions/dispositions were responded to by WBN (DNC) via an action item list containing the twelve (12) actions required for resolution. These actions, including training of WBN Construction warehouse clerks, are being tracked as a side issue via CATD 40800-WBN-01.

5.1.2 Receipt Inspections

Training records reviewed from the WBN Construction QA vault revealed that WBN Construction Receipt Inspectors were trained as required by DEC-QCP-1.11 as early as March 1975.

Before 1975 the WBN Construction Engineering Units provided informal training for members of their individual units. Personnel certification was required by upper-tier document but the program did not address certification before March 24, 1975. Training was required and performed before 1974 and did not change when the certification program was established. Permanent documentation does not exist for this training. A review of the WBN Construction Receipt Inspection Program revealed that nonconformances were being identified during receiving inspection and that these nonconformances were documented for corrective action.

No WBN site procedures for Power Stores Material Receipt Inspection was found for the period from February 1977 to December 1977. However, records show that items were being nonconformed during that time and that no Quality Assurance Level I items were received during that time.

A Quality Control Program was initiated in 1982 to centralize activities and present a uniform structure for control of material, equipment, and activities. Under the new program, WBN Construction warehouse receipt inspection was separated from the Engineering Unit and Nuclear Power Quality Control Inspectors assumed the responsibility for appropriate receipt inspection at WBN Power Stores. Also see conclusions in section 4.1.2. |R2

5.1.3 Persons Authorized to Approve Power Stores Requisitions-575

Training is not required for personnel authorized to approve Power Store Requisition-575.

Training is required for Power Stores Issue Clerks who are responsible for verifying the material QA level is in compliance with the purchase documents.

The Office of Power Quality Assurance Procedure 7.1, Revision 0, dated July 7, 1976 stated that personnel performing receipt inspections shall receive QA training and certification. Receiving records indicated that some receipt inspections were performed as early as April 12, 1977. The earliest QA records found for training and certification of WBN Power Stores receipt inspectors were dated February 21, 1978. Also see conclusions in section 4.2.2.1. |R2

5.2 Significance of the Subcategory

5.2.1 Site-Specific-WBN

The training program at WBN for warehouse clerks and receipt inspectors was developed slowly due primarily to site procedures for training not being devised and implemented in a timely manner by the responsible organizations. The program for receipt inspections was improved in 1982 by the initiation of a Quality Control Program designed to centralize the Receipt Inspection Activities.

6.0 CAUSES

6.1 Warehouse Personnel/Clerks |R2

The concerned individuals (CI)s misinterpreted the position description of warehouse personnel. The CIs perception of "Receiving"* of materials and "Receipt Inspection"** appeared to be one and the same. There were some cases of inattention to detail rather than lack of training of warehouse personnel. However, WBN Construction is enhancing their training program for warehouse clerks and correcting isolated storage problems and this is being tracked as a side issue on CATD 40800-WBN-01 Revision 0 for closure verification. |R2

*Receiving is a function of inventory control.

**Receipt inspection is a function of item identification and verification of purchasing requirements. |R2

6.2 Receipt Inspections

No problems affecting quality were found in this evaluation of the WBN Receipt Inspection training program.

6.3 Persons Authorized to Approve Nuclear Power Stores Requisition-575 |R2

No requirements for training of people authorized to approve Power Stores Requisition-575 were found.

7.0 CORRECTIVE ACTIONS

7.1 Already taken or planned

7.1.1 Generic

Not applicable.

7.1.2 Site-Specific – WBN

A Quality Control Program was initiated in 1982 to centralize activities and present a uniform structure for control of material, equipment and activities. Under the new program WBN construction and warehouse receipt inspection was separated from the engineering units and Nuclear Power Quality Control Inspectors assumed the responsibility for appropriate receipt inspections at WBN Power Stores.

WBN Construction submitted corrective actions for IN-85-369-001 in a response to Nuclear Safety Review Staff Recommendations Q-IN-85-369-001-01, -02, and -03. Q-IN-85-369-001-01 has been verified complete by this evaluation. Q-IN-85-369-001-02 was addressed in the program enhancements listed in the construction response to Q-IN-85-369-001-03. CATD 40800-WBN-01 was issued to track the completion of the open items in Q-IN-85-369-001-02 and -03.

The corrective action for CATD 40800-WBN-01 as proposed by WBN DNC and concurred with the ECTG is as follows. The items below correspond to items found on pages 8 and 9 of Attachment D.

1. Two SOPs were developed to answer this concern (SOP-PMS-07 and SOP-PMS-08) and were approved for use on September 16, 1986. Training for the warehouse employees was completed on November 5, 1986.

2. The initial training on all material clerks (storekeepers) is complete with the exception of one employee who is scheduled to complete the training in January 1988. This concern originally came about from the statements made that clerks were not properly trained. As a final attempt to clear up this matter, a corrective action plan was initiated in a memo to Stephen W. Gillis dated November 21, 1986. Additional training to employees was begun and has progressed slowly because of the workload. Copies are on file as each employee requested specific areas they need additional training in, and this program will continue until all employees have received that

training. No written exams can be required without approval by TVA Division of Personnel and union representatives.

4. This item is complete and was done so on August 28, 1986. A proposed sale in September 1986 was cancelled. The material is scheduled to be sold in the next surplus sale which is scheduled for April 23, 1987. It was also decided that all heat numbers and TVA class and ASME code class will be validated for correctness against the heat log printout.

   This change to include validation of "TVA class and ASME code classes" has been informally implemented since the validation program was started.

5. This item is complete. The original concern was complete on approximately December 22, 1986, when authorization was given to use the new computer program; however, full implementation is not anticipated until June 1987. There is also a new program format now being considered which will broaden the information input that will be helpful to the engineering units. If the format is adopted and the new program is implemented, it will extend the completion date by several months.

6. The warehouse is continuing with the review of inventory material stored at the present time. The material that was declared surplus by mechanical and civil engineering has been placed in a hold status until further notice, with the exception of the material that was requested by Bellefonte Nuclear Construction during a recent walkdown. Bellefonte is in the process of preparing a formal transfer request for the material that was reserved by them during the walkdown. Transfer of material to the Division of Fossil and Hydro and the CSB (Construction Services Branch) has been delayed until further evaluations can be made of the material that was surplused. Anticipated completion is in June 1987.

7. Overall consolidation of material is approximately 60 percent complete. Completion in the main warehouse is in the final stage with several of the storage huts already completed. At the present rate, the anticipated consolidation is to be complete in June 1987.

