



Darell D. vonderLinden, Manager Procurement and Property Bechtel SAIC Company, LLC 1180 Town Center Drive Las Vegas, NV 89144

VERIFICATION OF CORRECTIVE ACTION AND CLOSURE OF CORRECTIVE ACTION REPORT (CAR) BSC(V)-02-C-002 FOR LOSS OF TRACEABILITY AT METAL SAMPLES COMPANY

BSC Quality Assurance has verified implementation of corrective action for CAR BSC(V)-02-C-002 and determined the results to be satisfactory. As a result, the CAR has been closed.

If you have any questions, please contact either Richard L. Maudlin at (702) 295-2961 or Daniel A. Klimas at (702) 295-2665.

Donald T. Krisha, Manager

Quality Assurance

RLM:bw-0401022025

Enclosure:

DR BSC(V)-02-C-002

Market XI

cc w/encl:

L. H. Barrett, DOE/HQ (RW-2) FORS

L. W. Bradshaw, Nye County, Pahrump, NV

Margaret Chu, DOE/HQ (RW-1) FORS

J. R. Dyer, DOE/YMSCO, Las Vegas, NV

W. J. Glasser, NOS, Las Vegas, NV

Birdie Hamilton-Ray, DOE/YMSCO, Las Vegas, NV

C. E. Hampton, DOE/YMSCO, Las Vegas, NV

R. W. Henderson, BSC, Las Vegas, NV

D. G. Horton, DOE/YMSCO, Las Vegas, NV

D. A. Klimas, BSC, Las Vegas, NV

D. T. Krisha, BSC, Las Vegas, NV

Robert Latta, NRC, Las Vegas, NV

S. W. Lynch, State of Nevada, Carson City, NV

S. P. Mellington, DOE/YMSCO, Las Vegas, NV

Ram Murthy, DOE/OQA, Las Vegas, NV

D. G. Opielowski, NQS, Las Vegas, NV

R. E. Powe, BSC, Las Vegas, NV

J. M. Replogle, DOE/YMSCO, Las Vegas, NV

N. K. Stablein, NRC, Rockville, MD

D. D. vonderLinden, BSC, Las Vegas, NV

Engelbrecht von Tiesenhausen, Clark County, Las Vegas, NV

B. L. Wilson, BSC, Las Vegas, NV

cc w/encl:

