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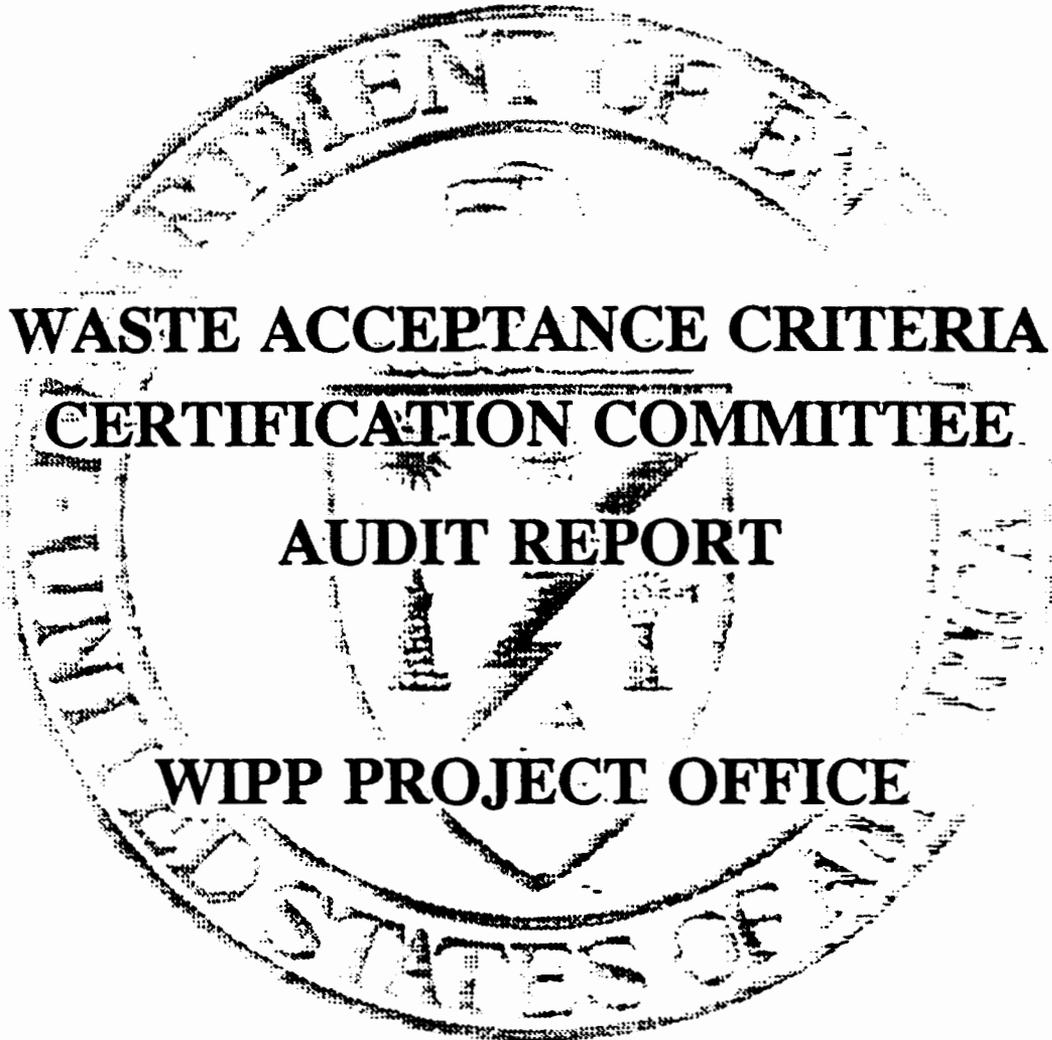
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Audit Report Number WACCC 91A-009

Dates of Audit August 12-16, 1991

Audit Subject Idarc National Engineering

Laboratory TRAMPAC and 072-3



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910802



**AUDIT OF TRU WASTE CERTIFICATION ACTIVITIES
IDAHO NATIONAL ENGINEERING LABORATORY**

AUGUST 12-15, 1991

I. INTRODUCTION

This report presents the result of the audit conducted by the Waste Isolation Pilot Plant (WIPP) Waste Acceptance Criteria Certification Committee (WACCC) at the Idaho National Engineering Laboratory (INEL) on August 12-15, 1991. The audit team members were Les Gage, DOE/AL, Lead Auditor; Tom Stroud and Bill Greenlee, Westinghouse Waste Isolation Division; Phil Grant, Wastren; Pat Rencken, Duane Rencken, Phil Strahn and Joyce Brack, SEG; and Bob Davis and Ron Knobel, MAC Tech. Matt Silva, from the State of New Mexico Environmental Evaluation Group and Hal Davis (US DOE), Chairman of the WIPP WACCC, were present as observers.

The opening meeting was held on August 12 with personnel present from INEL (DOE and EG&G) and the observers. Those attending are listed on Attachment 1.