8. This concern is being accomplished through the use of potential surplus listings that have to be made on a quarterly basis in accordance with Construction Modification Interim Procedure-09 (CMIP-09), Revision 0, Identification and Disposition of Excess Materials.

10. This item was reported as complete on the biweekly response dated June 23, 1986. Random checks are conducted on all stainless pipe and tubing in storage to ensure that caps and plugs are in place as required and replaced where needed.

7.2 Corrective Action Required as Result of Evaluation

7.2.1 Generic

Not applicable

7.2.2 Site-Specific - WBN

No additional corrective action requirements resulted from this evaluation.

8.0 ATTACHMENTS

Attachment A - Subcategory Summary Table (Computer Printout): List of concerns by concern number indicating safety relationship and generic applicability

Attachment B - List of concerns by Issue/Element

Attachment C - ERT/NSRS Investigation Report on IN-85-369-001

Attachment D - WBN Construction Response to IN-85-369-001

ATTACHMENT A
LIST OF CONCERNS INDICATING SAFETY RELATIONSHIP AND GENERIC APPLICABILITY
CATEGORY: MATERIAL CONTROL SUBCATEGORY: 40800 TRAINING

CONCERN NUMBER	CAT	SUB CAT	PLT LOC	GENERIC APPL B F	B L	S Q	W B	QTC/NSRS INVESTIGATION REPORT	P S R	CONCERN DESCRIPTION	REFERENCE SECTION # CATEGORY - MC SUBCATEGORY - 408
HI-85-077-N12	MC	408	WBN	N	N	N	N	REPORT	NS	NRC IDENTIFIED THE FOLLOWING CONCERN FROM REVIEW OF THE QTC FILE: "RECEIPT INSPECTION OF MATERIAL AND DOCUMENTATION FOR WHICH THEY HAD NOT BEEN TRAINED." PER REVIEW OF THE FILE, THIS APPEARS TO INVOLVE POWER STORES PERSONNEL DOING RECEIPT INSPECTION.	1.2.2, 2.3.2, 3.1.2, 3.2.2, 4.2.2.2, 5.1.2
IN-85-145-001 T50115	MC QA	408 802	WBN	N	N	N	N	REPORT IN-85-145-001 The entire concern was evaluated in this sub-category although shared with QA/QC subcategory.	NS	QUALITY RECEIVING UNIT NOT ESTABLISHED PRIOR TO THREE YEARS AGO. CI QUESTIONS WHY DIDN'T WBNP HAVE A QUALITY RECEIVING UNIT PRIOR TO THREE YEARS AGO. CONSTRUCTION DEPT. CONCERN. CI HAS NOT FURTHER INFORMATION. NO FOLLOW UP REQUIRED.	1.2.2, 3.1.2, 4.2.2.1, 4.2.2.2
IN-85-369-001 T50023	MC	408	WBN	N	N	N	N	REPORT IN-85-369-001	NS	WAREHOUSE CLERKS ARE UNTRAINED AND OFTEN MIX SAFETY AND NON-SAFETY MATERIALS.	1.2.1, 2.3.1, 2.5, 2.6, 3.1.1, 3.2.1, 4.1.2, 5.1.1, 7.2.2
IN-85-412-001 T50013	MC	408	WBN	N	N	N	Y	REPORT	NS	200-300 PEOPLE ARE AUTHORIZED TO SIGN (POWER STORE REQUISITION -575), FOR MATERIAL AT THE WAREHOUSE, BUT MOST OF THEM DON'T KNOW EITHER HOW TO FILL OUT THE REQUISITION OR WHETHER THEY HAVE THE CORRECT MATERIAL OR NOT. THIS COULD RESULT IN THE WRONG TYPE OF QUALITY LEVEL MATERIAL BEING INSTALLED IN THE PLANT. TOO MANY PEOPLE NOW AUTHORIZED TO SIGN FOR MATERIAL.	1.2.3, 2.3.3, 3.1.3, 3.2.3, 4.3.2, 5.1.3

ATTACHMENT A
LIST OF CONCERNS INDICATING SAFETY RELATIONSHIP AND GENERIC APPLICABILITY
CATEGORY: MATERIAL CONTROL SUBCATEGORY: 40800 TRAINING

CONCERN NUMBER	CAT	SUB CAT	PLT LOC	GENERIC APPL B F	B L	S Q	W B	QTC/NSRS INVESTIGATION REPORT	P S R	CONCERN DESCRIPTION	REFERENCE SECTION # CATEGORY - MC SUBCATEGORY - 408
IN-85-570-001 T50054	MC	408	WBN	N	N	N	N	REPORT	NS	WAREHOUSE PERSONNEL LACK AN INDEPTH KNOWLEDGE OF MATERIALS SPECS & DISTRIBUTION OF ASME CODE MATERIALS. TOTAL LACK OF TRAINING IN ADDITION TO PERSONNEL ATTITUDE.	1.2.1, 3.1.1, 3.2.1, 4.1.2, 5.1.1
IN-85-606-001 T50057	MC	408	WBN	N	N	N	Y	REPORT	NS	RECEIVING INSPECTIONS WERE NOT PERFORMED IN AN ADEQUATE MANNER, BY TRAINED, EXPERIENCED OR CERTIFIED PERSONNEL, DURING THE TIME PERIOD FROM THE BEGINNING OF WBNP CONSTRUCTION UNTIL ESTABLISHMENT OF THE MATEIRAL SERVICES UNIT IN 1982. ACTIVITIES PERFORMED PRIOR TO 1982 ALTHOUGH DESIGNATED AS "RECEIVING" CONSISTED OF ACCOUNTABILITY VERIFICATION ONLY. DETAILS ARE KNOWN BY QTC.	1.2.2, 2.3.2, 3.1.2, 4.2.2.1, 5.1.2
IN-86-011-001 T50189	MC QA	408 802	WBN	N	N	N	Y	REPORT	NS	NO RECEIVING INSPECTION GROUP WAS IN EXISTENCE PRIOR TO APRIL 1982. CI IS CONCERNED THAT "Q" MATERIALS RECEIVED PRIOR TO THIS TIME MAY HAVE NOT MET PURCHASE SPECIFICATIONS, AND MAY HAVE BEEN INSTALLED IN THE FIELD. CI EXPRESSED THAT NO DOCUMENTATION/HARDWARE VERIFICATION WAS PERFORMED OF RECEIVED MATERIAL. CONSTRUCTION DEPT CONCERN. UNITS 1 & 2. CI HAS NO FURTHER INFORMATION.	1.2.2, 3.1.2, 4.2.2.1

This entire concern was evaluated in this subcategory although shared with QA/QC subcategory.

