

CA

Date: 05/04/2001

Responsible Manager: GAEDTKE, J. 43
Group: ENGINEERIN
Department: SYS ENG
Sub Department: MECHSUPV

Status: ~~OPEN~~ CLOSED
Significance: N
Priority: 9
Doc Type/Number:

Title

DURING VISUAL EXAM OF 'A' SSW DISCHARGE PIPING IT WAS DISCOVERED THAT A 20 FOOT SECTION OF RUBBER LINING WAS PEELED OFF OF THE PIPING EXPOSING BARE METAL

Rec'd Date: 05/03/2001	Due Date: 05/03/2001
Assign Date: 05/03/2001	Dead Date: 05/03/2001
Start Date: 05/03/2001	Completion Date: / /

Action

EVALUATE 'A' SSW DISCHARGE PIPING INSPECTION - U.T. RESULTS TO DETERMINE CORRECTIVE ACTION PLAN

Closure Requirements

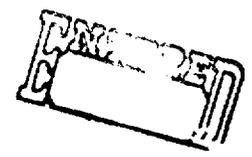
CORRECTIVE ACTION PLAN DEVELOPED.

Notes/Basis for Change(s) CLOSE per ATTACHED EVALUATION *Jawell 5/10/01*

Z124

Change(s) Approved By: *[Signature]* Date: 5/10/01
Manager

Change(s) Accepted By: *[Signature]* Date: 5/11/01
PR Coordinator



PROBLEM REPORT

PROBLEM REPORT No. 01.2275 "DURING VISUAL EXAMINATION OF "A" SSW DISCHARGE PIPING IT WAS DISCOVERED THAT A 20 FOOT SECTION OF RUBBER LINING WAS PEELLED OFF OF THE PIPING EXPOSING BARE METAL."

EVALUATION RESPONSE

1. Problem Description: While inspecting the "A" SSW Discharge piping in accordance with TP99-031, a 20 foot section of rubber lining was found peeled off the piping exposing bare metal. The effected SSW spool was JF29-11-4.
2. Apparent/Direct Cause: Age related wear of the original 30-year-old liner.

The cause of these and previous failures have been determined to be aging rubber lining. Extensive testing was conducted during the intake buried piping root cause analysis. Representative samples of the rubber lining removed from pipe spools were sent to the S.G. Pinney Associates Inc. Laboratory testing was performed to determine the physical properties of the rubber lining. Of particular interest were three parameters; a. tensile testing, b. Tensile testing for elongation and c. Shore Hardness testing. Their report identified that the physical parameters of these tests indicated a loss of ductility of the rubber that results in embrittlement, cracking and susceptibility to mechanical damage. Their conclusion indicated that the original lining of the Salt Service Water Piping at Pilgrim station had reached the end of its performance life. They also stated that in other industrial applications (such as oil refining and chemical production), rubber lined pipe in salt water service is considered to have a 15 year economic life and is either refined or replaced on a scheduled basis. Their analysis indicated that the lifetime was consistent with the findings of the examination of the Salt Service Water Piping at PNPS.

3. Equipment Performance Issues: System Number 29 Component Number JF29-11-4 Component Type or Description "A" Loop SSW Discharge Pipe Spool

Maintenance Rule Functional Failure: YES NO Unknown

3. Corrective Actions Completed (include Dates if possible)
The "A" Loop SSW Discharge Piping was originally going to be relined with a CIPP (Cured In Place Pipe) Lining in accordance with PDC01-09. Due to problems encountered with liner impregnation and premature curing (exothermic reaction), that lining was not installed. As a result, this 20' and several additional areas in the "A" Loop discharge line were repaired by an alternate means using Belzona Ceramic R-Metal epoxy compound in accordance with FRN01-09-05 and MR10000753. This work was completed on 5/4/01.

5. Corrective Actions Required (if not required, check "N/R") N/R

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6. Trend Data for Apparent Cause (check "N/R" if analysis deals with equipment performance only) N/R

7. The significance should: Be Upgraded Remain the Same

If applicable, the reason for the upgrade:

Completed By: J. Geedke J. Geedke Date: 5/10/01
Evaluator/Mentor

Approved By: [Signature] Date: 5/10/01
Manager

0 8 5 1 0 1 4 0 7

Date: 5/1/01 (Other Mission)
 Originator: WES BNO
 Assignment Mode: WES BNO
 Origin Assignment ID #: 0168