H. E. Adkins, BSC, Las Vegas, NV

R. W. Andrews, BSC, Las Vegas, NV

Rick Douglas, Metal Samples Company, Munford, AL

J. C. Estill, BSC/LLNL, Livermore, CA

R. F. Hartstern, BSC, Las Vegas, NV

R. L. Maudlin, BSC, Las Vegas, NV

Carolyn Moyers, BSC/FANP, Las Vegas, NV

M. T. Peters, BSC/LANL, Las Vegas, NV

R. E. Rucinski, BSC, Las Vegas, NV

S. A. Silva, BSC, Las Vegas, NV

Roxanna VanDillen, BSC, Las Vegas, NV

C. C. Warren, BSC, Livermore, CA

OFFICE OF CIVILIAN RADIOACTIVE WASTE MANAGEMENT U.S. DEPARTMENT OF ENERGY WASHINGTON, D.C. ORIGINAL red					CORRI REPOR C(V)-02-0		
DEFICIENCY/CORRECTIVE	ACTIC	ON REPO	DRT				
Controlling Document: Alabama Specialty Products, Inc., Quality Manual, Rev. 2/16/99 TRW Purchase Orders A15382YS9B and A15414SS0B		· · · · · · · · · · · · · · · · · · ·	2. Related	Report No VA	:		
3. Responsible Organization:	4. Disc	cussed Wit	th:				
Bechtel SAIC/Metal Samples Company			rk Johnson (Richard Mau		ples), M	lark Peters,	
 Requirement: TRW Purchase Orders A15382YS9B and A15414SS0B, Procurement Rei "Identification shall be maintained on the items or in documents traceable established and maintained." Alabama Specialty Products, Inc. Quality Sys Receiving Clerk, and the Inventory Control Supervisor shall maintain, and e storage, and maintenance of any Customer supplied product." 	e to the ite stem Mar	ems, or in a nual, Rev. 2/	manner, which 16/99, Section	assures tha	at identification	cation is tes in part, "The	
6. Description of Condition:		~~~~~~~					
Contrary to the above:							
 No documentation could be provided by MSC to establish traceability, upon customer supplied certified material test reports (CMTR). As a result, the t MSC to support TRW Purchase Orders A15382YS9B and A15414SS0B c NOTE: No YMP work is currently being performed by MSC. On 11/15/01 S contacted the Procurement Department on 11/15/01 and requested a modifinclude ALL YMP work. SER revised on 11/15/01 to place restriction on MS BSC Manager of Quality Assurance. 	raceabiliticould not	y of the mate be confirmed tructed MSC e made to the whibit ongoin	erial to the CM d. C, via email, to e existing conti g or new work	TRs for the s stop all YMP ractual hold until concur	work. II PROC.(rence is	ns fabricated by n addition, S&ET 08/01.008) to obtained from the	
7. Initiator: April Van Diller Roxie Van Diller Date 11/15/01	X X	∕es	ork condition] No One: [] A	exist? (No	•	ed for a DR)	
10. Recommended Actions:	11 10.	a, Officer C	ле. ЦХ		10 2	ЙD	\dashv
 Take immediate action to evaluate MSC's controls for receipt inspection of onecessary modifications/revisions to MSC's receipt inspection procedures to material to the associated documentation. Although no YMP work is current contractual hold (PROC.08/01.008) on welded specimens at MSC to include specimens fabricated from YMP-customer supplied material and the location untested specimens at the laboratories that received metal specimens fabric sample of the different types of specimens and have them independently an specified by TRW Purchase Orders A15382YS9B and A15414SS0B. Until specimens fabricated from YMP-customer supplied material shall be identified. 	to assure the being the ALL YM one where cated from alyzed to these te	that custom performed by MP work. Take MSC shipp m YMP-custo confirm that ests have been	er supplied ma by MSC, take in ake immediate ed the specime omer supplied t the specimen en completed,	aterial is insp nmediate act action to det ens. Determ material. Ol as were fabries	ected for tion to mo ermine the nine if the btain a re cated fro	r traceability of the odify the existing he total number of ere are any epresentative im the material	,
44 OA Builan	-46- -		. 5.:			<u></u>	
11. QA Review: QAR RL Maudlin Date ///s/o/		sponse Du orking Day	ue ⊔aτe: ys From Iss⊧	uance			
13. DOQA Issuance Approval:		<u> </u>					ᅱ
Printed Name Robert W. Glark 672 1/56, Signature	<u> 2.7.</u>	Kin	h	D	ate //	1/15/01	
22. Corrective Actions Verified: QAR Mauell Date 04/01/02	3. Closu	are Approv	ed by:	inha	Date	4/15/02	

TYPE RESPONSE: ☑ Initial ☐ Complete ☐ Amended	OFFICE OF OR CONTROL OF CONTROL O	E MANAGE T OF ENER	RGY	DR/CAR NO. BSC(V)-02-C-002 PAGE 12 OF 17. DEC 101 12151 QA: QA
	•		ORIGINAL	
	DEFICIENCY/CORRECTIVE /	ACTION PE	PORT (RESPONS	<u> </u>
14a. Immediate Action		AOTION ILL	TOTAL (ILLOI ONO	
BSC Procurement a Samples Company issue a formal modif all YMP work.	and Property issued a copy of Correctiv (MSC) on November 26, 2001. Addition fication to the existing contractual hold	nally, BSC P	rocurement and Prop	erty has been requested to cimens at MSC to include
Compliance Date: De	ecember 6, 2001		مراناه	L
14. Remedial Actions:				
	will evaluate MSC's controls for receip es to be implemented by MSC.	ot inspection	of customer supplied	material and recommend
S&ET and MSC the locations wh	will determine the total number of spenere MSC shipped the specimens.	cimens fabri	cated from YMP-custo	omer supplied material and
S&ET will determined fabricated from	mine if there are any untested specime YMP-customer supplied material.	ens at the lab	oratories that received	d metal specimens
Representatives discuss an acce	s from S&ET, Waste Package, LLNL, Neptable method for determining the qua	MTI, Purchas ality of the fab	ing, and QA will meet pricated specimens.	on December 12, 2001, to
5) A systematic se fabricated by M	earch of the TDMS will be performed ar SC from YMP-customer supplied mate	nd all (if any) rial will be ide	quality data generate entified and appropria	d from specimens tely classified.
15. Extent of Conditio	n:	· · · · · · · · · · · · · · · · · · ·		
All samples fabrical A15414SS0B are co	ted from YMP-customer supplied mater onsidered "suspect" at this time. This v	rial for TRW will be further	Purchase Orders A15 addressed in the con	382YS9B and nplete response.
	on SR products. The impact on LA pro implete response to this CAR.	oducts is curr	ently being investigate	ed and will be further
16. Cause: (Attach r	results of root cause determination prepare	d in accordan	ce with AP-16.4Q for a	significant deficiency.)
A root cause analys	sis is underway and will be completed b	y December	18, 2001.	
The actions to prec	e Recurrence: clude recurrence will be determined bas	sed on the res	sults of the root cause	e analysis.
18. Due Date: Janua	ary 15, 2002	19. Response	by: Mark Peters M/	11 P. Low 12/11/1
	of complete response	KD .	DINIA Ma	& I Vale 12/4/0
☐ For completion	n of corrective action	Date Decembe	er 4, 2001 Pi	none 5-3644 1440 5
20. Evaluation: ⊠Ad	ccept Partially Accept Reject	21. Concurre	nce:	
QAR Infa	Date 12/10/01 [DOQA G	2.1. Tick	Date /2/3/0

