Page : 1 Printed: 11/24/08

ACTION REQUEST 00236389

Type

Orig Date: 06/13/07 18:21 Discovery Date:

Subject

: TRITIUM IDENTIFIED IN MANHOLE 2-MH-2SE

#### Description

TRITIUM HAS BEEN IDENTIFIED IN MANHOLE 2-MH-2SE. THE TRITIUM ACTIVITY WAS 1.949E-5 UCI/ML (19,490 PCI/L). THE APPROXIMATE LOCATION OF THE MANHOLE IS IN THE VICINITY OF THE STACK AND THE INTAKE STRUCTURE.

Priority : 2

Report To

Status: COMPLETE 11/19/08

Due Date : 12/31/08

Event Date

Originator : MILLIM02

Originator Group:

Facility : BNP

Department

: Z84

Organization:

Owed To

Owed To Group : ERCUEVAL

Discipline : '

Owed To Fac: BNP

Department

AR Status History

Mr Status His	COLY		
Updated Date	Updated By	AR Status	AR Due Date
06/13/07	MILLIM02	INPROG	
06/13/07	MILLIM02	H/APPR	
06/19/07	HOLLEN	PRE-APRV	
06/19/07	HOLLEN	•	12/13/07
06/19/07	HOLLEN	APPROVED	
10/10/07	HOLLEN	,	08/30/08
06/21/08	HOLLEN		11/06/08
08/21/08	HOLLEN		12/04/08
11/06/08	HOLLEN		12/31/08
11/19/08	HOLLEN	COMPLETE	

Page : Printed: 11/24/08

ACTION REQUEST 00236389

Request Attribute

1A POT'L OPER/REPORT N

Regd Date

06/13/07

Name : MICHAEL

MILLINOR

Value

Request Attribute

1B EQUIPMENT RELATED N

Name : MICHAEL

MILLINOR

Reqd Date

06/13/07

Request Attribute

Value

Reqd Date

2 SUPERVISOR REVIEW Y

06/17/07

Name : JERRY

JOHNSON JR.

Request Attribute

Value

Reqd Date

2A CR VALID?

06/17/07

Name : JERRY

JOHNSON JR.

Request Attribute

Value

Reqd Date

2B FURTHER INVN REOD Y

06/17/07

Name : JERRY JOHNSON JR.

Information to include for No Further Investigation Required

Include the following information for Priority 2:

Inappropriate Act statement (include work group involved, if known)

Apparent Cause including code

" • Completed Corrective Actions - CORR, or

Additional Corrective Actions if needed - including recommended

assignee and recommended due date

Include the following information for Priority 3:

Completed Corrective Actions - CORL, or

Additional Corrective Actions if needed - including recommended

assignee and recommended due date

Request Attribute

Value

Reqd Date

2C RECOMMENDED OWNER MIKE MILLINOR Name : JERRY

JOHNSON JR.

06/17/07

Request Attribute Value

Reqd Date

2D OPER/REPORT ISSUE N Name : JERRY

JOHNSON JR.

06/17/07

Request Attribute Value

Regd Date

2D1EQUIPMENT RELATED N

06/17/07

Name : JERRY

JOHNSON JR.

Request Attribute

Reqd Date

2E MAINT RULE APPLIC N

06/17/07

Name : JERRY

JOHNSON JR.

Page Printed: 11/24/08

ACTION REQUEST 00236389

Request Attribute

Value

Regd Date

2F SYSTEM

06/21/07

Name : SYLVIA

Added 5259 per Jim Boone, MR Coordinator. sde 6/21/07

Request Attribute

Value

Regd Date

3 OPERATIONS REVIEW

Name :

Request Attribute

Value

Regd Date

3A IMMED REPT ISSUE N

06/17/07

Name : STEVEN

CORDY

A Licensee Event Report (LER) is due to the NRC only if any liquid effluent release, when averaged over a time period of 1 hour, exceeds 20 times the applicable concentrations specified in Appendix B to Part 20, Table 2, Column 2, at the point of entry into the receiving waters (i.e., unrestricted area) for all radionuclides except tritium and dissolved noble gasses. Reference 10CFR50.73(a)(2)(viii).

The release (tritium at approx 3.3E-4uCi/ml) is less than the 1.0E-3 listed in App B to Part 20.

ORCI-06.1, Attachment 1, has the exact same criteria for mandatory reporting.

For voluntary reporting, Attachment 1, page 18 and 19, specifies that a report should be made if an inadvertent unmonitored leak or spill has or can potentially get into groundwater that is used for drinking water or could be used for drinking water.

We do not have any reason to believe that this leak can get into any drinking water. The leak is following the release path directly to the intake canal. The hydrology experts on site this week will evaluate for any long term potential impact.

Request Attribute

Value

Reqd Date

3B OCR

06/17/07

Name : STEVEN

GORDY

Request Attribute

Value

Regd Date

3B1 OPER ISSUE Name : STEVEN

GORDY

06/17/07

Request Attribute

Value

Regd Date

3B2 REPORT ISSUE

06/17/07

Name : STEVEN

GORDY

A Licensee Event Report (LER) is due to the NRC only if any liquid effluent release, when averaged over a time period of 1 hour, exceeds 20 times the applicable concentrations specified in Appendix B to Part 20, Table 2, Column 2, at the point of entry into the receiving waters (i.e.,

unrestricted area) for all radionuclides except tritium and dissolved noble gasses. Reference 10CFR50.73(a)(2)(viii).

The release (tritium at approx 3.3E-4uCi/ml) is less than the 1.0E-3 listed in App B to Part 20.