ORIGINAL
 THREE MONTHS

RECEIVED
 MAY 03 2001
 E

PROBLEM REPORT No. 01.2275 PROBLEM REPORT

ORIGINATOR REPORT

Originator Tech Trainer Mail Stop 46 Telephone Extension 7411
 Date of PR 5/1/01 Time of PR 0100 OSS Review Not Required (Initial) OSS

Originator's Dept TECH TRN Group Scheduling
 If this problem occurred at a date and time other than above, provide the following:
 Date of Problem 5/2/01 Time of Problem 2230

Describe Problem and How Found:
During Visual Check of "A" Sew Discharge Piping it was discovered that a
small section of rubber lining (approx 12" long) in the pipe was missing from
underneath the pipe of the piping. Missing pipe seen.

Procedure Number(s) in use TD-00 637

What do you believe to be the cause of this Problem?
The rubber lining in the pipe is deteriorating with age. Several locations
found that have been done in this section of pipe.

Describe any corrective actions which were taken as a result of this Problem
Job for 000073 & TD 637, ultra sonic scans are being performed. If
the work is approved, a new CIPP liner will be
installed, unlike some other locations etc.

ADDITIONAL INFORMATION

System Name SMT SERVICE WATER System Number 29
 Component/Equipment Name PIPE Component/Equipment Number
 Was a Work Request Tag/Maintenance Request written? YES NO WRT#/MR# 10000753 Existing
 Radiological Problem? YES NO

NOTE

If the problem meets the criteria on the back of this page, immediately hand carry this form to the OSS and/or refer to Note preceding PNPS 1.3.121 Step 6.1(5).

The following will be used for Problem trending. Provide information, if known, to the extent practical; Inappropriate Action (IA) description: NO

IA Job Title _____ IA Dept _____ IA Group _____
 Employer: Energy _____ Contractor _____ Frequently Performed ___ Yes ___ No
 Work Process _____ Key Activity: _____ Event Type: _____
 Org. & Programmatic Failure Mode _____ HEIA Failure Mode _____ Procedure _____
 Human Error Type: Skill Based _____ Rule Based _____ Knowledge Based _____

Attachment 2 OUTAGE PR ASSIGNMENT SHEET

OUTAGE ASSIGNMENT ID # 0168

PR # 01.2275

ACTION:

EVALUATE 'A' SSW DISCHARGE PIPING INSPECTION & U.T. RESULTS TO DETERMINE CORRECTIVE ACTION PLAN

CLOSURE

CORRECTIVE ACTION PLAN DEVELOPED

ASSIGNED OWNER: J. GAEDTKE

DUE DATE: 5/3/01 DEAD DATE: / /

MILESTONE NUMBER	MILESTONE	CHECK ONE
1	UNIT OFF LINE	
2	COLD SHUTDOWN	
3	B' LOAD SHED TESTING COMPLETE	
4	CAVITY FLOODED TO 112	
5	READY FOR FUEL SHUFFLE 1	
6	COMMENCE RVESSEL ACTIVITIES, FUEL SHUFFLE 1 COMPLETE	
7	LOOP SWAP COMPLETE	
8	READY FOR FUEL SHUFFLE 2	
9	FUEL SHUFFLE 2 COMPLETE	
10	READY FOR CAVITY DRAIN DOWN TO FLANGE	
11	A' LOAD SHED TESTING COMPLETE	
12	READY FOR FEEDWATER FLUSH	
13	AUTO ECCS LOAD SEQUENCE DSL & TRANSFORMER COMPLETE	
14	DRYWELL PRIMARY CONTAINMENT READY FOR STARTUP	
15	READY FOR VESSEL PRESSURIZATION	✓
16	MODE SWITCH TO STARTUP	
17	UNIT ON LINE	
18	OTHER	

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ORIGINAL

Problem Report 01.2275

PROBLEM REPORT

RType G7.07

SCREENING REVIEW

It is not a Procedure requirement to use this form.

1. Significance:

SCAQ Non-SCAQ

2. Reactivity Management Event ? Yes No

3. N/A Disposition:

Assigned Owner

Fact Finding -----

RCA -----

Apparent Cause -----

Direct Cause -----

Corrective Action -----

J. GARDNER - OUM - 12/015

Close: [] to Trend [] other -----

10CFR21 Applicability Review -----

10CFR50.73 or 70.52 Review -----

NUCLEAR NETWORK -----

Recommendation -----

4. Approved: [Signature]
PR Screening Team Chairman

Date 5/4/01

REMARKS/COMMENTS

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