LIST OF CONCERNS BY ISSUE

ATTACHMENT B

Concern Number	Issue (Section)
HI-85-007-N12	Receipt Inspections (1.2.2)
IN-85-145-001	Receipt Inspections (1.2.2)
IN-85-369-001	Warehouse Personnel/Clerks (1.2.1)
IN-85-412-001	Persons Authorized to Approve Power Stores Requisition - 575 (1.2.3)
IN-85-570-001	Warehouse Personnel/Clerk (1.2.1)
IN-85-606-001	Receipt Inspections (1.2.2)
IN-86-011-001	Receipt Inspections (1.2.2)

TVA 64 (OS-9-65) (OP-WP-5-85)
UNITED STATES GOVERNMENT

Memorandum

TENNESSEE VALLEY AUTHORITY

TO: W. T. Cottle, Site Director, Watts Bar Nuclear Plant

FROM: K. W. Whitt, Director of Nuclear Safety Review Staff, E3A8 C-K

DATE: FEB 11 1986

SUBJECT: NUCLEAR SAFETY REVIEW STAFF INVESTIGATION REPORT TRANSMITTAL

Transmitted herein is NSRS Report No. IN-85-369-001

Subject WAREHOUSE CLERKS

Concern No. IN-85-369-001

and associated recommendations for your action/disposition.

It is requested that you respond to this report and the attached recommendations by March 10, 1986. Should you have any questions, please contact Bruce F. Siefken at telephone 6230.

Recommend Reportability Determination: Yes X No ___

WATTS BAR NUCLEAR PLANT SITE DIRECTOR'S OFFICE
FEB 12 '86

Note | Action | Reply

Director, NSRS/Designee

BFS:GDM
Attachment
cc (Attachment):
H. L. Abercrombie, SQN
W. Bibb, BFN
James P. Darling, BLN
E. P. Denise, LP6N40A-C
D. R. Nichols, E10A14 C-K
QTC/ERT, Watts Bar Nuclear Plant
E. K. Sliger, LP6N48A-C

—Copy and Return—

To : K. W. Whitt, Director of Nuclear Safety Review Staff, E3A8 C-K

From: W. T. Cottle, Site Director, Watts Bar Nuclear Plant

Date: February 18, 1986

I hereby acknowledge receipt of NSRS Report No. IN-85-369-001
Subject WAREHOUSE CLERKS for action/disposition.

Signature 2/18/86
Date

429U

NSRS RECOMMENDATIONS

EMPLOYEE CONCERN NUMBER: IN-85-369-001

Q-85-369-001-01: "Warehouse Operations"

The deficiencies in segregation, labeling, and storage of materials identified in this report need to be corrected via a quality assurance document.

Q-85-369-001-02: "Training of Warehouse Clerks"

Warehouse clerks should be trained in the applicable QA requirements of their jobs. This training should be formal, documented, and completed under the QA program.

Q-85-369-001-03: "Adequacy of Issued Materials"

Since warehouse clerks were not properly trained and materials were found mislabled and mislocated, an evaluation of the adequacy of material issued needs to be made and documented under the QA program.

Principally prepared by Bruce F. Siefken.

QUALITY TECHNOLOGY COMPANY
P.O. BOX 600 Sweetwater, TN 37874 (615)365-4414

ERT INVESTIGATION REPORT PAGE 1 OF 6

CONCERN NO: IN-85-365-001

CONCERN: Warehouse clerks are untrained and often mix safety and non-safety materials.

INVESTIGATION PERFORMED BY: Stephen P. Hans

DETAILS

PERSONNEL CONTACTED: CONFIDENTIAL

DOCUMENTS REVIEWED:

1. TVA Topical Report: TVA-TR75-1A, Revision 6
2. U. S. Nuclear Regulatory Guide, 1.38, Revision 2, May 1977, Quality Assurance Requirements for Packaging, Shipping, Receiving, Storage, and Handling of Items for Water Cooled Nuclear Power Plants
3. ANSI Standard N45.2.2, 1972, Packaging, Shipping, Receiving, Storage and Handling of Items for Nuclear Power Plants
4. TVA Division of Construction
   Quality Control Instruction, QCI, 1.06, Revision 1, December 21, 1983, Receiving
5. TVA Office of Construction
   Quality Control Instructions, QCI, 1.35, Revision 10, June 7, 1985, Storage and Housekeeping
6. Memorandum to Project Personnel Officers from C. Boyce Cox, Personnel Officer dated June 24, 1980.
   Subject: Consideration of Warehouse Clerk - Trainees for Positions in Engineering Organizations
7. Division of Construction Training Plan for Material Control Clerk, no date, no revision.

UNITED STATES GOVERNMENT

~~Memorandum~~ ~~TENNESSEE VALLEY AUTHORITY~~

TO : Guenter Wadewitz, Project Manager, Watts Bar Nuclear Plant OC

FROM : R. P. Denise, Program Manager, Watts Bar Employee Concern Task Group
Watts Bar Nuclear Plant ONP

DATE : FEB 26 1986

SUBJECT: WATTS BAR NUCLEAR PLANT - EMPLOYEE CONCERN INVESTIGATION REPORT TRANSMITTAL

Transmitted herein is employee concern investigation report number IN-85-369-001 and associated recommendations dealing with employee concern number IN-85-369-001. Please respond to this report and recommendations by March 7, 1986. Also, make a reportability determination and include this and any applicable corrective action implementation dates in your response.

If you have any questions, please contact G. G. Brantley at 3584, Watts Bar Nuclear Plant ONP.

W L Bradley
R. P. Denise

WLB:GGB:EDA:SKF
Attachment

This memorandum was principally prepared by R. D. Anderson.

CONCERN NO: IN-85-369-001

DETAILS, continued

SUMMARY OF INVESTIGATION:

This concern is substantiated. The following activities were accomplished during the investigation process. First, a review of the TVA FSAR commitments for receipt, storage and handling of material was completed to gain understanding of the TVA requirement. Second, interviews with Material Control Clerks were performed to determine the training methods and controls applicable to the clerks. Third, material identification practices were reviewed with the warehouse supervisor and observed in the field. Fourth, interviews with Warehousemen (Teamsters) were conducted to determine whether they were cognizant of cases involving the mixing of safety and non-safety related materials in the past or present. Finally, a walkdown of the storage yards and warehouses was accomplished to determine if present controls, as implemented were adequate to prevent mixing of materials.

This investigation was conducted from January 8 to January 20, 1986.