TYPE RESPONSE: ☐ Initial ☐ Complete ☐ Amended	Initial OFFICE OF CIVILIAN Complete RADIOACTIVE WASTE MANAGEMENT			DR/CAR NO. BSC(V)-02-C-002 PAGE 3 OF / 7
	WASHING	TON, D.C.	ORIGINAL	
	DEFICIENCY/CORRECTIVI	E ACTION REP	ORT (RESPON	SE
14a. Immediate Action			· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·
Purchasing issued a Project until further d	hold on all further work prohibiting Nirection.	MSC from providi	ng any work supp	orting the Yucca Mountain
14. Remedial Actions:				
acceptability of the fa	ween the S&ET, Waste Package, Labricated specimens resulted in repl LLNL and MTI will be addressed in N	acement of the s	pecimens. The di	E for determining the 2/28/02 sposition of the samples
necessary. There w End Report (Current	dial action specified in the initial respected only 89 specimens tested at MT by in Draft Form). The data has not attus has been confirmed. (See state	l and the complet been submitted to	e results will be so the TDMS, nor w	ubmitted in a CY2001 Year- vill it be submitted to the
15. Extent of Condition	1:			7-1-10
LLNL have been tes	fabricated from YMP-customer sup ted. Of the 471 samples fabricated ay they've received, 382 have not b	from YMP-custor		
There is no impact to	o SR products. (See next page for in	mpact to LA).		
16. Cause: (Attach re	sults of root cause determination prepa	red in accordance	with AP-16.4Q for a	significant deficiency.)
See attached root ca	ause analysis report.			
17. Action to Preclude	Recurrence:	· · · · · · · · · · · · · · · · · · ·		
	etal Samples Company for further fa es. (Root Cause Analysis: Causa			
(Continued on next p	page).			
18. Due Date: Februa	-	19. Response by	: Mark Peters	300 BECOT
18. Due Date: February 28, 2002 For submittal of complete response 19. Response by: Mark Peters 2/15/02 3/15/02 3/15/02				

Date February 15, 2002 21. Concurrence:

Date 02/21/02 DOQA (

Exhibit AP-16.1Q.1

For completion of corrective action

20. Evaluation: MAccept ☐ Partially Accept ☐ Reject

Rev. 12/20/1999

Phone 5-3644

OFFICE OF CIVILIAN RADIOACTIVE WASTE MANAGEMENT U.S. DEPARTMENT OF ENERGY WASHINGTON, D.C.

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8.	☑DR/CAR ☐ Stop Work Order
	NO. BSC(V)-02-C-002
	PAGE4 OF 17 QA: QA

DEFICIENCY/CORRECTIVE ACTION REPORT/STOP WORK ORDER CONTINUATION PAGE

15. Extent of Condition (Cont'd):

The welded samples were intended to be placed in test in August 2001. A six to seven month delay is now anticipated. This will impact the amount of data from welded samples available for a potential license application.

17. Action to Preclude Recurrence (Cont'd):

Effective December 11, 2001, Procurement/QA Roles and Responsibilities in the Testing Project were reassigned. See email from Mark Peters dated 12/11/01.

Additionally, the Science and Engineering Testing responsible manager has determined that Laboratory Testing, Inc. (LTI) is the "vendor of choice" for replacement of the welded specimens to be fabricated from BSC customer supplied material. LTI is currently on the OCRWM QSL to perform material sample fabrication. The BSC QA organization performed an audit of LTI in December 2001 and found their quality program to be satisfactory. Additionally, the S&ET performed an audit of LTI in December 2001 and found their quality program to be satisfactory. Additionally, the S&ET performed an audit of LTI in December 2001 and found their quality program to be satisfactory. Additionally, the S&ET performed an audit of LTI in December 2001 and found their quality program to be satisfactory. Additionally, the S&ET performed an audit of LTI in December 2001 and found their quality program to be satisfactory. Additionally, the S&ET performed an audit of LTI in December 2001 and found their quality program to be satisfactory. Additionally, the S&ET performed an audit of LTI in December 2001 and found their quality program to be satisfactory. Additionally, the S&ET performed an audit of LTI in December 2001 and found their quality program to be satisfactory. Additionally, the S&ET performed an audit of LTI in December 2001 and found their quality program to be satisfactory. Additionally, the S&ET performed an audit of LTI in December 2001 and found their quality program to be satisfactory. Additionally, the S&ET performed an audit of LTI in December 2001 and found their quality program to be satisfactory. Additionally, the S&ET performed an audit of LTI in December 2001 and found their quality program to be satisfactory. Additionally, the S&ET performed an audit of LTI in December 2001 and found their quality program to be satisfactory. Additionally, the S&ET performed an audit of LTI in December 2001 and found their quality program to be satisfactory. Additionally, the S&ET performed an audit of LTI in December 2001 and found th

BSC QA has taken the necessary steps to improve supplier quality evaluations and audits. Please see attached email from Robert Hartstern dated February 14, 2002. (Root Cause Analysis: Causal Factor 03, Corrective Actions 05, 06).