The audit consisted of interviews, tours of the Stored Waste Examination Pilot Plant (SWEPP) site, and document reviews - each of which presented opportunities for verification of adequate program implementation. Audit findings and observations are detailed in Section IV. The scope of the audit is summarized in Section II, and an executive summary is provided in Section III. The status and adequacy of corrective actions to previous audit open items were reviewed and are detailed in Section V.

The closeout meeting was held on August 15 to present preliminary findings and observations as well as status of previous audit open items. Attendance at the closeout meeting included personnel from the organizations present at the opening meeting and is provided in Attachment 2.

II. AUDIT SCOPE

The audit was performed to evaluate INEL compliance with the TRAMPAC document, WM-PD-88-012, "RWMC Compliance Plan for TRUPACT-II Authorized Methods for Payload Control (TRAMPAC)," dated April 1991; the SWEPP quality program, defined in document QPP-130, "Quality Program Plan RWMC/SWEPP Programs," Revision 2; and the Certificate of Compliance 9218 issued to INEL for payload control. The audit was designed, by a focus on the forementioned documents, to provide an indication of whether the SWEPP site was ready to ship TRU waste and to verify that INEL complied with the U.S. Department of Energy requirements contained in the TRAMPAC, Appendix 1.3.7 of the TRUPACT-II SARP, and the WIPP/DOE-120 document for quality assurance programs.

III. EXECUTIVE SUMMARY

This audit of the DOEEL Radioactive Waste Management Complex (RWMC), managed by EG&G Idaho, Inc. was performed prior to the first scheduled shipment of radioactive waste to the WIPP. It resulted in nine findings and 21 observations. (Observations are, like the findings, perceived weaknesses or problems which require corrective actions, but are considered of a less-serious nature.)

In general, the findings are the result of a lack of procedures. The procedures are considered necessary in order to insure complete and repeatable actions to comply with WIPP requirements.

In addition, there was one finding (para. 2.7) relative to calibration (of the weighing station) and one finding (para. 2.6) relative to an incomplete specification for procuring carbon-composite filter vents.

IV. AUDIT FINDINGS AND OBSERVATIONS

1.0 Definitions

FINDING

A finding is direct noncompliance to a program or procedural requirement which, if left uncorrected, could result in questionable waste shipments or possible violations to environment, safety or health. It requires a response consisting of root cause, corrective action, and action to prevent recurrence. Action to prevent recurrence should be a solution to the root cause. Because the audit was a sampling of the activities, findings may be symptomatic of more extensive problems. Therefore, when the auditee investigates findings and develops corrective action, the entire program should be considered.

OBSERVATION

An observation is a weakness or problem which, if left uncorrected, could become a significant condition adverse to quality. It also requires a response consisting of root cause, corrective action, and action to prevent recurrence. Action to prevent recurrence should be a solution to the root cause. Because the audit was a sampling of the activities, observations may be symptomatic of more extensive problems. Therefore, when the auditee investigates observations and develops corrective action, the entire program should be considered.

2.0 Findings

2.1 Inspecting for Water

The SWEPP Operations and Maintenance Manual (O&M), Section 3.10, Issue 101, dated 7/29/91 does not address inspection for the presence of water, nor how to remove it if it is found.

DISCUSSION:

The Certificate of Compliance for payload control, No. 9218 and the referenced SARP, Chapter 7.0 require the shipper to have controlled procedures in place for loading the payload into the TRUPACT-II Shipping Package.

2.2 TRUPACT-II Venting (ICV)

The SWEPP O&MM, Section 3.10, does not address, for the TRUPACT:

- o checking the vent port plug O-ring
- o torquing the vent port inner and outer plugs and cover
- o inspecting the inner containment vessel lock bolts, test port plug, vent port plugs, and vent port cover

DISCUSSION:

Refer to discussion in paragraph 2.1

2.3 TRUPACT Venting (OCV)

The SWEPP O&MM, Section 3.10, does not address, for the TRUPACT:

- o inspecting the outer containment vessel lock bolts, test port plug, vent port plug, vent port cover, and seal test port and vent port access port
- o inspecting the vent port plug O-ring seal
- o torquing the vent port plug and pipe plug

DISCUSSION:

Refer to the discussion in paragraph 2.1

2.4 Leak Testing of TRUPACT

The SWEPP O&MM, Section 3.10, does not address for the TRUPACT leak test procedure, that the ICV shall be assembled with both main O-ring seals installed in the ICV lower seal flange.

DISCUSSION:

Refer to the discussion in paragraph 2.1

2.5 Levelling of the TRUPACT Trailer

The SWEPP O&MM, Section 3.10, does not address levelling of the TRUPACT trailer.

DISCUSSION:

The trailer is stabilized by lowering the jacks on to a firm surface and shall be level to within 1/8 inch. This is a requirement imposed by the Operations and Maintenance manual for the TRUPACT-II Packaging, Revision 5, developed by Pacific Nuclear Corp., No. ON-0134 NP.