FINDINGS:

The results of this investigation support the allegation of lack of training of Material Control Clerks and the mixing of safety related material with non-safety related material. The Watts Bar Nuclear Plant has been under construction since approximately 1972 and material started arriving on site for storage a short time after the start of construction.

In the area of training of "Material Control Clerks", or the personnel charged with the responsibility of carrying out the functions of a Material Control Clerk, regardless of the job title, the investigation established the existence of a training program for "Material Control Clerks" only, starting in mid-1980. This training program was exclusively "On-the-Job Training" (OJT) and consisted of rotating assignments in the various material control activities for specified time periods. An evaluation of performance of each clerk was performed by a three (3) member panel consisting of the Warehouse supervisor, a Union representation and an individual from TVA personnel. The training consisted of teaming new personnel with experienced personnel.

CONCERN NO: IN-85-369-001

DETAILS, continued

During the course of the investigation, however, it was determined that a common practice existed of teaming two newly assigned personnel together; instead of one experienced (i.e., SB-4) Material Control Clerk and one trainee (i.e., SB-2 or SB-3). Additionally, no formal training program was identified prior to 1980 for any type of material control personnel.

The Material Control Clerks interviewed during the investigation were generally knowledgeable about the present storage practices employed at the Warehouse. However, the majority of the Clerks exhibited a very poor understanding of the Quality Assurance requirements as they relate to receipt, storage and handling of material. The Clerks exhibit only a knowledge of "QA/Code" material/items, i.e., material which fall under the requirements of the ASME Code and is subjected to QA inspection. Since the ASME Code is only applicable to pressure retaining and support items, the understanding of the Clerks is limited to mechanical items and not to electrical, civil, HVAC items, etc., which may also be safety related, but non-ASME Code.

No formal training of Material Control Clerks to established and documented procedures was identified. The only written instructions pertaining to the warehouse activities do not prescribe the activities of the Material Control Clerks.

During the investigation, four (4) individuals were "in training". The present training program is not controlled or administered in accordance with original requirements. The three member evaluation board is no longer functioning, the Union representative and the individual from TVA personnel are no longer active in the program, and the specified time periods are no longer closely adhered to for the rotating job assignments.

These facts and the demonstrated lack of knowledge of the QA requirements on the part of the Material Control Clerks are justification for substantiating the concern about the "untrained clerks".

The walkdown of the warehouses and the laydown yards confirmed that the controls applied to separation of safety and non-safety materials have not always been adequate in the past, and the present controls, although much improved, are still inadequate.

CONCERN NO: IN-85-365-001

DETAILS. continued

During the walkdown, items were selected at random from the ledger office books (see attachment #1). These books are the primary source of control and accountability for material and items at Watts Bar Nuclear Plant. The items selected were then located and identified in the field. During this process, it was noted that valves marked and tagged "ASME" were stored with non-ASME valves. Piping material was misidentified (i.e., ASME Code large bore piping was identified as ASTM material). Additionally, several items had no identification (e.g., Concentric Reducers in Yard 1, Location C1) and some items were not in their proper storage locations. These individual problems are indicative of a lack of stringent controls in the warehouse.

The most significant problem noted during the walkdown was the existence of the uncontrolled "DC Construction Laydown Yard" located next to Warehouse Yard #2 and the "Engineering" Cable Yard located outside the Warehouse Controlled Cable Yard. These two uncontrolled material storage areas represent a total breakdown of the TVA commitment to Title 10 Code of Federal Regulation Part 50, Appendix B in the following areas. (See attachment for specifics.)

Criteria II; "providing control over activities affecting the quality of identified...components, to an extent consistent with their importance to safety"; in that material was stored in a completely uncontrolled environment.

Criteria VIII; "The identification and control of materials...throughout fabrication, erection, installation and use...". "Control measures shall be designed to prevent the use of incorrect or defective material." In that completed hanger, flat stock (Plate), I-Beams, cable tray hanger material (tube steel), etc., where not identified as to status, i.e., conforming, non-conforming, nor were they controlled as to their access, i.e., locked and fenced areas. This includes the Engineer Cable Storage area.

Criteria XV; "Control materials...which do not conform to requirements in order to prevent their inadvertent use..." "include...segregation..." In that non-conforming cable stored in the Warehouse Cable Storage area was not segregated. The cable was identified with a small red tag and red tape in some cases. The cable stored in the Engineering Storage area was totally uncontrolled.

ERT INVESTIGATION REPORT PAGE 5 OF 6

CONCERN NO: IN-85-369-001

DETAILS, continued

Interviews with the warehouse personnel revealed that, prior to approximately 1977 to 1979 timeframe, all material was stored by nomenclature, (i.e., 1/4 inch valves; weld neck flange, etc.), regardless of their safety function, or quality classification.

Based upon: Inadequacies presently identified in the Warehouse controls; the uncontrolled environment identified in the DC Construction laydown and Engineering cable areas; the fact that items were stored by nomenclature, the concern identifying mixing of safety related and non-safety related materials is substantiated.

OBSERVATIONS:

During the investigation of the warehouse the following ANSI standard N45.2.2-1979 requirements were noted as being violated:

1. Paragraph 6.3.2 "Arrangement of items. Items stacked for storage shall be arranged so that rack cribbing or crates are bearing the full weight without distortion of the item;" in that boxes in warehouse # One (1) were stacked upon each other and were distorted. Also, piping material in Yard 1 D-6 was used to support the roof of a shed.

2. Paragraph 6.4.2(1) Items in storage shall have all covers, caps...intact..." in that carbon steel piping material did not have end caps.

CONCLUSIONS:

This concern is substantiated. This conclusion is based upon the following deficiencies:

- Lack of knowledge of Material Control Clerks about QA requirements as they relate to the receipt, storage and handling of materials.

- The lack of an established program for training of Material Control Clerks prior to 1980.

CONCERN NO: IN-85-369-001

DETAILS, continued

- The common practice of having two trainees teamed together instead of one experienced and one trainee teamed together during the 1980 Training Program.
- The lack of formal training in procedures prior to 1980.
- The lack of formally issued and controlled procedures to describe the activities of Materials Control Clerks.
- The current lack of adherence to the established training program requirements.
- The lack of material separation (safety and non-safety) prior to 1977-1979 timeframe.
- The uncontrolled storage of material in the "DC Construction" and "Engineering Cable" areas.
- The misidentification of items in stock.
- The lack of identification of items in stock.
- The mislocation of items of stock.