The S&ET Department is working closely with the Purchasing and QA Departments to provide clear and concise direction in vendor/supplier contracts and analytical and technical services contracts. This includes the preparation and implementation of receipt inspection plans. These groups are currently working together to transfer C22 material from Framatome ANP to LLNL. A letter will be issued by the S&ET manager addressing clarification of the requirements listed in the contract already in place. This documentation will be contractually binding (will reference current Framatome ANP purchase order and technical guidance document. (Root Cause Analysis: Causal Factor 04, Corrective Action 07).

(See Next Page for Clarification of Information for this CAR)

DR/CAR NO: BSC(V)-02-C-002

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This page was added for clarification purposes only.

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ACRONYM LIST:

BSC Bechtel SAIC, LLC

DOE Department of Energy

LLNL Lawrence Livermore National Laboratories

MSC Metal Samples Company

MTI McDermott Technologies, Inc.

QA Quality Assurance
QSL Quality Supplier List

S&ET Science and Engineering Testing

TDMS Technical Data Management System

YMP Yucca Mountain Project

REMEDIAL ACTIONS FROM INITIAL RESPONSE:

Remedial Action No. 1: No longer applies. Metal Samples Company will not be used for further fabrication activities.

Remedial Action No. 2: BSC received a letter from Metal Samples Company detailing the sample numbers, dates, and destination of all YMP customer supplied samples.

Remedial Action No. 3: This is addressed in the extent of condition (block 15 of this response).

Remedial Action No. 4: This is addressed in paragraph one of the remedial actions (block 14 of this response).

Remedial Action No. 5: No longer applies. See paragraph two of the remedial actions (block 14 of this response) for the justification.

Exhibit AP-16.1Q.2 Rev. 06/01/1999

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Incident:

CARV002

BSC(V)-02-C-002 Metal Samples Traceability Deficiency

Date of Incident:

11/15/2001

Date Investigation Started:

12/10/2001

Date Draft Report Sent for Approval: 12/17/2001

Incident Classification:

Incident

Incident Summary:

As a result of an investigation into a Non-Conforming Sample received at MTI, a traceability issue was raised on multiple samples. A Corrective Action Report (CAR(V)-02-C-002) was issued: "No documentation could be provided by MSC to establish traceability of the YMP-Customer supplied material and the associated YMP-customer supplied certified material test reports (CMTR). As a result the traceability of the material to the CTMRs for the specimens fabricated by MSC to support TRW Purchase Orders A15382YS9B and A15414SS0B could not be confirmed

Initial Conditions:

An Audit was conducted on 11/06/98 by DOE OQA on the QA program implemented by MSC. This program was that of Alabama Specialty Products. Inc. (ASPI)the parent company of MSC.

MSC is on the QSL list

The initial contract A15382YS9B was issued in February 1999. The additional contract was issued in May 2000.

The contracts stipulated that MSC was to use the ASPI approved QA program for the work. It also stipulated that "OA Records such as...traceability records...(shall be) retained by the supplier for a minimum of 3 years..."

The contractor was initially using vendor supplied material and switched to customer supplied material from Framatone- an M&O teammate with TRW.

Initiating Event:

A particular specimen from MSC was determined to be non-conforming by MTI. A contractual hold was issued to MSC by BSC Procurement on June 21, 2001. DR No BSC(V)-01-D-124 was initiated and an investigation was instituted. One of the outcomes of the investigation was the discovery of a traceability issue to the Framatone supplied material. The material was sent to MSC on 9/99.

Incident Description:

Investigation into the traceability of the specimens cut from customer supplied material revealed that there was no retrievable/available documentation that the specimens were cut from the material supplied by Framatone. Therefore there was no traccabilty to the customer supplied certified material test reports(CMTR).

Causal Factor:

New employee at MSC used in the Receiving Clerk role during the Period in question

For approximately three months a replacement employee at MSC was used due to the regular employee being on sick leave. This employee did not record receipt of material information into the log book as required by MSC Work Instruction 10.1-1. One of the items not recorded was the Framatone material. Corrective actions for this employee error have been initiated by MSC>

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Root Cause: Human Performance Difficulty (1H)

Procedures (3P)

Not Used / Not Followed (4NU)

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Corrective Action: 01

Date Due:

Responsible Dept.:

Date Complete:

Responsible Person:

Corrective actions for this causal factor, which is the root cause, have been initiated by Metal Samples

Company

Root Cause: Human Performance Difficulty (1H)

Work Direction (31)

Selection of Worker (4SW) Not qualified (5NU)

Corrective Action: 02

Date Due: Date Complete: Responsible Dept.: Responsible Person:

See CA 1

Root Cause: Human Performance Difficulty (1H)

Work Direction (31)

Supervision During Work (4SD)

No supervision (5SN)

Corrective Action: 03

Date Due:

Responsible Dept.:

Date Complete:

Responsible Person:

See CA 1

Causal Factor:

Purchase Order(PO) requirements are not sufficiently detailed to prevent the error.