2.6 Carbon Composite Filters

The current ERG ERAC procurement specification for carbon composite filter vents does not meet the specifications identified in Appendix 1.3.5 of the TRUPACT-II SARF and the TRAWAC, Section 7.1.2. The existing procurement specification is deficient in identifying minimum flow rate requirements, hydrogen diffusion rates, and ~~the~~ verification.

DISCUSSION:

The carbon composite filters, which are specified in both the TRUPACT-II SARF and ERAC TRAWAC documents, are required on the payload containers including the drums, standard waste boxes (SWBs) and the waste bins as a requisite for shipment. These filters are also installed as a requirement for aspiration of payload containers prior to measurements and transport. The ERAC committee in their TRAWAC document W6-7D-08-012 to acquire and install filter vents in accordance with the Appendix 1.3.5 of the SARF. The existing procurement specification was not reviewed to assure compliance with the requirements. Corrective actions should include a modification to the filter procurement specification and a comprehensive review of all TRUPACT SARF specifications with the existing procurement requirements. Verification of the Westinghouse Isolation Division supplied filter vents (which will be used on the WIPP-BIN containers) should also be performed.

2.7 Calibration of Weighing Devices

The current procedure for calibration of the SNEPP weighing station scales has not been demonstrated to be in compliance with the NBS Handbook #44 as required by the TRUPACT-II SARF and the ERAC TRAWAC, Section 10.1.1. The requirement includes calibration to the reference NBS document and the use of trained personnel for calibration and maintenance.

DISCUSSION:

The existing ERAC calibration standard for weighing station scales uses NIST-Standard 4562A, and no calibration standard has been identified for other payload-container weighing devices, including the TRUPACT Loading Facility load cell. The existing ERAC TRAWAC document, which specifies the correct TRUPACT-II SARF Appendix 1.3.7 requirement for NBS Handbook #44, was not verified as part of the quality assurance review. There is no indication that the NIST-Standard spec is equivalent to the NBS requirements. The TRUPACT-II SARF requirement applies to all weighing activities associated with payload containers. The corrective action should include a modification to the calibration/maintenance procedures for the weighing station scales and a review of other weighing devices used in the measurement for payload containers.

2.8 NSIC Load Management System

The current EG&G NSIC Load Management System (LMS) is not fully proceduralized. No NSIC Project Directive (PD) or Detailed Operating Procedure exists for this program.

DISCUSSION:

DOE Order 1540.2 requires that all of the conditions of an NSIC Certificate of Compliance (C of C) be met. The TRUPACT-II C of C requires that the conditions of 10 CFR 71, subpart G and TRUPACT-II Safety Analysis for Packaging (SARP), Appendix 1.3.7 be met. In addition, 10 CFR 71, subpart G requires that the conditions of 10 CFR 71, subpart H be met.

Per 10 CFR 71.111 (subpart H) activities affecting quality shall be documented in instructions, procedures or drawings. These must include appropriate quantitative or qualitative acceptance criteria for determining that important activities have been satisfactorily accomplished.

Per 10 CFR 71.135 (subpart H) sufficient written records shall be maintained to describe the activities affecting quality.

Per the TRUPACT-II SARP, Appendix 1.3.7 the Transportation Certification Official (TCO) will perform reviews of data, decay heat calculations, container matching, container weights and ensure the SARP payload control parameters have been met prior to approving a shipment using a TRUPACT-II. This official is also responsible per the referenced appendix for TRUPACT-II records.

Per the NSIC/SWAPP Quality Assurance Program, QAP-130, Rev. 2, Section 5.17.3, personnel performing the review and approval of records will ensure that they are legible, accurate and complete.

Procedures must be in place to describe and control load management activities affecting quality.

- a. Currently, it is not apparent in NSIC procedures what data is required to accomplish the TCO's responsibilities, where the data will come from, how it will be collected, how it will be used, and who is responsible for each activity required to manage and accomplish this. It is also not apparent what records are required, who is responsible for record validation, and how they will be managed. Also, many of the responsibilities for the TCO, as defined in the TRUPACT-II SARP, Appendix 1.3.7, do not appear to be in the NSIC procedures nor how these responsibilities will be accomplished.

- b. It is not apparent, in ESMC procedures, how the container calculations are redone and reviewed for fissile content and decay heat once a bin returns from ANL-W if all of the drums sent from ESMC are not placed in the intended bin. This is also true for all of the verification functions the TCO must perform.
- c. It is not apparent in the ESMC/ANL-W User Manual for Load Management, how the containers that do not go into the intended bin are to be dispositioned at ANL-W, to ensure the ESMC load management requirements for container matching are met and verified as subsequent bins are prepared.

2.9 ESMC Container Sampling Program

The EG&G ESMC container sampling program has not been proceduralized. No ESMC Project Directive (PD), Detailed Operating Procedure (DOP) or Operation and Maintenance Manual (OMM) Instructions exist for this program.