PREPARED BY: [signature] 1-30-86
DATE

REVIEWED BY: [signature] 1/31/86
DATE

accepted by [signature]

Warehouse Walkdown
Items and Discrepancies List

A. The following items were selected from the ledger book and observed in the field.

		Heat Number
1.	6" sch 40 pipe, SA 312, 316 L	M7508
2.	4" sch 40 pipe, A 312, 316 L	None recorded
3.	Flange, Orifice Union, SA 105-300# CS, SW	216841-MHA
4.	I Beam 5" X 14.75#, A 36	1815151

B. The following items were noted as discrepent.

Item		Discrepancy
1.	1/2" ball valve, SA479-316 SW 600#, Mark 37W2061218	Stored in non-safety location.
2.	14" sch 140 pipe, HT #2809-1-2, HT Lot #72376	Mismarked as ASTM A312-376 when material was ASME Sec III Class I
3.	Concentric Reducers, HT Code AEA	Filled with water
4.	Flange, Orifice Union, HT #216841-MHA	Stored in wrong location
5.	I Beam 5" x 14.75, HT #1815151	Wrong HT number. Should be 1815151
6.	Piping Material Yard #13-6, Yard #1C-5	Uncapped or ends split
7.	The roof of Building D-6, Yard #1	Brace of roof resting on piping material
8.	I Beam in uncontrolled D.C. Laydown area identified as PM/CA/04 R 551661, 10' X 10" X 1/2", A500 Gr B, HT 77H14	Completely uncontrolled
9.	Non-conforming cable - various types.	Uncontrolled.

REQUEST AND REPORTABILITY EVALUATION

1. Request No. IN-85-[illegible] _____
(ERT Control No.) (ID No., if reported)

2. Identification of Item Involved: Warehouse Material Control Clerks
(Nomenclature, system, manuf., SN, Model, etc.)

3. Description of Problem (Attach related documents, photos, sketches, etc.)

Warehouse clerks are untrained and often mix safety and non-safety material.

4. Reason for Reportability: (Use supplemental sheets if necessary)

A. This design or construction deficiency, were it to have remained uncorrected, could have affected adversely the safety of operations of the nuclear power plant at any time throughout the expected lifetime of the plant.

No _____ Yes __X__ If Yes, Explain: The inadvertent installation of non-safety related material in safety applications may cause failure of safety related components.

AND

B. This deficiency represents a significant breakdown in any portion of the quality assurance program conducted in accordance with the requirements of Appendix B.

No _____ Yes __X__ If Yes, Explain: Uncontrolled material violates Criteria II, VIII, and XV.

OR

C. This deficiency represents a significant deficiency in final design as approved and released for construction such that the design does not conform to the criteria bases stated in the safety analysis report or construction permit.

No __X__ Yes _____ If Yes, Explain: _____

OR

REQUEST FOR REPORTABILITY EVALUATION

D. This deficiency represents a significant deficiency i construction of or significant damage to a structure, system or component which will require extensive evaluation, extensiv redesign, or extensive repair to meet the criteria and base stated in the safety analysis report or construction permit or to otherwise estaclish the adequacy of the structure, system, or component to perform its intended safety function.
No _____ Yes __X__ If Yes, Explain: A reevaluation of construction documents and verification of materials as installed is required to assure all safety related systems were constructed of materials meeting t OR minimum requirements.

E. This deficiency represents a significant deviation from the performance specifications which will require extensive evaluation, extensive redesign, or extensive repair to establish the acequacy of the structure, system, or component to perform its intended safety function.
No __X__ Yes _____ If Yes, Explain: _____

IF ITEM 4A, AND 4B OR 4C OR 4D OR 4E ARE MARKED "YES", IMMEDIATELY HAND-CARRY THIS REQUEST AND SUPPORTING DOCUMENTATION TO NSRS.

This Condition was Identified by: _____ 365-4464
ERT Group Manager Phone Ext.

_____ 365-4014
ERT Project Manager Phone Ext.

Acknowledgment of receipt by NSRS

_____ Date 2-6-86 Time 0912
Signed

ERT Form M

UNITED STATES GOVERNMENT

Memorandum

TENNESSEE VALLEY AUTHORITY

TO : R. P. Denise, Program Manager, Watts Bar Employee Concern Task Group
Watts Bar Nuclear Plant CNP

FROM : Guenter Wadewitz, Project Manager, Watts Bar Nuclear Plant OC

DATE : MAR 12 1986

SUBJECT: WATTS BAR NUCLEAR PLANT - REQUEST FOR INVESTIGATION/EVALUATION

Attached is our response to employee concern numbers IN-85-369-001.

Guenter Wadewitz

CC: JM
QERT.CR
Attachment

3/13/86

RESPONSE TO EMPLOYEE CONCERN IN-85-369-001

A. Q-85-369-001-01: "Warehouse Operations"

"The deficiencies in segregation, labeling, and storage of materials identified in this report need to be corrected via a quality assurance document."

The specific items given to "substantiate" this are as follows:

1. 1/2-inch ball valve, SA479-316, SW 600#, Mark 37W2061218; Stored in nonsafety location

   Response: This valve was received as a QA code valve in Februrry 1979. The valve was issued in March 1979 to the steamfitters. There is not a credit record for return to the warehouse; therefore, it would not have been listed in the ledger books. It must be assumed that the craft later returned the valve but did not follow appropriate procedures for crediting back to warehouse control. While bookkeeping accountability was violated, the traceability of the valve was maintained. A credit document (TVA 575) has been written, and the valve relocated to an ASME location.

2. 14-inch sch 140 pipe, HT #2809-1-2, HT lot #72376; Marked with paint stick ASTM A312-376 when material was ASME Sec III Class I

   Response: This pipe was received in 1976. It had the heat number stamped into the pipe and the proper documentation is available as QA Level I material. There was improper paint stick markings on the pipe which have been removed.

3. Concentric reducers, HT Code AEA; Filled with water

   Response: Carbon steel butt weld fittings above two inches such as this one are stored in Level D storage on a plywood platform. This particular fitting has a plastic end cap resulting in some water collection. This cap was removed and the remaining fittings checked for potential water collection.

4. Flange, orifice union, HT #216841-MHA; Stored in wrong location

   Response: This particular union had a location of W21AF31 and had been placed on the bin below at W21AF21. This was corrected.

5. I Beam 5" x 14.75, HT #1315151; Wrong HT number, should be 1315151

Response: We have 390 feet of 5" x 14.75 I beam in stock. 240 feet is HT #1315151 and 150 feet is HT #170S813. We were unable to find any markings as 1515151. Each was marked correctly.

6. Piping material yard 1B-6, yard 1C-5; Uncapped or ends split

Response: This is a continuous problem where variance in temperature cause the plastic end caps to pop out or split. These items are checked each month and replaced on the monthly housekeeping tour. To help prevent future occurrences, we are in the process of securing these end caps with tape. This will be completed April 7, 1986.

