

MEETING MINUTES

SUBJECT: Meeting with F. R. Cook Regarding Waste Package Data and Procedure Traceability

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|--------------------------------|------|--|--------------------------------|
| TO: Distribution | | BUILDING MO-407/200E; 325/300 Area | |
| FROM: M. J. Smith | | CHAIRMAN M. J. Smith, Manager, Engineered Barriers | |
| DEPARTMENT-OPERATION-COMPONENT | AREA | SHIFT | DATE OF MEETING |
| Engineered Barriers/BWIP | 2E | day | 1/30/84 |
| | | | NUMBER ATTENDING see attached. |

Distribution: see attached list

Meeting minutes attached.

WM Record File

101

WM Project 10

Docket No. _____

PDR

LPDR

Distribution:

REB/MTB
BC's
(Return to WM, 623-SS)

NUMARK

KENNEDY

WRIGHT

15

84 APR -3 AM 1:16

WM DOCKET CONTROL CENTER

B404270077 B40130
PDR WASTE PDR
WM-10

Distribution:**Attendees**

P. F. Salter
R. C. Edwards
T. B. McCall
E. L. Moore
G. S. Barney
T. J. Higgins
R. T. Wilde
L. R. Fitch
R. J. Gimera
J. H. LaRue
H. Babad
J. E. Mendel
G. S. Hunt
E. B. Ash

**Basalt Waste Isolation Project (BWIP)/Engineered Barriers Department Meeting
with E. R. Cook, Nuclear Regulatory Commission (NRC), January 30, 1984**

Attendees:

F. R. Cook
G. J. Bracken
D. H. Dahlem
M. F. Nicol
M. J. Smith
R. C. Edwards
P. E. Lamont
J. Myers

(1) F. R. Cook stated that his objective for the meeting was to determine:

- (a) What BWIP documents are pertinent to tracing procedures/tests.
- (b) Whether or not the procedure and test traceability documents

follow the nine items listed by him (see Attachment 1). Mr. Cook stated that he had given a similar list to the Rock Mechanics Group.

- (c) Whether or not the BWIP QA system is adequate to police what is in place?

He added that he was trying to identify problems early so corrections could be made before a large amount of data is collected.

- (2) Mr. Cook outlined the list of nine questions he provided to P. E. Lamont (Attachment 1). Further clarifications made by Mr. Cook are written as notes taken by M. J. Smith on the attachment. (Mr. Cook's original list included only the nine major questions given in Attachment 1.)

- (a) During the discussion of Item 5, M. F. Nicol stated the BWIP QA plan would be reissued within two months.

- (b) G. J. Bracken of DOE-RL QA stated that QA signoff does not mean that they agree that the procedure produces valid technical results. QA cannot possibly determine this.

- (c) Mr. Cook stated that no testing or procedures for tests should be approved by QA until test plans, a QA plan and performance requirements are in place. Mr. Nicol stated that QA approval on Basalt Operating Procedures (BOPs) currently does not mean that they have been checked for relevance to the test plan they support. Mr. Cook stated that the BOPs are American Society for Testing Materials (ASTM) type procedures, i.e., they do not instruct the operator as to what needs to be tested, how many tests need to be run, how to treat materials, etc. In Mr. Cook's view, they are generic. Mr. Cook stated that QA should keep records of what they reviewed on each procedure in order to clarify what their approval means.

- (d) It was pointed out by Mr. Cook that real-time QA surveillance is

needed on a periodic inspection basis and is required to provide an independent check that work was done according to procedure or instruction. A plan for inspection/surveillance should be in place prior to testing. Unannounced QA audits are required in addition to the periodic surveillance performed. Mr. Cook stated that in-house QA systems should be continuously improved and that a QA system that reveals no audit findings for a long period of time will be viewed as suspect when a license is reviewed.

- (e) Mr. Cook suggested that surveillance by QA should be documented along with data rather than in separate surveillance reports. Key measurements must be observed by QA personnel, and the request for surveillance should be made by the experimenter.

- (3) Mr. Cook said he will use information from this visit to help formulate the pending QA workshop in June 1984 and to identify problem areas early.

