

U. S. NUCLEAR REGULATORY COMMISSION
OFFICE OF INSPECTION AND ENFORCEMENT

REGION IV

Investigation Report No. 99900727/80-01

Company: Keene Corporation
Rayproof Division

Address: 50 Keeler Avenue
Norwalk, Connecticut 06856

Investigation Conducted: August 26-28, 1980

Investigation At: Norwalk, Connecticut

Investigator:

R. K. Herr

R. K. Herr, Investigation Specialist

12 Sept 1980

Date

Inspector:

D. E. Whitesell

D. E. Whitesell, Chief, Components 1 Section
Vendor Inspection Branch

12 Sept 1980

Date

Reviewed By:

Uldis Potapovs

Uldis Potapovs, Chief, Vendor Inspection
Branch

9-12-80

Date

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Summary

Investigation on August 26-28, 1980, Report No. 99900727/80-01.

Area Investigated: Allegations that Rayproof Division management personnel falsified welder qualifications. This investigation involved 24 investigator man-hours by one NRC Investigator and one NRC Inspector.

Results

Allegations that Rayproof Division falsified welder qualifications is confirmed.

INTRODUCTION

Keene Corporation, Rayproof Division, located in Norwalk, Connecticut, periodically, under specific contracts, fabricates nuclear doors for various customers.

REASON FOR INVESTIGATION

On June 26, 1980, an investigator for the U. S. Nuclear Regulatory Commission, Region I, received a telephone call from an individual who claimed that the Rayproof Division of Keene Corporation, a vendor supplying material on contract for nuclear power stations, falsified welder qualifications.

SUMMARY OF FACTS

On July 11, 1980, a written report of the above allegation was forwarded to Region IV for appropriate action. On August 8 and 25, 1980, the alleged (Individual A) was telephonically contacted and reiterated the following specific allegation:

That Rayproof Division management personnel certified Individual A as qualified in submerged arc welding when, in fact, Individual A claims he did not perform a submerged arc weld for testing evaluation.

DETAILS1. Persons ContactedKeene Corporation, Rayproof Division Employees

*Robert Yff, Vice President of Operations
Frits A. Olsen, Quality Control Manager

Other Personnel

Individuals A through G

*Denotes those attending exit interview.

2. Investigation of AllegationAllegation

That Rayproof Division management personnel certified Individual A as qualified in submerged arc welding when, in fact, Individual A claims he did not perform a submerged arc weld for testing evaluation.

Investigative Findings

On August 26, 1980, Mr. Clif Hale, Chief, Project Section, Vendor Inspection Branch, Region IV, telephonically contacted Mr. Robert Williams, a representative of Ebasco Corporation, to determine if Ebasco had contracts with Rayproof Division to fabricate any nuclear-related work. Mr. Hale advised that Mr. Williams reported that Ebasco has one purchase order with Rayproof Division concerning safety-related fabrication associated with the WPPSS project. Mr. Williams stated that their records reflect that Rayproof Division is fabricating equipment hatch doors and spent fuel building doors, which are classified as nuclear class seismic.

Interview of Individual A

On August 27, 1980, Individual A was interviewed and executed a signed statement (Document 1). Individual A stated that during the November/December 1979 time frame, Rayproof Division of Keene Corporation qualified three welders in a semi-automatic submerged arc welding process. Individual A identified the three welders as himself and Individuals D and E. Individual A described the following method utilized to qualify the three welders:

Individual D was instructed by management individual (identification unknown) to weld a 3 foot test plate utilizing the above submerged arc welding process; Individual D was then told to divide the 3 foot test plate into three equal parts; Individual D was then told to write the name of Welder A on one piece, Welder D's name on another piece, and Welder E's name on one piece; Individual D was then told to forward the three pieces to the Bridgeport Testing Laboratory for proper analysis.

Individual A stated that subsequently the test plate results were returned and the test plate bearing the names of Individuals A and E were acceptable; however, the test plate bearing Individual D's name was unacceptable. Individual A advised that based on this lab report, he and Individual E were certified as qualified to perform semi-automatic submerged arc welding. Individual A maintained that he did not weld the test plate and that Individual E did not weld a test plate, yet both of them became certified. Individual A added that Individual D, who had done all the welding, was not acceptable, threw his plate away and took one of the test plates that was acceptable, erased the name on it, and resubmitted it to the lab. Individual A claimed that subsequently the test plate was returned as acceptable and Individual D was then certified.

Interview of Individual B

On August 27, 1980, Individual B advised that Rayproof Division currently has five welders employed that are qualified to perform submerged arc welding. Individual B stated that he requires that each welder actually perform test plate welding before test plates are sent to the laboratory for analysis. Individual B claimed that he personally observed the welding by various welders from September 1978 to February 1980. Individual B stated that Rayproof Division does not have any written procedures on how the welders are qualified, however, he keeps records of those welders who are qualified in various processes. Individual B provided records of qualifications of Individuals A, D, and E (Documents 2, 3, and 4, respectively), concerning the semi-automatic submerged arc welding process. Individual B claimed that to the best of his knowledge, no nuclear safety-related welding was conducted between October 1979 and May 1980.