7. The roof of building D-6, yard #1; Brace of roof resting on piping material

Response: A support brace for a roof section had settled and was resting on some stainless pipe. This was corrected March 3, 1986.

8. I Beam in uncontrolled DC laydown area identified as PM/QA/04 R 551661, 10' x 10" x 1/2", A500 Gr B, HT 77H14; Completely uncontrolled

Response: For stock material where the crafts perform shop or field fabrications, the point of installation is the controlling factor for material integrity.

All transfers of heat numbers require inspector verification whether it takes place in the warehouse or in the field. At the point of installation, heat numbers are reverified for compliance by a quality control inspector. If the number cannot be read or verified to the heat code program, its installation is not accepted until resolved.

A general cleanup of all material which has left the warehouse but has not been installed is planned. This will be covered under our summary of actions required. The possibility for a craftsman to pick up a substitute piece of material will always exist regardless of the controls in place. It is for this reason that we must rely on inspector verification of material at the time of actual installation.

9. Nonconforming cable - various types; Uncontrolled

Response: The cable stored under the control of the warehouse had all nonconforming cable segregated by roping off with red QC tape and a NCR tag fastened to each reel. To use this cable would occur only with the purposeful

intent of an individual to violate the quality control program. To avoid any future question of this type, all nonconforming reels have been moved to a location approximately 100 yards away and will be covered with tarps. This cable was previously surplused and sold and is awaiting shipping.

The cable referred to as "Engineering Storage" is outside the warehouse yard and is the staging area for the crafts. These are the "working reels" for the electricians and used for their various pulls. Again, the "control" of the material is maintained by requiring a final inspection at the point of installation. An inspector must be present at the beginning of each pull to verify the proper cable is being used along with the appropriate pull requirements. Any cable of a nonconforming nature that a craftsman might substitute would be caught at this time. If we locked up the staging area and issued only a strand of cable at a time for a specific use that would not stop the use at another unspecified location. For this reason, the control of proper use must occur at the point of actual installation.

10. In addition to the above, several other areas need to be addressed.

a. The report says that material on the ledger cards could not be found. To check the magnitude of this we selected 436 items at random from ledger cards. From the cards, we copied descriptions of the material and its designated location. We then went to the designated locations to see (1) if the items were there and (2) if it was properly identified by tag, marking on container, or if the description was painted or marked on the item itself.

Following are our findings:

Of the 436 items on the books, 36 were not in place or 7.4 percent.

Of the 36 not in place, 21 were being surplused and remained on the books until paperwork cleared to show the items gone. Three of the missing items were electrical, which were being consolidated with like items. These were on pallets in a staging area. Three of the items showed "0" on the books. This only left nine items that could not be accounted for or 1.9 percent of the sample.

We found no problem identifying any of the material by tags attached to the material, markings or descriptions on containers, or on the items themselves. However, there is problem of identification of stenciled information; such as heat numbers on items like carbon steel pipe and fittings that are stored outside and have been there a number of years.

This takes us back to the problem of being exposed to the elements for 8 to 10 years. This will be addressed in our overall plan to review all material and to keep what can be cleaned up and used and surplus the remaining for sale.

b. We have some items stored in ASTM locations that have ASME markings. For instance, a piece of material was transferred in from the Hartsville jobsite. We requested ASTM but Hartsville only had ASME. When received, we placed the material in the ASTM location since there was its intended use. An auditor or investigator will see the ASME paint stick markings and assume we have errored in storing the material. To correct this we will review all markings and remove the reference to ASME where we intend the use the piece as ASTM. Heat numbers will remain stamped into the material so the traceability of the material is maintained.

c. The report also states that there was a "lack of material separation (safety and nonsafety) prior to 1977-1979 timeframe. There are only four remaining people in the warehouse that were stores clerks at Watts Bar prior to 1977-1979. They supplied the following information concerning receipt and storage of material.

Evidence of the material program prior to 1977 is shown by the attachments on Sections 3.6 and 3.7 dating back to 1974.

Areas for nonpermanent and permanent material having different levels were provided in outside and inside storage locations. Items, such as steel, pipe, and fittings, were segregated in outside locations that correspond to warehouse locations on ledger cards. The cards indicating quantity, cost, type, level of material, and contract number would tie the material and contract together. Areas were marked for carbon steel or stainless steel storage. Inside storage areas consisted of racks and bins which were marked or labeled indicating type and level of material. The ledger cards also correspond to these locations indicating type, quantity, and level of materials.

Stainless steel pipe, valves, and fittings, were stored so as not to come into contact with any nonstainless material. Pipe was color coded with different color of paint to indicate the ASTM specification for traceability.

Receiving clerks were instructed to check the contract for QA level and if material was permanent direct charge or inventory material. After inspection of material to see if the contract specifications were met and proper documentation was received

and checked by the responsible engineer, the material was stored in designated areas. Ledger cards for inventory material were checked to ensure the material being stored was stored with material having the same specifications.

B. Q-85-369-001-02: "Training of Warehouse Clerks"

"Warehouse clerks should be trained in the applicable QA requirements of their jobs. This training should be formal, documented, and completed under the QA program."

The intent of the training program established for material control clerks is to rotate personnel from one phase of warehousing, such as receipt and issue, to other areas, such as the ledger office. By doing this TVA's goal is to lessen the impact of attrition by having all SB-4 personnel who can easily move into another job if a sudden vacancy is created.

As a clerk is trained in a particular area whether he/she be a SB-2, -3, or -4, he/she becomes eligible to perform in that area independently.

Prior to 1980 the training program was directed at stores clerks and stores record clerks as described in W. F. Baker's memo to Those listed dated March 16, 1971 (attached). After 1980 the program for the material control clerks came into existence (see attachment).

Neither of the programs were intended to take the place of specific training in the appropriate quality control procedures. At the time of the QTC investigation, our records show that each of the "trainee" clerks mentioned in his report had been trained in the procedure of storage and housekeeping and the procedure of receiving. These procedures outline the witnessing of receipt by the inspection organization and their concurrence on storage level assignments. It also includes their review of the appropriate paperwork and markings.

Once again, after a clerk has been trained in a function of the warehouse and in the appropriate procedure, he/she has been allowed to make issues. It is not necessary to work in the ledger office and all other aspects, as required for a SB-4, to become proficient in receipt and issues; yet the clerk is still termed a "trainee."