The definitions and understandings between MSC and BSC were not the same for specific words such as what constitutes a OA document and what constituted traceability. While the The PO attachment "Procurement Requirements Document for Test Specimens". Rev 02, June 23,1999, Pg 6of 6 states, "...QA records such as:...traceability records (shall be) retained by the supplier for a minimum of three years...", MSC received the customer supplied material under OP 7.0-1. Control of Customer Supplied Material (General). This did not require a QA inspection and was not considered a QA document by MSC.

Additionally, the logs (which were not inputted to properly by the MSC employee) were only required to be retained for six months. These were not considered QA or traceability documents. MSC could have disposed of them under their ASPI controls. Traccability to MSC was defined by their Job Traveller process.

Root Cause: Human Performance Difficulty (1H)

Management System (3M)

Standards, Policies, or Admin. Controls NI (4SL)

Not strict enough (5NS)

Corrective Action: 04

Date Due:

Responsible Dept.:

Date Complete:

Responsible Person:

Purchase Orders need to be detailed enough to ensure everyone understands the definitions of special use words. "QA documents" should be defined. Traceability should be clarified.

Recommendation:

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Review current contracts to ensure BSC requirements are understood by sub-contractors. Any clarifications should be well documented.

This CAR should be taken into account when writing new purchase orders that require stringent adherance to regulatory requirements.

Causal Factor:

03

OCRWM OQA annual supplier evaluation did not identify any issues with traceability.

On 11/12/99 OCRWM OQA conducted an annual evaluation. This was 2 months after the receipt of customer supplied materials from Framatone. The evaluation (MOL.20000119.0206) stated:

"In discussions with Rick Douglas, QA Manager, at MSC, MSC has had no QA Program changes or major management changes in the last year. Additionally, he indicated that an ISO 9000 maintenance audit in June identified no deficiencies. The annual internal MSC audits also did not identify any major program deficiencies. Therefore, based on input from John Estill, the supplier and a review of purchase orders, the supplier has performed satisfactorily for the M&O and an OCRWM audit is not necessary until the next evaluation date."

At this point in time the material had been received and the logbooks were not properly documented.

A history of audits of MSC reveals a pattern of problems associated with all or parts of the ASPI QA Program implementation dating to 1995. The most recent problem dealt with the Welding Program Quality in Jan/Feb 2000. Audit OQA-SA-96-007 had resulted in a CAR and 4 DRs. Audit OQA-SA-97-018 "...revealed unsatisfactory implementation of Metal Samples quality program in the area of procurement control."

Additionaly, traceability doubts were raised by LLNL in eary 2000. Only the issue concerning the pedigree of the material (provided by Framatome) was resolved. No need was seen for an audit/surveillance of the fabricator (MSC) of the specimens.

Root Cause: Human Performance Difficulty (1H)

Management System (3M)

Oversight / Employee Relations (4OE)

Infrequent audits & evaluations (a & c) (51F)

Corrective Action: 05

Date Due:

Responsible Dept.:

Date Complete:

Responsible Person:

Audits of sub-contractors show that frequency of audits and deficiencies are related. There was a history of audit problems with this sub-contractor

Recommendation:

Increase the audit frequency when there is evidence of previous non-compliance.

Root Cause: Human Performance Difficulty (1H)

Management System (3M)

Oversight / Employee Relations (4OE)

A & E lack depth (5LD)

Corrective Action: 06

Date Due:

Responsible Dept.:

Date Complete:

Responsible Person:

The evaluation conducted in 11/99 indicated traceability at MSC was not a problem. Yet at the time, the traceability problem already existed.

ORIGINAL

Recommendation:

If a particular area is not actually checked during an annual evaluation, should it be marked N/A for the evaluation.

Causal Factor:

04

Receivers of finished specimens did not require the MSC receipt of CSM traceability

The first samples shipped under PO A15382YS9B were delivered 12/17/99. There was no requirement that traceability as is now being defined, ex post facto, be delivered with the specimens.

What was accepted as valid traceability, at LLNL, at that time did not include copies of the receipt logbook pages.

Root Cause: Human Performance Difficulty (1H)

Management System (3M)

Standards, Policies, or Admin. Controls NI (4SL)

Not strict enough (5NS)

Corrective Action: 07

Date Duc: **Date Complete:** Responsible Dept.:

Responsible Person:

Recommendation:

Receivers of finished products from sub-contractors be required to receive all official requirement documents, including traceability, as a condition of receipt.