DISCUSSION:

DOE Order 1540.2 requires that all of the conditions of an NRC Certificate of Compliance (C of C) be met. The TRUPACT-II C of C requires that the conditions of 10 CFR 71, subpart G and TRUPACT-II Safety Analysis for Packaging (SARP), Appendix 1.3.7 be met. In addition, 10 CFR 71, subpart G requires that the conditions of 10 CFR 71, subpart H be met.

Per 10 CFR 71.111 (subpart H) activities affecting quality shall be documented in instructions, procedures or drawings. These must include appropriate quantitative or qualitative acceptance criteria for determining that important activities have been satisfactorily accomplished.

Per 10 CFR 71.135 (subpart H), sufficient written records shall be maintained to describe the activities affecting quality.

Per the TRUPACT-II SARP, Appendix 1.3.7 a sampling program shall be implemented for qualification of retrievable stored waste transported in TRUPACT-II.

Procedures must be in place to describe and control sampling activities affecting quality.

Sampling is required to achieve a 95% confidence level in the compliance of the packaging of the wastes, and it provides verification (in addition to the bin test program). Therefore, the sampling program must be formally established and implemented per the requirements of the TRUPACT-II SARP, Appendix 1.3.7.

3.0 Observations

3.1 Controlled Drawings and Documents

A sampling of NIPP-supplied drawings and documents were reviewed. The results are as follows:

- o Nuclear Packaging Inc., Drawing 2077-5008NP, Sheets 1 through 11 (the TRUPACT-II User Requirements Documents Manual) Controlled Copy #09, has no sheet #1 of 11, but has two sheets #2 of 11.
- o Nuclear Packaging Inc., Drawing 2077-0078NP has one sheet. There are two copies. One is Rev. "None" and the other is Rev. C, so it is not possible to determine the current revision.

The discrepancies in these drawings indicate that the drawings were not satisfactorily reviewed after receipt at the RSMC, but were incorporated into their controlled document system.

DISCUSSION:

10 CFR 71.12(c) (1) requires the shipper to have a controlled document system, including the latest applicable revisions.

3.2 Shipment Records

Procedures were not found to require the shipper to record the following information, for each shipment, as applicable:

1. Identification of the packaging by model number;
2. Verification that there are no significant defects in the packaging, as shipped;
3. Volume and identification of coolant;
4. Type and quantity of licensed material in each package, and the total quantity of each shipment;
5. For each item of irradiated fissile material:
 - a. identification by model number and/or serial number;
 - b. irradiation and decay history to the extent appropriate to demonstrate that its nuclear and thermal characteristics comply with license conditions;
 - c. any abnormal or unusual condition relevant to radiation safety;
6. Date of shipment;
7. For type B packages, any special controls exercised;
8. Name and address of the transferee;
9. Address to which the shipment was made; and
10. The record of routine determinations.

DISCUSSION:

This record is required by 10 CFR 71.12(c) (1).

3.3 Audits

Objective evidence was not found to verify that the EG&G Environmental, Safety and Quality (ES&Q) department performed audits of the RWSC activity for quality procedures QP-1, 3, 5, 6, 8, 11, 13, 14, 16, 17, 18, 19 and 21. (This department is responsible for performing quality audits for EG&G.)

DISCUSSION:

WIPP/DOE-120 Revision 2, Section 4.18, states: "Planned and scheduled audits shall be conducted by appropriate personnel to verify all aspects of waste certification."

EG&G Quality Manual, OP-18 of 8/31/90, Paragraph 2.0, states: "A comprehensive system of planned and scheduled quality audits shall be conducted to verify compliance with all aspects of the EG&G Idaho Quality Program. Quality audits shall be conducted by trained personnel not having direct responsibility for performing the activity being audited."

EG&G Quality Manual, OP-18 of 8/31/90, Paragraph 4.1.4, states: "ES&Q manager appoints a lead auditor for each audit, who shall organize and direct the audit;..."

EG&G Quality Manual, OP-2 of 8/31/90, Paragraph 7.1.1, states: "Designates as Lead Auditors those individuals who satisfy the requirements stated in this section...". (These are personnel who meet the requirements stated in the quality standards of NQA-1, supplementary standard 2S-3.

3.4 Qualified Procedures, Personnel and Equipment

No record could be found that special processes are performed with qualified procedures, qualified personnel and qualified equipment.

DISCUSSION:

NQA-1, EG&G QA Manual, and QPP-130 Rev. 2, Section 5.9.6, Records, all require that evidence be provided that special processes (as defined in QPP-130, Section 5.9.6) were performed using qualified procedures, qualified personnel and qualified equipment. Records Retention Procedure, PD-RS-3.2, makes no mention of what equipment is qualified. In addition, this Records Retention Procedure states that, in the table of Attachment 1, a Record of Qualified Procedures exists. However, no procedures were found for the special processes defined in QPP-130. Further, no Standard Operating Procedure (SOP) could be found that provides requirements or guidance on how to qualify procedures or how to qualify equipment.

3.5 Identified Hard-Hat Area

In a prior site readiness review, the RSMC committed to declaring a hazardous area as a "hard-hat area". This was not accomplished.