We do feel that our training program can be strengthened. Plans to do this will be outlined under the summary for recommendations. Since receiving this concern, we have reviewed the procedures again with each clerk to make sure they understand their responsibilities.

To ensure an understanding of the issue of permanent material, I will outline the process. This begins with the craft expediter bringing a properly prepared and authorized TVA 575 to the warehouse ledger office. From the description given on the 575, the ledger office clerk locates the storage location of the material and notes it on the

575 so the issue clerk will know where to go to get the material. After this is done, the ledger office gives the 575 to the issue counter clerk, who in turn will give the 575 to the issue clerk for that day.

All issues made outside of the main warehouse are always accompanied by an issue clerk, and issues within the main warehouse are gathered by a warehouseman and taken to the issue counter clerk to be checked before issuing.

All issues involving steel, nuts, and bolts, which do not bear an inspector's mark are made with an inspector present to verify the issue. In the case of steel, each piece must be die stamped with the heat number and validated by an inspector's die stamp before it can be issued to the craft. Heat numbers are verified by the use of the heat code log file. If heat numbers are not listed, the inspector and issue clerk will take the contract number from the item to be issued and return to the warehouse to pull the file on the contract and verify that it is a good heat number and proper documentation is on file before making the issue.

In issuing nuts and bolts, an inspector is required along with the issue clerk to check for manufacturer's identification markings and to check heat number traceability as well as die stamp validate each one prior to issuance in accordance with the material specifications.

On issuing ASME Code pipe, an inspector and issue clerk are both required when the code pipe does not already bear the inspector's validation stamp. When issuing code pipe fittings, an issue clerk is all that is needed since each code fitting is validated by the inspector prior to its being stored upon initial receipt. All issues involving code pipe, pipe fittings, nuts and bolts (with heat numbers), and steel will show the heat number that was issued so that traceability can be maintained after it has left warehouse storage. The issue clerk is responsible for documenting the heat number(s) on each 575 upon issue to the craft.

After completion of issue is made, the issue clerk has the craft expediter to sign for the material that was issued to him/her. The issue clerk will then date and initial the 575, give the craft expediter copy number 4 of the 575, and return the completed 575 to the issue counter clerk where the issued 575 is checked off the log so that a continuity record is maintained. The issue counter clerk then returns the 575 to the ledger office where the ledger office will deduct the quantity that was issued on the ledger card, assign a serial number to the 575 and note that on the ledger card, then file the 575 in sequence under the appropriate account number file.

By following the preceding steps, we are able to maintain traceability from the time material arrives in warehouse storage until it leaves warehouse storage.

All permanent material that is not ASME Code is bought to ASTM specifications. It is for this reason that we go to special efforts on the issue of ASME Code realizing that the other permanent material issues will always meet the ASTM requirements.

C. Q-85-369-001-02: "Adequacy of Issued Material"

> "Since warehouse clerks were not properly trained and materials were found mislabled and mislocated, an evaluation of the adequacy of material issued needs to be made and documented under the QA program."

Again the heart of this issue is not the training of the clerks, but the controls on procurement, receipt, and installation. We procure all permanent material as ASME or ASTM. At receipt we identify and check material in with the assistance of the quality control inspector. Once issued, the material enters the project, and the installation procedures along with the expertise of the engineers, craftsmen, and inspectors ensure the proper material is installed for its appropriate use.

Since the inspector must verify the heat number on the material, any ASTM substitute for ASME would be caught. All other installations would at a minimum meet ASTM. This also applies to cable since the inspector must verify the cables and appropriate reel numbers at the beginning of each pull. We cannot agree that any problems in this area can be based on the training of clerks.

We do feel that the process can be improved, and we will address what enhancements will be put in place.

1. A standard operating procedure (SOP) on materiel clerk responsibilities will be written. This will include detailed information on how they are to carry out their responsibilities.

   This will be completed by April 7, 1986.

2. The training program will be more formalized and written exams developed to measure training effectiveness. (This is dependent on approval by the Division of Personnel.)

   This will be in place by May 5, 1986.

3. A checkpoint manned by a materiel clerk will be placed at the entrance to the warehouse yard. The clerk will check all incoming and outgoing traffic for proper documentation for material returned or issued.

   This will be in place by April 7, 1986.

4. A special crew of crafts, engineering, and warehouse people will be set up to identify areas and schedule their clean up of discarded material. This applies to scrap areas and lay down areas both inside and outside the warehouse yard.

   A schedule for this effort will be put together by April 14, 1986.

5. Watts Bar site will request the Knoxville staffs to do an analysis of computerizing our ledger system and placing it online to avoid inherent lag time for updating.

   This request will be made by March 24, 1986.

6. The warehouse and quality control will set a schedule for the review of all inventory. During this review, ASME material will be checked for proper markings and validated. During the interim period, all ASME issues will be accompanied or checked at the gate for compliance.

   A start date for each of these has not been set but will be no later than March 24, 1986.

7. An overall consolidation schedule will be developed with the intent of placing all like materials together.

   This schedule will be finalized by April 14, 1986.

8. All material will be reviewed for usability. Where corrosion has made the use of the material questionable, it will be surplused and segregated. This will be incorporated in item F.

9. Lay down areas will be identified and separated from the warehouse yard. These areas will be fenced in and used to carry out item ~~7~~ 4 above. 3-4-87

   Areas will be established to begin receipt of material by April 14, 1986.

10. Requirements for caps and plugs will be reviewed. Where required, these will be secured with tape to prevent them from falling out.

    This will be complete April 7, 1986.

11. All nonconforming cable is being segregated where there is no question of accidental use.

    This will be complete March 24, 1986.

12. A revised organizational chart has been presented to the Manager's Office for review. The proposal realigns duties in the warehouse to ensure responsibilities for various warehouse operations are clear. It also establishes a position to review warehouse facilities, training progress, procedural requirements, and housekeeping.

    Implementation is pending this review.

NCSF Corrective Action Tracking Document (CATD)

Rev 3/91 (A#)

INITIATION Applicable NCSP Report No: NG-40800

1. Immediate Corrective Action Required: ☐ Yes ☒ No
2. Stop Work Recommended: ☐ Yes ☒ No
3. CATD No. 40800-WBN-01, Rev 0 4. INITIATION DATE 10-09-86
5. RESPONSIBLE ORGANIZATION: WBN - DNC
6. PROBLEM DESCRIPTION: ☐ QR ☒ NQR Memo to R. P. Denise, Program Manager, ECTG from Guenter Wadewitz, Project Manager, WBN-OC, dated March 12, 1986 containing response to employee concern number IN-85-369-001: Items 1, 2, 4, 5, 6, 7, 8, and 10 of NSRS Recommendation O-35-369-001-03 have not been completed. These items are as indicated on Attachment A.

