



Department of Energy

Washington, DC 20585

QA: Q

JAN 07 2003

D. C. Richardson
Bechtel SAIC Company, LLC
1180 Town Center Drive, M/S 423
Las Vegas, NV 89144

VERIFICATION OF CORRECTIVE ACTION AND CLOSURE OF DEFICIENCY REPORT (DR) BSC(O)-03-D-013

The Office of Quality Assurance staff has evaluated the corrective action of DR BSC(O)-03-D-013 and determined the results to be satisfactory. As a result, the DR is considered closed.

If you have any questions, please contact either James Blaylock at (702) 794-1420
Christian M. Palay at (702) 794-1486.

OQA:JB-0470

James Blaylock
R. Dennis Brown, Director
Office of Quality Assurance

Enclosure:
DR BSC(O)-03-D-013



JAN 07 2003

cc w/encl:

N. K. Stablein, NRC, Rockville, MD
Robert Latta, NRC, Las Vegas, NV (2 cys)
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S. J. Cereghino, BSC, Las Vegas, NV
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8 DEFICIENCY REPORT
 CORRECTIVE ACTION
REPORT

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DEFICIENCY REPORT/CORRECTIVE ACTION REPORT

1. Controlling Document. (Document ID and Revision or Date)

AP-3 12Q, Revision 0, ICN 4, *Calculations*

2 Related Report No

OQA-02-S-24

3 Responsible Organization

Bethel SAIC Company, LLC (BSC) Preclosure Safety Analysis Dept

4 Discussed With

D C. Richardson, J A. Ziegler

5 Requirement

AP-3 12Q, Section 5 1.2 c) states "Prepare the calculation in accordance with the Calculation Outline, presenting information in accordance with the outline and in the order listed"

AP-3 12Q, Attachment 2, Calculation Outline, item 2 states in part. "This section shall also identify whether any control of the electronic management of data was accomplished in accordance with method(s) specified in the TWP, or described any variances from the planned method(s)"

6 Description of Condition

Contrary to the above requirements, the listed calculations do not identify whether any control of the electronic management of data was accomplished in accordance with method(s) specified in the Technical Work Plan, or described any variance from the planned method(s)

List of calculations

- CAL-CTS-SE-000001, Revision 0, *Canister Transfer Sequence Calculation*
- CAL-WPS-SE-000005, Revision 0, *Plutonium/High-Level Vitrified Waste BDBE Dose Calculation*

Has work been stopped? Yes No

7 Initiator

Christian M Palay

Printed Name

Signature

Date

9. Does a stop work condition exist?

Yes No N/A

If Yes, Check One

A

B

C

D

10 Recommended Actions

None

11 QA Review

Christian M Palay

Printed Name

Signature

Date

12. Response Due Date

10 Working Days after Issuance

13 QAM Issuance Approval

Printed Name R. Dennis Brown

Signature

James Blaylock for

Date

10/23/02

14 Corrective Actions Verified/Closure

Christian M Palay

Signature

Date

15 QAM Closure Approval

R Dennis Brown

Signature

Date

James Blaylock for 1/7/03

- 2. Check if Amended
- Check if also Initial Response
- 3 Extended Processing
- No Yes (if yes, submit Extended Processing request)

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DEFICIENCY REPORT/CORRECTIVE ACTION REPORT COMPLETE RESPONSE

4. Extent of Condition: (Amended response will be required if all Extent of Condition Investigations are not complete and documented herein)
The following calculations do not identify whether any control of the electronic management of data was accomplished in accordance with method(s) specified in the Technical Work Plan, or describe any variances from the planned method(s). There are no other identified documents prepared in accordance with procedure AP-3.12Q REV 0 ICN 4 that contain this deficiency.

CAL-CTS-SE-000001 REV 00, Canister Transfer Sequence Calculation
CAL-WPS-SE-000005, REV 00, Plutonium/High-Level Vitrified Waste BDBE Dose Calculation

5. Impact: (Provide an impact statement relative to waste isolation and safety, and impact to other work, if any)
See CAQ Continuation Page.

6. Remedial Actions: (Document all actions necessary to address the results of the Extent of Condition)
There are no remedial actions required to revise the identified calculations. The current procedure AP-3.12Q REV 1 ICN 2 no longer contains a requirement for the control of electronic media, therefore, no discussion of the control of electronic media is required. Current PSA calculations are engineering activities that contribute to the design of the YMP. The calculations are now, therefore, controlled by procedure AP-3.13Q, Design Control. Compliance with procedure AP-3.13Q, Section 5.1.2, Control of Software and Electronic Management of Information, is intended to ensure compliance with Supplement V of the QARD.

A cross-reference will be created between the 2 calcs and this DR. 11/11/02

7. Root Cause (For a significant CAQ, attached results of formal root cause determination prepared in accordance with AP-16.4Q)
 Apparent Cause
The deficiency occurred as a result of inattention to detail.