DISCUSSION:

In the TRUPACT-II Loading Station Readiness Review, DLF-88-91, under "Previously Identified Deficiencies Still Open", Note 2: "A previous readiness review reported this item closed because the area (the TRUPACT-II Loading Station wrap-machine area) had been declared a hard-hat area." It was observed that no area around the wrap-machine has been so designated. The only hard-hat area designation found was a sign on the main entrance, which stated that hard-hats were required when the crane was in operation.

3.6 TRUCON Codes

The TRAMPAC requirements that address DOE/WIPP 89-004 (TRUCON Codes), are not contained in SWEPP/RSMC procedures addressing shipping categories and content codes.

DISCUSSION:

RSMC payload control procedures which contain requirements for the assignment of shipping categories and content codes (i.e. PD-RS-2.10, "Documentation of Waste Certification" and SWEPP OGM 3.4, "Data Management System, Issue 94), while containing requirements for these assignments, do not contain the TRAMPAC specific reference to DOE/WIPP 89-004, latest revision, for controlling the assignment of shipping categories and content codes. (Since the specific reference to DOE/WIPP 89-004, latest revision is missing from the procedures [ED's, DOP's, SOP's, etc.] a search of all procedures dealing with the specifics of the TRUCON codes and shipping categories contained in DOE/WIPP 89-004 should be made, to ensure that these codes and shipping categories are in place.)

3.7 Procedural Cross-References

Detailed operating procedures DOP-RO-4.2.1, "SWEPP Examination Operations", and DOP-RO-4.3.2, "WIPP Waste Examination", contain descriptions of the quality inspector (QI) signoffs that are required. The descriptions in the general section do not correspond with the procedural steps, where the QI stamp/initial is actually placed.

DISCUSSION:

Inaccuracies in cross-references between sections of procedures or between procedures may indicate a lack of thoroughness in the document review process. Additionally, performance of procedures containing such discrepancies can violate the EG&G "Verbatim Compliance Requirement" established in PD-RS-1.13, Section 2.9.

3.8 Reference to Deleted Procedure

The "Quality Program Plan for RSMC/SWEPP Programs," QPP-130-Rev. 2 and Project Directive PD-RS-5.4, "Design Review" both contain references to a deleted project directive, PD-RS-5.6, "Design Planning Tabulation".

DISCUSSION:

QPP-130-Rev. 2 has recently been revised (8/5/91). PD-RS-5.6 was deleted 11/13/90. PD-RS-5.4 has not been updated since 5/23/90.

3.9 Control of Purchased Items

The documented rationale for the determination of quality levels for the equipment, components and systems at the RSMC could not be provided. (All items, except for HEPA filters [level "A"] were designated quality level "B".) Procedure QP-7, "Control of Purchased Items and Services", dated 8/31/90, has extensive procurement requirements for level "A" items, but reduced requirements for level "B" items.

DISCUSSION:

Quality levels "A" and "B" are provided in Appendix 1 of Project Directive PD-RS-1.1, dated 2/25/91. They are defined in Quality Program Procedure QP-2, dated 8/31/90, Appendix I.

3.10 Adequacy of the Quality Program

The RSMC has committed to "annually assessing the adequacy of (their) quality program and assuring its effective implementation and continued compliance". They have also committed to "measurement of the achievement of quality standards". The adequacy assessment is scheduled for 8/31/91; the measurement of the achievement is scheduled "periodically". Plans for the former were not available; evidence of the latter was not available either.

DISCUSSION:

Quality Program Procedure QP-2, "Quality Program", dated 8/31/90, para. 3.1.12 commits to the adequacy assessment. The "RSMC Quality Program Plan", QPP-130, Rev. 2, para. 5.1 commits to the measurement of achievement of quality standards.

3.11 Radiation Surveys

No specific procedural guidance exists for the performance of radiation surveys for packages and shipments which meet the requirements of 49CFR 173.441.

DISCUSSION:

- a. 49 CFR 173.441.(b)(1) imposes a limit of 200 millirem per hour on the external surface of a package.

- b. 49 CFR 173.441(b)(2) imposes a limit of 200 millirem per hour (in the case of a flat-bed style vehicle) at any point on the vertical planes projected from the outer edges of the vehicle, on the upper surface of the load (or enclosure if used) and on the lower external surface of the vehicle.
- c. 49 CFR 173.441(b)(3) imposes a limit of 10 millirem per hour (in the case of a flat-bed style vehicle) at any point 2 meters from the vertical planes projected by the outer edges of the vehicle (excluding the top and underside of the vehicle).
- d. 49 CFR 173.441(b)(4) imposes a limit of 2 millirem per hour in any normally occupied space of the conveyance (truck cab).
- e. 49 CFR 441 does not differentiate between neutron and gamma radiation. Therefore, the guidance provided for radiation surveys of shipments is inadequate in that no procedural requirement exists to sum neutron and gamma radiation (as also required by INEL TRAMPAC WM-PD-88-012 Sec. 11.2)

3.12 Certification of Shipments

The individual at the RWMC, who is designated as the Certification Specialist, is responsible for reviewing the data for each waste container. If it is satisfactory, she signs off on a WIPP Certification Statement.