- (4) Mr. Cook suggested that BWIP should categorize all testing into developmental testing vs testing done for initial performance modeling. Any testing done as developmental should be defined by means of test specifications or instructions in order to assure that when a procedure is eventually written, the developmental data can be inspected and determined whether it is admissible for licensing. The test specification should control the critical test parameters that are pertinent to establishing pre- or post-closure performance or the success of the test performed. QA should sign off on the test instructions and all changes to the test instructions. The BWIP should identify which data being collected are critical to establishing the pre- and post-closure safety of the repository.

- (5) Work being done by draft procedures should not be allowed, and work should not be started until all signatures are acquired on a procedure.

Pacific Northwest Laboratory (PNL)/BWIP Engineered Barriers Department
Meeting, January 31, 1984

Attendees:

M. R. Kreiter
G. J. Bracken
F. R. Cook
P. E. Lamont
J. Myers
D. G. Coles
R. E. Westerman
D. E. Ryder
S. Klopfer
B. O. Barnes

- (1) M. R. Kreiter presented the basics of how PNL is organized and how BWIP work is handled within the organization.
- (2) Mr. Cook stated that NRC has been encouraged to identify potential problem areas that might come up during licensing by NRC-HQ. Most of the prior difficulties NRC has encountered have been related to QA and procedures used to establish operational or long-term safety. Mr. Cook reiterated the items covered in Item 5 in the meeting at Rockwell. Mr. Cook stated that Rockwell should define whether the data being collected are critical to safety (in pre- or post-closure performance) or simply result from method development.
- (3) Mr. Cook then covered the nine questions given in Attachment 1 for the PNL staff and management.
- (4) Mr. Cook identified that BWIP needs a procedure to identify what to do with data collected by unintentional violations of procedure and how to recover from a problem in this area.
- (5) Mr. Cook stated that the QA statement in Statements of Work should require that BWIP QA and the appropriate end function manager agree to

the QA plan prior to the initiation of work, if the work is subcontracted.

- (6) Procedures for the preparation and procurement of gases, radionuclides, reagents and waste forms should be in place for all work being conducted by the BWIP. Specifications for all materials should be in place as well as the requirements for vendor certification of materials/equipment supplied. The individual that is authorized to sign the vendor certification and to certify the materials supplied should be identified in the test instructions. All materials used to prepare waste forms need to be certified as meeting requirements. Vendor certification alone is not sufficient. Over-checks need to be completed routinely by the test engineer or his designee. The required over-checks for items critical to safety (i.e., performance) need to be specified in procedures that are written. The justification for the over-check requirements should be documented.

Westinghouse Hanford Company (WHC)/BWIP Engineered Barriers Department
Meeting with E. R. Cook, January 31, 1984

Attendees:

A. C. Leaf
J. M. Lutton
J. J. McCown
C. N. Wilson
F. R. Cook
L. D. Blackburn
R. Knecht
W. Clarke
G. J. Bracken
J. Myers.

1. R. Knecht outlined the personnel, procedures and activities associated with BWIP work at WHC. Mr. Cook suggested that it be identified what the signature on each procedure means. A procedure for approval of procedures needs to be put in place.

2. C. N. Wilson stated that a procedure for record keeping exists in HEDL-TC-2405.
3. Mr. Cook discussed the nine items identified in Attachment 1. He reiterated that it is important for each principal investigator to know whether the data being collected is important to establishing pre- or post-closure repository safety and that each investigator be familiar with NQA-1 requirements for record keeping.
4. Design requirements for waste packages, etc. need to specify that the work will be done in accordance with ANSI standards.
5. Mr. Cook questioned HEDL extensively as to what sections of NQA-1 apply to their work. Mr. Cook's approach would be to include the non-mandatory (design control) requirements as well as data control requirements in all work.
6. Mr. Cook stressed that automatic data tapes, computer printouts, and outputs from data loggers need to identify the experiment or test from which they result and that these records become part of that laboratory notebook.
7. Mr. Cook added that the training of each principal investigator with respect to QA requirements and procedures is as important as his technical qualifications. This training needs to be documented.