Investigator / Investigation Team:

Tommy Wall

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MTI has performed tests on the following specimens supplied by Metal Samples:

Specimen Number Range	Material	Condition
IC1901 – IC1918	Alloy 22	Welded
IC2001 – IC2024	Alloy 22	Annealed
IC2301 – IC2324	TiGr7	Annealed
IC2401 – IC2423	TiGr7	Welded

The initial results from these tests were submitted to TRW/BSC in an interim report (MTI RDD:2001:43761-103-000:01R, dated June 6, 2001). Complete results on these specimens will be submitted in a CY2001 Year End Report (currently in draft form). The data has not been submitted to the TDMS (Technical Data Management System), nor will it be submitted to the TDMS until its Q status has been confirmed.

Herald Gordon

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ORIGINAL

Roxie VanDillen

01/08/2002 12:35 PM

To:

imsarver@mcdermott.com

cc:

Mark Peters/YM/RWDOE@CRWMS, Gerald Gordon/YM/RWDOE@CRWMS

Subject: Request for Documentation for Disposition of Data Generated at MTI

QA:N/A Exclusionary

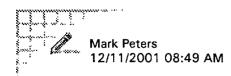
Jeff,

I need a documented signed statement to support the fact that none of the data generated at MTI using the "suspect" samples provided by MSC have been transmitted to the TDMS. Additionally, I need a statement documenting the disposition of the data that was generated. Please provide this information at your earliest convenience, I need it as part of the response to CAR No. BSC(V)-02-C-002.

Should you have any questions, please do not hesitate to call me on (702) 295-5779.

Thank you.

Roxie VanDillen



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To:

Robert Henderson/YM/RWDOE@CRWMS, Sharon Silva/YM/RWDOE@CRWMS, Carolyn

Makaena/YM/RWDOE@CRWMS, Michael Eldred/YM/RWDOE@CRWMS, Robert Hartstern/YM/RWDOE@CRWMS, Richard Maudlin/YM/RWDOE@CRWMS, Kenneth

Gilkerson/YM/RWDOE@CRWMS, Rick Weeks/YM/RWDOE@CRWMS, Dan Klimas/YM/RWDOE@CRWMS, Steve Dana/YM/RWDOE@CRWMS, Judith

Gebhart/YM/RWDOE@CRWMS, Darell von der Linden/YM/RWDOE@CRWMS, Gregory

Jensen/YM/RWDOE@CRWMS

cc:

Robert Andrews/YM/RWDOE@CRWMS, William Watson/YM/RWDOE@CRWMS, Thomas

Doering/YM/RWDOE@CRWMS, Gerald Gordon/YM/RWDOE@CRWMS, Pasu Pasupathi/YM/RWDOE@CRWMS, John Estill/YM/RWDOE@CRWMS, Cynthia Palmer/YM/RWDOE@CRWMS, Christine Stockman/YM/RWDOE@CRWMS, Roxie VanDillen/YM/RWDOE@CRWMS, Carolyn Moyers/YM/RWDOE@CRWMS, Howard Adkins/YM/RWDOE@CRWMS, Tammy Summers/YM/RWDOE@CRWMS, Jerry

Cogar/YM/RWDOE@CRWMS, Jack Cloud/YM/RWDOE@CRWMS

Subject: Reassignment of Procurement/QA Roles & Responsibilities in Testing Project

Effective immediately, all procurement related activities in the Waste Package Testing area will be the responsibility of Carolyn Moyers. John Estill or Tammy Summers, LLNL, will serve as technical POC for procurements in this area (depends on the contract). All QA related matters in the Waste Package Testing area will continue to be handled by Roxie VanDillen.

Howard Adkins will continue to serve as the Work Package Manager for Waste Form Testing and Technical POC for the ANL and PNNL contracts. Carolyn Moyers will continue to support Howard in procurement activities related to ANL and PNNL. Roxie VanDillen will continue to be the QA POC in the Waste Form Testing area.

If there are any questions concerning this matter please contact me (5-3644).

Mark Peters, Manager Science&Engineering Testing Project Robert Hartstern 02/14/2002 01:17 PM

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To:

Roxie VanDillen/YM/RWDOE@CRWMS

cc:

Subject: CAR 002

QA:N/A Exclusionary

Attached is the response for two corrective action resulting from the TapRoot for CAC 002.



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TapRoot Incident Report
CARV002
BSC(V)-02-C-002 Metal Samples Traceability Deficiency

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Causal Factor 03 Response

Corrective Action:

05

"Increase the audit frequency when there is evidence of previous

non-compliance"

While there is no dispute that increasing the frequency of audits may reduce the number of findings, this incident is not directly related to audit frequency. From the time BSC took responsibility for supplier qualification in February, 2001, there was no evidence of a problem with traceability of materials at MSC until identified by BSC in November, 2001. Previous audits prior to that date indicate that MSC had an adequate process for identifying customer supplied materials upon receipt, but as discussed in Causal Factor 01, these processes were not implemented for the reasons identified. BSC conducted an audit in November 2001 after the deficiency in tracability of customer supplied materials was identified in CAR 002 issued on 11/15/01. Traceability of materials procured directly by MSC was found to be satisfactory in that audit, which was observed by the Nuclear Regulatory Agency and OCRWM OQA.