The same individual has been designated as the TRUPACT-II Transportation Certification Official. She inspects each TRUPACT-II payload for compliance with the TRAMPAC document. If it is satisfactory, she approves each shipment.

The perception is that the Transportation Certification Official is in place to provide a check of the WIPP Certification Statement. If the same individual performs both functions, the checkpoint is lost.

DISCUSSION:

The TRAMPAC document, WM-PD-88-021, "RWMC Compliance Plan for TRUPACT-II Authorized Methods for Payload Control," dated April 1991, paragraph 13.4.3, specifies the requirements for the Certification Specialist and the Transportation Certification Official.

3.13 TRUPACT Payload Restriction

The current SWEPP procedures do not identify nor establish the physical form requirement that the TRUPACT-II payload shall be restricted to solid or solidified material as specified in Section 3.0 of TRAMPAC WM-PD-88-012.

DISCUSSION:

The existing OGGI procedures specify all the related requirements for physical form restriction under TRAMPAC except solids and solidified material. While the water content and other material restriction may imply solids and solidified material, no clear statement regarding this requirement is specified.

3.14 RTR/Visual Examination

The current SWEPP procedures on physical form do not address the requirement that all newly generated waste shall be identified by either visual examination or Real Time Radiography (RTR) as specified in RWMC TRAMPAC Section 3.1

DISCUSSION:

No existing SWEPP procedures were identified stating that newly generated waste shall be visually examined or scanned by RTR as a requirement. Action to resolve this requirement can be handled procedurally.

3.15 Second Verification

The current SWEPP procedures for independent verification do not identify the requirement that a second independent verification shall be documented by affixing a signature, initial or stamp to the payload container data sheet per Section 3.1 Methods of Determination and Control (TRAMPAC).

DISCUSSION:

This is a procedure requirement established in the TRAMPAC and a requirement for completion of the Payload Container Data sheets.

3.16 RTR Comparisons

The current SWEPP procedures do not establish requirements for performing observation comparisons with data produced from RTR examinations as established per Section 3.1 of the Sampling Program of RWMC-TRAMPAC.

DISCUSSION:

No implementing procedure exists which identifies the comparison requirements between visual observations and RTR examinations within the sampling program. An Engineering Design File (EDF-RWMC-363) does establish a plan to collect comparison data at ENL-W. However, this is only one component for a sampling program. A second component is to have an assessment procedure of the visual comparisons which can establish corrective actions in improving the RTR process with greater reliability. The basis for performing comparisons is assurance on system performance and consistency with improved statistics as a basis

for adjusting sample frequency. Action is necessary to establish a sampling program with procedures which integrates comparisons of visual data with RTR data and assesses the results to improve the program objectives.

3.17 Maximum Load Requirements

Procedure OSM 3.16.28 (Load Management System) does not accurately identify the maximum load requirements per the TRUPACT-II SARP. The limit identified for the TRUPACT-II is 19,250 lb.

DISCUSSION:

On page 4 3.16-6 of OSM 3.16 the existing trailer load limits should be deleted and replaced with the identified TRUPACT-II load limit.

3.18 Payload Weights

Current SWAPP procedures for payload container weights do not include the determination and addition of errors as part of the weight determination per RMC-TRAMPAC and Appendix 1.3.7 of the SARP.

DISCUSSION:

The requirement to ensure that the payload weight includes error additions is established to assure conservative estimates in payload content weight restrictions.

3.19 Dose Rate Measurements

Dose Rate measurements for SWAPP TRUPACT-II monitoring does not combine the gamma and neutron reading for the highest dose rate on container data packages per SARP and TRAMPAC requirements.

DISCUSSION:

Requirements to combine dose rates are necessary to determine recorded readings for shipping information on individual containers and transport casks. It is also essential that the combined dose rates for gamma and neutrons are used to determine that the maximum limits on packages (200 Rm/hr on contact and 10 Rm/hr at 2 meters) are not exceeded. Review of the procedures and measurement requirements indicated that they currently do not perform additive or combining of neutron and gamma dose rates for measurements. Action is necessary to correct these dose rates measurement procedures to be in accordance with DOR and RRC requirements.

3.20 Training

a. Transportation Official

The RMC Training Manual, RM-PD-88-003, Rev. 2, does not address the Transportation Official position defined in the SARP, Chapter 7, Appendix 7.4.3.

DISCUSSION:

The TRAMPAC WM-PD-88-012 states in Section 14, "Training Program" in part ... "RWMC has developed a training program for meeting the parameters covered in this document. This training program will ensure: ...5. That all persons who supervise, validate, or review any activities are trained to the same standards as those who perform the functions."

b. RWMC Training Manual

The Waste Management Training Program issued during the audit week must incorporate the latest applicable RWMC Training Manual.