Interview of Individual C

On August 27, 1980, Individual C was interviewed. Individual C stated that he is a qualified submerged arc welder and that he actually performed welding on a test plate to become qualified. Individual C stated that he has heard rumors to the effect that some welders were qualified in the November 1979 time frame when one welder actually performed the welding for two other welders. Individual C could not provide the identities of these welders or other personnel involved.

Interview of Individual D

On August 27, 1980, Individual D was interviewed and executed a signed statement (Document 5). Individual D admitted that in November 1979, he was instructed to weld a 3 foot test plate utilizing the submerged arc welding process. Individual D claimed that the test plate was then divided into three equal pieces and he was then instructed to write his name on one piece and have Individuals A and E each place their name on one of the other two pieces. Individual D remarked that the three test plates were then forwarded to the Bridgeport Testing Laboratory for proper analysis. Individual D explained that subsequently the test results disclosed that Individual A's and E's test plates were acceptable, however, his was unacceptable. Individual D stated he was then

instructed to throw his test plate away and resubmit one of the test plates that had been acceptable. Individual D remarked he changed the physical appearance on one of the test plates that were acceptable by grinding various areas on the test plate and then resubmitted the test plate, with his identity on it, to the testing laboratory for analysis. Individual D claimed that subsequently his resubmitted test plate was returned acceptable. Individual D pointed out that since he did all three of the welds, and two of the three welds were acceptable, he was technically qualified in the submerged arc welding process. Individual D identified Individual B as the person who ordered him to perform the weld on the test plates, to divide the test plates into three equal pieces, and to insure that the names of Welders A and E were placed on two of the remaining pieces for submission to the testing laboratory.

Reinterview of Individual B

On August 28, 1980, Individual B was reinterviewed and executed a signed statement (Document 6). Individual B admitted that in November 1979 he instructed Individual D to weld a 3 foot test plate utilizing a submerged arc welding process, to then divide the test plate into three pieces, and to place the name of Individual A on one piece, Individual D on another piece, and Individual E on one piece. Individual B admitted he submitted these three pieces to the Bridgeport Testing Laboratory and subsequently upon receiving the results of the laboratory analysis, qualified Individuals A and E as certified in the submerged arc welding process.

Individual B further admitted that he was aware that Individuals A and E did not actually do any test welding, but explained that since Individuals A and E were present in the welding shop and witnessed Individual D do the welding then he considered the 3 foot welding test plate to be a "collective effort." Individual B explained he has not used this collective method in the past and did not believe he would use this method in the future. Individual B stated that Individuals A and E are no longer employed by Rayproof and he did not know their present whereabouts.

Interview of Individual E

On September 2, 1980, Individual E was interviewed telephonically and advised that he was employed by the Rayproof Division of Keene Corporation during the November 1979-January 1980 time frame. Individual E advised that he was qualified/certified as a submerged arc welder by Individual B during this time; however, did not actually perform any welding test plates for submerged arc welding. Individual E stated that he was the individual who actually wrote the names and clock numbers (welder numbers) of Individual A on one piece of test plate, Individual D on another piece of test plate, and his own name on one piece of test plate. Individual E claimed that he observed Individual D make a 3 foot test plate weld utilizing the submerged arc process and later divide the 3 foot test plate into three equal pieces. Individual E claimed he was merely following orders of Individual B.

Interview of Individuals F and G

On August 27, 1980, Individuals F and G, welders employed by the Rayproof Division, Keene Corporation, were interviewed. Individuals F and G claimed they both were qualified to do submerged arc welding and explained that they had each performed welding on test plates that were submitted to a laboratory for proper analysis. Neither Individual F or G claimed to have any knowledge of any falsification of welder qualifications of individuals presently employed by Rayproof Division of any individuals that had previously been employed by Rayproof Division.

Review of Records

On August 27, 1980, a review of the manufacturing processing sheet (traveler) disclosed job number N2467, Item 11, Door Leaf Number A126. This processing sheet had the following information recorded:

Drawing 3A-28, Revision 2, material verification by inspector FAD
Dated January 4, 1980, Welding Procedure Number 12-1-9 and 12-1-7,
for tacking and welds. Welders performing both tack and weld were
identified as Individuals A and E, dated January 10 and January 30,
1980. A followup inspection report is reported in Report No. 99900727/
80-02.

Exit

On August 28, 1980, Mr. Robert Yff (supra) was apprised of the results of this investigation. Mr. Yff advised that to the best of his knowledge semi-automatic hand held submerged arc welding is utilized on all nuclear-related jobs. Mr. Yff maintained that he was totally unaware of any falsification of welders' qualifications, and does not support or condone this type of activity.

Documents

The written statements and copies of all documents identified herein relating to this allegation are maintained in the NRC Region IV Office. The following is a list of documents utilized in this report.

- Document 1 - Statement of Individual A, dated 08-27-80
- Document 2 - Qualification Records of Individual A, dated 12-5-79
- Document 3 - Qualification Records of Individual D, dated 1-9-80
- Document 4 - Welding Qualifications of Individual E, dated 12-5-79
- Document 5 - Statement of Individual D, dated 08-27-80
- Document 6 - Statement of Individual B, dated 08-28-80