If there are indications of potential problems with a supplier's performance additional audits, other than the annual/triennial scheduled audits, may be required. This may be identified by the requesting organization or the result of a supplier's previous deficiencies, depending on the impact of the deficiencies on the product. The BSC Manager of QA imposed this action shortly after BSC became responsible for maintaining the QSL. When a BSC supplier audit identifies a number of conditions adverse to quality or one that has the potential to directly impact product quality, a review is conducted when the condition(s) is corrected. The review by the BSC Procurement Quality Assurance Representative (PQAR) is to evaluate any impact on quality and to determine whether to perform a surveillance or follow-up audit, maintain the scheduled annual audit, or return the supplier to a triennial audit schedule. Any follow-up actions are documented in the SER and tracked by QSL Open Items List. This practice has been ongoing since October 2001 as documented in audit reports and Supplier Evaluation Reports (SER). Ajax Magnethermic Corporation and Campbell Scientific are two examples of this process. The QSL currently has 11 suppliers with restrictions because of conditions adverse to quality identified during audits.

Causal Factor 03 Response

Corrective Action:

06

"If a particular area is not checked during an annual evaluation, should it be marked N/A for the evaluation"

At this time if a particular area is not checked during an annual evaluation, it is checked N/A in the applicable portion of the SER. The discussion for Casual Factor 03 indicates that the annual evaluation conducted on 11/12/99 should have identified the traceability issue because the plate had arrived at MSC two months before. BSC Annual supplier evaluations only evaluate those

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elements of the suppliers QA program that can be evaluated without actually visiting the facility and conducting an audit. The annual evaluation consists of the questions identified in Block 11 on the SER and is conducted through an interview with the supplier's quality representative, input from the requesting organization's Technical Representative, and review of any pertinent documents, including changes in the supplier's quality program.

A "Guideline for Preparation of Supplier Evaluation Report (SER)" has been developed to aid the BSC PQAR in completing the SER and in conducting annual evaluations. The Guideline provides the following basic items:

- 1) Questions to ask during interviews with suppliers (e.g. have internal audits been performed? were any sub-tier suppliers used? if so, were the QA and technical requirements passed down?);
- 2) Identifies supporting documentation to request from the supplier (e.g. the supplier's annual audit schedule; copies of audit reports or other evidence of the audits; evidence of the supplier's evaluation for selection; and an unpriced copy of the procurement documents to demonstrate passing down QA and technical requirements);
- 3) Process for obtaining input for the annual evaluations from the requesting organization's Technical Representatives. The Guideline references the questionnaire to be sent to the requesting organization's Technical Representative to be completed and returned; and
- 4) Instructions to provide consistency in completing the SER.

BSC Procurement Quality has made an effort to improve annual supplier evaluations through both staff meetings to re-enforce the importance and developing the Guideline for preparation of SERs. In addition, Procurement Quality has developed the questionnaire for the to requesting organization to complete in support the annual evaluations as described above. Neither of these was available prior to BSC assuming responsibility for supplier evaluations in February 2001.

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John C. Estill
Phone 925-422-6139
Fax 925-422-3362

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Te); 	Roxic Van Dillen			Fax: 702-295-3554						
Fr	om;	John	Estill			Date:		1/9/2	002		
R	Re: Corrective Action Request (CAR) BSC(V)-02-C-002		Pages;		1 including cover sheet						
C	D:	·			•						
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Sincerely,

John Estill

Roxie VanDillen

01/08/2002 12:01 PM

To:

John Estill/YM/RWDOE@CRWMS

cc:

Mark Peters/YM/RWDOE@CRWMS, Tammy Summers/YM/RWDOE@CRWMS, Cynthia

Palmer/YM/RWDOE@CRWMS

Subject: Written Statement That None of the Suspect Samples Shipped to LLNL Have Been Tested

QA:N/A Exclusionary

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John,

I'm not sure if you can provide this or if Tammy needs to, but I need a written, signed statement that none of the LLNL samples considered "suspect" in BSC(V)-02-C-002, have been tested. I need this information to satisfy commitment (5) of the CAR. Please provide the information at your earliest convenience.

Should you have any questions, please do not hesitate to call me on (702) 295-5779.

Thank you.

Roxie

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OFFICE OF CIVILIAN RADIOACTIVE WASTE MANAGEMENT U.S. DEPARTMENT OF ENERGY WASHINGTON. D.C.