DISCUSSION:

The TRAMPAC WM-PD-88-012 in Section 14, states the RWMC certification/qualification is maintained by satisfying the annual and biannual requirements listed in the RWMC Training Manual.

c. Helium Leak Testing

The following discrepancies were found when reviewing the Helium Leak Testing Level II certification for tester Larry Lazzarotto per WM-PD-88-003:

1. The signature, for approval for submittal, was missing on the application for NDE Examiner Certification/Recertification form.
2. The examination dates for Mass Spec. Level I and Level II listed on the Interoffice Correspondence dated June 7, 1991 should have reflected 10/04/90 vs. the incorrect date of 10/04/91.
3. The Level III Examiner signing the certificate of Larry Lazzarotto for Level II Helium Leak Testing was Jeffrey Cook. The Level III Certificate Records for Jeffrey Cook were not available to validate the signature.

DISCUSSION:

The certification requirements were listed in several documents referring to different editions of ASNT No SNT-TC-1A, as follow:

1. EG&G Idaho Inc. Company Procedures Manual 1.10 Section 4 references ASNT No SNT-TC-1A, 1988 Edition
2. TRAMPAC WM-PD-88-012 lists no specific edition
3. RWMC Training Manual lists no specific edition
4. QP-2 lists educational and experience requirements to ASNT No SNT-TC-1A, 1984 edition.

Inconsistencies and discrepancies in these certification requirements reflect a concern that this may not be an isolated case. SWEPP should make a thorough review of all certification records/requirements to correct any discrepancies/inconsistencies. (Certification records provided in Attachment 3).

4. Personnel Training Record

Four of the seven personnel training records reviewed could not document the certification requirements for the positions held by the individuals indicated below. The individual personnel training records were:

<u>Name</u>	<u>Certification</u>
Gina Redford	Certification Specialist
Larry Lasmaroto	Examination Technician
Kevin Lundquist	Examination Technician
Maria Whitehead	Examination Technician

DISCUSSION:

The records are required in accordance with MW-PD-88-003, Rev. 2 "RMC Training Manual", Section 4. The records may be available in a microfiche file, but were not available for review during the audit.

e. Student Evaluation Form

The students are not always given a Student Evaluation Form for feedback. When the forms are completed and returned to the Training Department, the forms are currently being filed, but are not being evaluated for possible corrective action by the RMC/SWEP Training Manager.

DISCUSSION:

The RMC Training Manual, MW-PD-88-003, Section 5.3, requires each student be given a Student Evaluation Form to fill out upon completion of each course or course examination, which lead to a qualified/certified position. These forms are forwarded to the RMC/SWEP Training Manager and evaluated by him for possible corrective action.

3.21 Inspector Qualification: Special Processes

No written procedures exist for the training and qualification of Quality Inspectors who perform inspections and tests to requirements of the SWEP Special Processes (defined in QPP-130).

DISCUSSION:

The ERG Quality Assurance Manual identifies Inspection and Test Personnel as company certified inspection and test personnel. Section 4 of this manual "Requirements: Inspection and Test Personnel", 4.1.2 requires that personnel who perform quality related inspections and testing to verify conformance to specified requirements, are qualified in accordance with written procedures (reference is to NQA-1, 28-2.1).

The Quality Inspector in the engineering organization of the RWMC performs quality inspections to specified requirements of the SWEPP Special Processes. The Quality Inspector is qualified to the requirements of NQA-1, 2S-2.1 as a General Inspector in accordance with ESH programs and requirements. (However, ESH programs and requirements do not address Inspection and Test personnel qualifications on SWEPP Special Processes.) The RWMC Training Manual exempts the training of selected professional training programs from its coverage. The Quality Inspector is one of these professional personnel who is exempted. The Training Manual identifies that this training of professionals is now done in accordance with manuals and procedures associated with their particular discipline. Such procedures do not presently exist for the Quality Inspector, for SWEPP Special Process inspections and tests.

V. OPEN ITEMS FROM PREVIOUS AUDITS

1990 WACC Audit of INEL

OBSERVATION 1

This item is now closed. Review of SWEPP Operations and Maintenance Manual Procedure 3.9, figures 3.9-10 and 3.9-11 verified that legible copies of the subject figures are now incorporated into the procedure.

OBSERVATION 2

This item is now closed. Review of WM-PD-88-011-4, paragraph 5.2.1.2 verified that the word "and" has been changed to "or". This change completes all required corrective action for this item.

