



RSV Zware Apparatenbouw b.v.  
Rotterdam Heavy Equipment

United States  
Nuclear Regulatory Commission  
Region IV  
611 Ryan Plaza Drive, Suite 1000  
Arlington, Texas 76012  
U.S.A.



Attn. Mr. Uldis Potapovs  
Chief Vendor Inspection Branch

Your ref.

Our ref.

Rotterdam, February 19th, 1980

Dir.

KD 80013

Tel. 010-872144

Subject : Your Report Docket No. 99900039/79-02

Gentlemen,

This is to acknowledge receipt of your letter dated 14 January 1980 with enclosure, which we received January 22nd.

Please find attached to this letter our detailed response to the reported findings as you requested in your letter.

Documents containing information as evidence to our response, you will find attached to this report.

We hope that our response will be satisfactory, but when you need any additional information, please contact us.

Yours Sincerely,

  
QA Manager

Enclosure : Report KD 80015

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Subject : RSV-A response to  
Inspection Report NRC Audit,  
Docket Nr. 99900039/79-02,  
dated 14 January 1980.

Date of response : 1980-02-19

Prepared by : Ir.M.Lodder, Manager QA.

A. NRC Finding

Paragraph 6.3.b in Chapter 6 of the QA Manual states that the Master Traveler is the Controlling document for all processes applied to items, subassemblies and assemblies.

Contrary to the above, certain Master Travelers were not the controlling document for all processes, as evidenced by the failure to include the process specification revision number utilized to accomplish a given manufacturing operation, e.g. Operation T-2 on the Master Traveler for Order 30823, Suborder 61550, Piece No. 102; Operation T-10 on the Master Traveler for Order 30823, Suborder 72000, Piece 0102.

RSV-A response

1. We agree that on a number of Master Travelers, as observed above, responsible QA personnel failed to enter the revision number of the specifications used.

We checked all Master Travelers of current orders still in circulation in the workshop and filled in where necessary the missing revision numbers.

The Master Travelers already on file will be checked and corrected during the Final Review of the documents for the Permanent Record Package.



2. In order to prevent recurrence we instructed all QA personnel concerned by means of a short internal course. A copy of the Attendance Roll of this course is attached (Att.A1).
3. The Final Review of the documents for the Black Fox I vessel will be completed before July 1980.

B. NRC Finding

Paragraph 4.2 in Chapter 4 of the QA Manual States, "The Manager Engineering has the overall responsibility for the engineering and design of nuclear items in accordance with the owner's Certified Design Specification and applicable code requirements."

Paragraph NA-4300 "Design Control" of the 1974 Edition of the ASME Code, subparagraph (b) states : "Stress Reports and the overall design shall be reviewed for compliance with the Design Specifications and this Section. Design reviews and checking shall be performed by or for the responsible design organization by individuals or groups other than those who performed the original design." Subparagraph (c) states "Reports of in-process and final design reviews shall be reviewed by management of the responsible design organizations."

Paragraph 7.4.3 of the Black Fox vessel Design Specification (Document 21A9477) requires that the detailed analyses for each component be submitted for buyer's approval in accordance with the Engineering Schedule but not less than 1 year before the vessel completion.

Contrary to the above:

- a. There was no documented evidence that RSV-A had performed design reviews of stress reports (sizing calculations), which had been prepared by another company and subsequently approved by RSV-A for the Black Fox vessels.
- b. Detailed stress analyses of each Black Fox vessel component had neither been submitted for buyer's approval, nor had a submittal date been posted in the Engineering Schedule, although the completion date for the Black Fox 1 vessel was estimated by RSV-A as being less than one (1) year from the date of this inspection.



RSV-A response

- a.1. Design review of all stress reports, which have been submitted to buyer, will be conducted by RSV-A as required by Code (1974 Edition).
2. For the Stress Reports which still have to be submitted to buyer, a design review will be made available as required.
3. Corrective actions on 1) above will be completed by March 1, 1980.

RSV-A response

- b.1. A Deviation Request will be submitted to buyer, requesting to change the submittal requirements for Black Fox 1 stress report in the Design Specification from one year to one month. Planned submittal dates will be put on the Engineering Schedule.
2. For future projects we will require more suitable time margins between latest submittal date of stress report and vessel completion to allow for reconciliation with design changes and as-built drawings.
3. The Deviation Request will be submitted to buyer before March 1, 1980.

C.

NRC finding

Paragraph NB-2223.2 of the 1974 Edition of the ASME Code requires that material test coupons for forgings with thickness exceeding 2 - inches be taken "so that the specimens shall have their longitudinal axis at least  $1/4 t$  of the maximum heat treated thickness from any surface ...."

Contrary to this requirement, material test coupons for the Black Fox-2 vessel steam outlet nozzle safe end forgings (4.3-in. wall thickness) were supplied by BOSCHGOTT HARDSHUTTE O.-BREYER GmbH to a sketch which designates the specimen location as  $3/4$  inch min. from the outside surface of the forgings.



RSV-A response

1. Testing of Black Fox 2 vessel steam outlet nozzle safe end forgings, supplied by BOSCHGOTTHARDSHUTTE O.BREYER GmbH will be repeated by RSV-A on available rest material, which meets ASME requirements for test material.
  
2. As this deviation does not seem to originate from any systematic deficiency it is to our opinion not necessary to take any corrective measures.  
However, adequate steps will be taken when repetition does occur
  
3. We estimate that the retesting will be finished before the end of April, 1980.

Unresolved Items

The unresolved items mentioned in above NRC report will be evaluated by RSV-A and will be discussed with you during the next inspection.



ATTENDANCE ROLL

Subject: QA course no. 1980-1  
"Process Control"

Course Leader: C. Kleutwyk Date, 1980-02-19

Name	Adm. Nr.	Function	Signature
J. Roos	23912	ASS. QA SHOP ENGINEER	
H. J. Korman	23140	QA SHOP INSP.	
C. F. Post	23660	ASS QA SHOP INSP	
A. v. Ree	23189	ASS. QA SHOP ENGR	
F. Koorn	23134	QA PROJ. Eng.	
A. Warendorp	23188	ASS. QA PROJ. Eng.	
F. G. Smets	20118	Absent, ill.	
P. H. Boop	23103	QA PROJ. Eng	
S. A. Huiskhoff	23120	QA System Eng.	
J. H. v. Claid	23145	QA Eng.	