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QA: QA

CONDITION ADVERSE TO QUALITY CONTINUATION PAGE

VERIFICATION OF CORRECTIVE ACTION AND CLOSURE OF CAR BSC(V)-02-C-002

On March 19-22, 2002, a follow-up verification was performed to verify implementation of corrective action to Corrective Action BSC(V)-02-C-002. This follow-up verification was based on a review of the following documentation to support implementation of corrective action:

- · Letter from BSC Procurement Department, dated November 26, 2001, to Metal Samples Company (MSC) transmitting a copy of CAR BSC(V)-02-C-002.
- · Letter from BSC Procurement Department, dated December 5, 2001, to MSC directing them to place a hold on all further work and included the requirements stated in the OCRWM Qualified Supplier List (QSL) that MSC is prohibited from providing any work supporting the Yucca Mountain Project until further direction.
- · Nonconformance Report YMSCO-02-0021, dated 02/14/02, identifying the nonconforming condition with Customer Supplied Material fabricated by MSC.
- · Documented signed statement from John Estill, dated 01/09/02, reflecting that LLNL has not tested any specimens that were ordered and received supporting TRW Environmental Safety Systems Purchase Order A15414SSOB. Documented signed statement from Gerald Gordon, dated 01/14/02, indicating that the complete results testing by McDermott Technology, Inc. (MTI) will be submitted in a CY2001 Year End Report (currently in draft form). The statement also reflected that no data from the MTI testing has been submitted to the Technical Data Management System.
- · Supplier Evaluation Report, approved on 01/18/02, which identifies a restriction that states in part: "Metal Samples shall be prohibited from performing any work supporting YMP until concurrence from the BSC Manager of Quality Assurance...".
- · OCRWM QSL which identifies a restriction prohibiting the performance of any work supporting YMP.
- · E-Mail from the Manager of Science & Engineering Testing, dated 12/11/01, addressing the reassignment of Procurement/QA Roles and Responsibilities in the Waste Package Testing area.
- The approved List of Items for Laboratory Testing Incorporated (LTI) for the Fabrication of Specimens from Alloy 22 Customer Supplied Material, dated February 14, 2002. The List of Items was found to incorporate detailed instructions to LTI for maintaining material traceability by the establishment of hold points at all critical steps in the process. List of Items is an attachment to BSC Purchase Order 2450-160-PO-001195.
- · E-mail, with attachment, from the Manager, BSC Verification Quality, defining the steps being implemented which provide for increased supplier oversight based on the results of previous audits and performance. Measures include increased audit frequency when there is evidence of previous non-compliance through the use of a QSL Open Items List and the preparation of a "Guideline for Preparation of Supplier Evaluation Report (SER)" to aid the BSC Procurement Quality Assurance Representative in completing the SER for the conduct of Annual Evaluations.
- · Current QSL Open Items List, dated 03/20/02, reflecting the list of supplier follow-up actions pending and those actions completed to date.
- The List of Supplier Assignments, dated 03/20/02, listing the OCRWM Approved Suppliers and the responsible QAR.
- · Guidelines for Preparation of Supplier Evaluation Reports (SER) which details the process for preparation of SERs.

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OFFICE OF CIVILIAN RADIOACTIVE WASTE MANAGEMENT U.S. DEPARTMENT OF ENERGY WASHINGTON, D.C.

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QA: QA

CONDITION ADVERSE TO QUALITY CONTINUATION PAGE

CONTINUATION OF VERIFICATION OF CORRECTIVE ACTION AND CLOSURE OF CAR BSC(V)-02-C-002

- · Letter from the Manager, Science & Engineering Testing, to Framatome ANP detailing the process, including documentation requirements, for shipment of Alloy C22 Corrosion Sample Plates from Framatome ANP to Lawrence Livermore National Laboratory (LLNL).
- · BSC receipt acceptance plan, dated 02/15/02, providing the criteria to be used by LLNL in the receipt of Alloy C22 Welded Plate shipped from Metal Samples Company to LLNL.
- · Specimen accountability tables for specimens on hold and red tagged at MTI and LLNL.

Based on the above, this CAR is considered closed.

The documentation provided, including the response to the CAR, satisfactorily resolves the condition adverse to quality and implements the corrective actions stated in the CAR response. The evidence reviewed during this verification and discussions with Science & Engineering Testing personnel have revealed a tremendous effort put fourth in controlling the identified problem and moving forward with a plan to mitigate future problems with the traceability of fabricated metal specimens. The List of Items issued under the existing LTI purchase order for the fabrication of new specimens was found to include stringent controls on the process which will assure independent oversight of the documentation generated by LTI at all critical steps in the process. This, along with surveillances of LTI activities by BSC QA and BSC Science & Engineering Testing/LLNL staff in the beginning stages of fabrication, will assure that adequate controls are being implemented for the traceability of the metal specimens during the receipt of material from BSC through final inspection by LTI.

Richard L. Maudlin

04-04-02

Date Signed

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