☒ ATTACHMENTS

7. PREPARED BY: NAME [signature] DATE: 11-17-86
8. CONCURRENCE: CEG-H [signature] DATE: 11/17/86
9. APPROVAL: ECTG PROGRAM MGR. [signature] DATE: 11/18/86

CORRECTIVE ACTION

10. PROPOSED CORRECTIVE ACTION PLAN: See CAPP 1.0 Attachment A for CATD # 40800-WBN-01 ~~3/23~~ prepared by Nancy Ledd (3-12-87) and proposed by D.M. Lake (3-13-87) and 3-23-87

SEE NEXT PAGE

☐ ATTACHMENTS

11. PROPOSED BY: DIRECTOR/MGR: See Next Page DATE: 3/13/87
12. CONCURRENCE: CEG-H: [signature] DATE: 3/19/87
SRP: [signature] DATE:
DATE:
DATE:
DATE:
ECTG PROGRAM MGR: DATE:

VERIFICATION AND CLOSEOUT

13. Approved corrective actions have been verified as satisfactorily implemented.

SIGNATURE TITLE DATE

2484T

Attachment 4

1. A standard operating procedure (SOP) on material clerk responsibilities will be written. This will include detailed information on how they are to carry out their responsibilities.

   This will be completed by April 7, 1986.

2. The training program will be more formalized and written exams developed to measure training effectiveness. (This is dependent on approval by the Division of Personnel

   This will be in place by May 5, 1986.

4. A special crew of crafts, engineering, and warehouse people will be setup to identify areas and schedule their cleanup of discarded material. This applies to scrap areas and lay down areas both inside and outside the warehouse yard.

   A schedule for this effort will be put together by April 14, 1986.

5. Watts Bar site will request the Knoxville staffs to do an analysis of computerizing our ledger system and placing it online to avoid inherent lag time for updating.

   This request will be made by March 24, 1986.

6. The warehouse and quality control will set a schedule for the review of all inventory. During this review, ASME material will be checked for proper markings and validated. During the interim period, all ASME issues will be accompanied or checked at the gate for compliance.

   A start date for each of these has not been set but will be no later than March 24, 1986.

7. An overall consolidation schedule will be developed with the intent of placing all like materials together.

   This schedule will be finalized by April 14, 1986.

8. All material will be reviewed for useability. Where corrosion has made the use of the material questionable, it will be surplused and segregated. This will be incorporated in item 6.

10. Requirements for caps and plugs will be reviewed. Where required, these will be secured with tape to prevent them from falling out.

    This will be complete April 7, 1986.

CATG
CAPP 1.0
REV. 0
ATTACHMENT

CATD NO. 40800-WBN-01

10. PROPOSED CORRECTIVE ACTION PLAN:

Item 1. Two SOPs were developed to answer this concern (SOP-PMS-07 and SOP-PMS-08) and were approved for use on September 16, 1986. Training for the warehouse employees was completed on November 5, 1986. (Attachment I is copies of SOP-PMS-07, SOP-PMS-08, and copies of training completion forms.)

Item 2. The initial training on all materiel clerks (storekeepers) is complete with the exception of one employee who is scheduled to complete the training in January 1988. This concern originally came about from the statements made that clerks were not properly trained. As a final attempt to clear up this matter, a corrective action plan was initiated in a memo to Stephen W. Gillis dated November 21, 1986 (attachment II). Additional training to employees was begun and has progressed slowly because of the workload. Copies are on file as each employee requested specific areas they needed additional training in, and this program will continue until all employees have received that training. No written exams can be required without approval by Personnel and union representatives.

Item 4. This item is complete and was done so on August 28, 1986. A proposed sale in September 1986 was cancelled. The material is scheduled to be sold in the next surplus sale which is scheduled for April 23, 1987. (See attached response dated September 12, 1986, attachment III, item 4, and attachment VI.) (*Continued on attached sheet)

Item 5. This item is complete. The original concern was completed on approximately December 1986, when authorization was given to use the new computer program. The work to be done is not complete. The anticipated completion date is June 1987. There is also a new program format now being considered which will broaden the information input that will be helpful to the engineering units. If this format is adopted and the new program is implemented, it will extend the completion date by several months.

(Continued on attached sheet)

Does the corrective action plan rely on or take credit for currently identified or previously completed work? Yes _____ No X
If yes list parent documents (e.g. NCR, SCR, CAR, Audit, etc.) _____

Does the problem described constitute a condition adverse to quality (CAQ)?
Yes _____ No X

If Yes CAQ No._____.

Schedule for completion of corrective action (schedule date, if known, or milestone (e.g. BFL1, etc.) See above response for anticipated completion date

11. Nancy G. Ladd 3/12/87
Prepared by/Date

W. M. Lee 3/13/87
Proposed by/Date

0320V

10. PROPOSED CORRECTIVE ACTION PLAN: (Continued)

Item 6. The warehouse is continuing with the review of inventory material stored at the present time. The material that was declared surplus by mechanical and civil engineering has been placed in a hold status until further notice, with the exception of the material that was requested by Bellefonte Nuclear Construction during our recent walkdown. Bellefonte is in the process of preparing a formal transfer request for the material that was reserved by them during the walkdown. Transfer of material to the Division of Fossil and Hydro and to CSB has been delayed until further evaluations can be made of the material that was surplused. Anticipated completion is in June 1987.

Item 7. Overall consolidation of materials is approximately 60 percent complete. Completion in the main warehouse is in the final stage with several of the storage huts already completed. At the present rate, the anticipated consolidation is to be completed in June 1987.

Item 8. This concern is being accomplished through the use of our potential surplus listings that have to be made on a quarterly basis in accordance with CMIP-09, Revision 0, Identification and Disposition of Excess Materials (see attachment IV).

Item 10. This item was reported as complete on our biweekly response dated June 23, 1986. Random checks are conducted on all stainless pipe and tubing in storage to ensure that caps and plugs are in place as required and replaced where needed (see attachment V, item 10).

*Item 4 (Continued). A supplement memorandum to attachment VI, page 2, paragraph 2, is being revised and will be reissued to add ". . . all heat numbers and TVA class and ASME code class ~~numbers~~ will be validated for correctness against the heat log printout.

SV 870319 This change to include validation of "TVA class and ASME code classes" has been informally implemented since the validation program was started.

Concurred, 870319, Joe Inger and Svein Vigander. (Correction -numbers-to-class- by SV as per phone instruction from Nancy Ladd) SV 870319