8. Action to Preclude Recurrence: (Address those actions necessary to prevent the identified cause from recurring)
The requirement for inclusion of the description of the control of electronic management of information is no longer included in the current revision of procedure AP-3.12Q, so the identified deficiency will not recur. During a PSA staff meeting on 10/31/02, Dennis Richardson (PSA manager) will present the details of the deficiency report and stress to the PSA personnel the importance of following implementing procedures, which includes verifying compliance with every applicable requirement every time the procedure is used. Also, Mr. Richardson will discuss the origin of control of electronic media (i.e., Supplement V of the QARD) and remind the group that BSC training for AP-3.13Q (that is required for PSA personnel before performing design work) includes the control of software and electronic management of information. Mr. Richardson will provide handout copies of selected pages of the AP-3.13Q training manual and Supplement V of the QARD (that requires control of the electronic management of data)

9 Due Date for Completion of Corrective Action
10/31/2002

10 Responsible Manager: *JFS BSC QAR 10/31/02*
Dennis C. Richardson *Dennis Richardson* 10/30/2002
Printed Name Signature Date

11. QAR Evaluation: Accept Partially Accept Reject
 Re-evaluated for significance c.p. 11-13-02
Christian Palay *Chris Palay* *11-7-02*
Printed Name Signature Date

12. QAM Concurrence
DENNIS BROWN *James Douglas* *11/21/02*
Printed Name Signature Date

Chris Palay *11-15-02* *c.p. 11-13-02*
11-13-02

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CONDITION ADVERSE TO QUALITY CONTINUATION PAGE

Continuation of Item 5:

The deficiency is applicable to only two calculations prepared by the PSA group, and there is no impact to waste isolation, safety, or other work. Although the control of electronic management of information was not correctly described as required by the applicable revision of procedure AP-3.12Q (i.e., REV 0 ICN 4), electronic records associated with calculations CAL-CTS-SE-000001 Rev. 00 and CAL-WPS-SE-000005 Rev. 0, along with other documents produced by the PSA group, were (and are) managed as described in the following paragraphs and in accordance with Supplement V of the Quality Assurance Requirements and Description (QARD), DOE/RW-0333P.

A. Requirement: Data are suitably protected from damage and destruction during their prescribed lifetime and are readily retrievable. PSA Compliance: Upon completion of work activities, QA inclusionary records were submitted to the Records Processing Center (RPC) in accordance with the applicable revision of procedure AP-6.1Q, Controlled Distribution. The records are retained, protected, and dispositioned in accordance with the applicable revision of procedure AP-17.1Q, Record Source Responsibilities for Inclusionary Records

B. Requirement: A description is prepared of how data will be stored with respect to media, conditions, location, retention time, security, and access. PSA Compliance: During the conduct of work activities (i.e., development of calculations), electronic information was backed up on network drives whenever changes were made but not more frequently than once per day. The network drives are backed up by BSC on a periodic basis to an offsite location. Electronic information on personal computers and on network drives can be retrieved instantly. Information that is backed up to an offsite location can be retrieved within a few days.

C. Requirement. Storage and transfer media are properly identified as to source, physical and logical format, and relevant date. PSA Compliance. Electronic information was stored on password-protected personal computers during the conduct of work activities. The information was retained on the password-protected personal computers until the QA inclusionary information associated with the work activity was transferred to the RPC in accordance with the applicable revision of procedure AP-6.1Q, Controlled Distribution. AP-6.1Q defines the requirements for identification of the transferred information, including the document identifier and revision, electronic filename and software used to create the information, date the information was last modified, and file size in kilobytes.

D. Requirement. The completeness and accuracy of the data input and any subsequent changes to the data are maintained. PSA Compliance: Completeness and accuracy of the input information was assured through compliance with the checking and technical review requirements of procedure AP-3.12Q REV 0, ICN 4. Any changes to the information were made in accordance with the procedure.

E. Requirement: The security and integrity of the data are maintained. PSA Compliance. Security and integrity of the electronic information developed during the work activity was maintained by storing the information on hard drives on password-protected personal computers, and by limiting write-access. After acceptance of the information by the RPC, integrity is maintained by RPC access controls.

F. Requirement: Data transfers are error free, or within a defined permissible error rate, to ensure no information is lost in transfer and that the input is recoverable from the output. Examples of data transfer include copying raw data from a notebook to a computerized data form, copying from computer tape to disk, etc. PSA Compliance: Minimization of errors resulting from the transfer of electronic information from one media (i.e., password-protected personal computers) to another (i.e., compact disks for transfer to the RPC) was accomplished through a visual comparison of the original information to the transferred information prior to transmittal to the RPC.

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CONDITION ADVERSE TO QUALITY CONTINUATION PAGE

Verification of Corrective Actions for Deficiency Report (DR) BSC(O)-03-D-013

The Quality Assurance Representative (QAR) performed a verification of the corrective action commitments documented in the complete response. The complete response was signed by the Responsible Manager on 10/30/02. The following are the results of the verification:

Remedial Actions

The only remedial action to verify was to link via a cross reference from this DR to CAL-CTS-SE-00001 Rev. 0 and CAL-WPS-SE-000005 Rev. 0, the affected record packages. This action was verified by the review of the OCRWM Transmittal/Receipt Acknowledgement (Package ID MOY-012109-10). The QAR has determined that the remedial action is satisfactory.

Action to Preclude Recurrence:

During an all-hands Preclosure Safety Analysis (PSA) staff meeting, the Responsible Manager emphasized the importance of verbatim compliance. The Responsible Manger also briefed the staff regarding current supplement V controls under AP-3.13Q, the procedure governing future PSA work. The QAR has reviewed the agenda and the attendance sheet which was signed by the relevant staff and the Responsible Manager. The subject matter for the meeting and the attendance is determined to be adequate. This action is verified as satisfactory.

Based on the above evaluation, the QAR recommends closure of DR BSC(O)-03-D-013.

Christian Palay

QAR Printed Name



QAR Signature

December 18, 2002

Date