ATTACHMENT #1

Entrance Meeting
8/12/91

<u>Name</u>	<u>Organization</u>
L. W. Gage	DOE/AL
Tom Stroud	Westinghouse/WID
W. J. Isle	EG&G
Phil Grant	Wastren
Robert E. Davis	M&C Tech
Ronald C. Knobel	M&C Tech
Duane G. Rencken	SEG
Patricia C. Rencken	SEG
Philip D. Straha	SEG
Don Pound	EG&G
Darris Bright	EG&G
Matthew Silva	NM E&G
Hal Davis	DOE/WFO
Joyce G. Brack	SEG
Don Kudera	EG&G
Darrell Hinckley	DOE/ID
Thomas L. Clements, Jr.	EG&G

ATTACHMENT 2

Exit Meeting
8/15/91

Name

Organization

L. W. Gage	DOE/AL
Joyce G. Brack	SEG
Phil J. Grant	Wastren
Ronald C. Knobel	MAC Tech
Robert E. Davis	MAC Tech
Jim Hines	DOE/AL
Matthew Silva	NM EEG
Philip Strahn	SEG
Diane Hartley	EG&G
Don Pound	EG&G
Craw Knasne	EG&G
Darris Bright	EG&G
Dennis Kick	EG&G
Rick Lang	EG&G
J. D. Wells	EG&G
W. J. Isle	EG&G
Pat Rencken	SEG
Duane G. Rencken	SEG
Tom Stroud	Westinghouse/WID
Doug French	EG&G
Darrell Hinckley	DOE/ID
Jay H. Davis	EG&G
Thomas L. Clements, Jr.	EG&G

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ATTACHMENT 3

INTEROFFICE CORRESPONDENCE

Date: June 7, 1991
To: D. W. Dentler, MS 4201 *Dennis Risk*
From: J. F. Cook, MS 2209 *Jeff Cook*
Subject: NDE CERTIFICATION RECORDS FOR LARRY LAZZAROTTO - JFC-25-91
Reference: WM-PD-88-003, Appendix A.

I am an EG&G Idaho Level III Examiner in leak testing. This letter documents transmittal of the subject certification records as required by the reference (2.2.2 and 7.). The attached copy of the Certificate covers the reference, paragraphs 7. a, b, h, and i. Paragraph 7. c. is covered by the attached Application for NDE Examiner Certification/Recertification. The training was completed satisfactorily as demonstrated by passing examinations administered as part of the training (Paragraph 7. d). Paragraph 7. e requires results of the physical examination (eye test) and this should be obtained from Medical. Examinations were successfully completed as shown below (Paragraph 7. f, g):

<u>Examination</u>	<u>Date</u>	<u>Score</u>
Mass Spec. Level I General (20 questions)	10/04/91	85%
Mass Spec. Level II General (20 questions)	10/04/91	90%
Mass Spec. Level II Specific (51 questions)	03/01/91	91.17%
Mass Spec. Level II Practical	04/07/91	100%

- Jh -

Attachments:
As Stated

cc: B. A. Barna, MS 2209 (w/o attach.)
C. R. Mikesell, MS 2209 (w/o attach.)
D. G. Pound, MS 3950 (w/o attach.)
J. D. Thomas, MS 3424
Central Files, MS 1651 (w/o attach.)
J. F. Cook File
Project File

Certificate

Larry Lazzarotto

has satisfactorily fulfilled the qualification requirements established by EG&G Idaho to be certified for the position of

Level II in Helium Leak Testing
per WM-PD-88-003, Rev-3, Appendix A and SNT-TC-1A

in the employ of EG&G Idaho, at the Idaho National Engineering Laboratory

Jeffrey W. Cook
Level III Examiner ASNT CERT # JB-772

Barclay Bama
Nondestructive Materials Characterization
Manager

May 1991

Certification Date

October 1993

Expiration Date

APPLICATION FOR NDE EXAMINER CERTIFICATION/RECERTIFICATION

1. GENERAL INFORMATION

Applicant's Name: LARRY LIZZARDI Date: 4-9-91
Badge No.: 55F15 Examiner's Stamp No.: N/A
Examiner's Classification: _____ Branch: _____
Certification Requested--Method: Holdings Book Testing Level: II
Original [] Recertification [] Expiration Date: _____

2. EDUCATIONAL BACKGROUND (Circle highest grade completed):

High School	College	Major and Degree
9 10 11 <u>(12)</u>	1 <u>(2)</u> 3 4	_____

3. CLASSROOM TRAINING: (For this examination method):

Given by	Hours	Date	Level
<u>Steve Brock (WIPP)</u>	<u>80</u>	<u>9-88</u>	<u>I & II</u>
<u>WIPP</u>	<u>10</u>	_____	_____
_____	_____	_____	_____

4. ON-THE-JOB TRAINING (AT EG&G):

Given by Steve Brock Hours 54 Date 9-88 to 4-91 Level I & II
Steve Brock Corp.

5. CALENDAR EXPERIENCE (For this examination method):

Company EG&G From 9-88 To 4-91

6. ACTUAL EXPERIENCE (For this examination method):

Total Number of Months Applicant Spent Performing this Method: 31
Average Percent of Working Time Applicant Spent Performing this Method: 102%
Number of Months of Actual Experience in this Method: .6

7. REMARKS: 94 hrs. on Tripack log book on leak testing
here and at WIPP

8. APPROVAL FOR SUBMITTAL:

Supervisor: _____ Date: _____