ORCI-06.1, Attachment 1, has the exact same criteria for mandatory reporting.

For voluntary reporting, Attachment 1, page 18 and 19, specifies that a report should be made if an inadvertent unmonitored leak or spill has or can potentially get into groundwater that is used for drinking water or

Page : 4 Printed: 11/24/08

ACTION REQUEST 00236389

could be used for drinking water.

We do not have any reason to believe that this leak can get into any drinking water. The leak is following the release path directly to the intake canal. The hydrology experts on site this week will evaluate for any long term potential impact.

Request Attribute 3B3 REW

Value

Regd Date

Name : STEVEN

GORDY

06/17/07

Request Attribute 3B4 DEG/NCON

Value

Reqd Date

06/17/07

Name : STEVEN

GORDY

Request Attribute 3C TRACKING NUMBER N

Reqd Date

Name : STEVEN

GORDY

06/17/07

Request Attribute Value

Reqd Date

4 REG AFF REVIEW

Name :

Request Attribute Value

4A OPER/REPORT ISSUE N

Reqd Date

Name : MARK

TURKAL

06/18/07

Request Attribute

Value

Reqd Date

4A1 OPER ISSUE Name : MARK

TURKAL

06/18/07

Request Attribute

Value

Reqd Date

4A2 REPORT ISSUE

06/18/07

Name : MARK

TURKAL

Request Attribute

Value

Reqd Date

4A3 REW

TURKAL

06/18/07

Request Attribute

Value

Regd Date

4A4 DEG/NCON

06/18/07

Name : MARK

Name : MARK

TURKAL

Request Attribute

Value

Regd Date

4B FOLLOWUP ASG REQD N Name : MARK

TURKAL

06/18/07

Request Attribute Value

4C T. SPEC VIOLATION N

Regd Date

Name : MARK

TURKAL

06/18/07

Page : 5 Printed: 11/24/08

ACTION REQUEST 00236389

Request Attribute Value
4D ADD'L REPORT REQD N
Name: MARK TURKAI

Value Reqd Date
N Y 06/18/07
TURKAL

Request Attribute Value
4E PNSC/CSERB REQD N
Name: MARK TURKAL

 Reqd
 Date

 Y
 06/18/07

Request Attribute Value
5 CLASSIFN/ASSIGNMNT
Name :

Reqd Date

Request Attribute Value
5A CR VALID? Y
Name : NANCY HOLLEY

**Reqd Date**Y 06/19/07

Request Attribute Value
5B FURTHER INVN REQD Y
Name: NANCY HOLLEY

Reqd Date Y 06/19/07

Request Attribute
6 MISCELLANEOUS
Name :

Reqd Date

Request Attribute Value 6A COMMENTS

Value

Value

Value

Value

Value

Reqd Date

Request Attribute
6B COMMENTS

6A COMMENTS Name :

Reqd Date

Name :

Reqd Date

Request Attribute 6C COMMENTS Name :

Request Attribute 6D COMMENTS Name : Reqd Date

Request Attribute 6E COMMENTS Reqd Date

Name :

Reqd Date

Request Attribute

6F LAST COM ITM DUE

Name :

Page : Printed: 11/24/08

ACTION REQUEST 00236389

Request Attribute

Value

Regd Date

6G EOUIP PRI ISSUE

Name :

Request Attribute

Value

Read Date

6H RESP MGR

Name :

Request Attribute

Regd Date

61 EQUIP PRI STATUS

Name :

#### ACTION REQUEST APPROVAL REVIEW

Route List: 001

Route List Initiator: MILLIM02

Alert

Send Send Action Action

JOHNSJ03 BNP ERCCSÚPV A JOHNSON JR.

PASSPORT Fac Group/Type Last Name

Date Time Taken

Date/Time

06/13/07 18:21 APPROVED 06/17/07 09:53

GORDYS BNP CONTROOM A GORDY

06/17/07 09:53 APPROVED 06/17/07 18:20

TURKAM BNP REGREV A TURKAL

06/17/07 18:20 APPROVED 06/18/07 06:44

HOLLEN BNP UNITEVAL A HOLLEY

06/18/07 06:44 APPROVED 06/19/07 14:21

#### TREND-CAUSE

Facility: BNP Trend 1: ACAUSE Trend 2: L Trend 3: L1

Date: 07/25/07

Process: N/A

Org: EC Rank: N Assign:

Description: PROBLEM WAS A HISTORICAL ONE

TRITIUM WAS IDENTIFIED IN WATER IN MANHOLE 2-MH-2SE.

Facility: BNP Trend 1: EVENT Trend 2: EC

Trend 3: EC59

Date: 06/19/07

Process: EN1

Org: N/A Rank:

Assign:

Description: OUT OF SPEC PARAMETER (SYS, TECH, MATERIAL SPEC, R

## Keywords

Keyword

Keyword Description

ENVIR

OUTDOOR SPILLS, NPDES?STP, ENVIR. INDEX IMPACTS

#### AR REFERENCE DOCUMENTS

DOC SUB DOCUMENT

REV MIN TITLE

TYP TYP

OR

BNP AR

00236389

000

TRITIUM IDENTIFIED IN MANHOLE

Page : Printed: 11/24/08

ACTION REQUEST 00236389

ASSIGNMENT NUMBER 02 SUB

Туре : INVN

Due Date

: 07/27/07

: 1

: Z58

Status

: COMPLETE Reschedule Pri Resp Group: ERCCSUPT

Sec Resp Group:

Assigned To : N HOLLEY Subject : ADVERSE CONDITION INVESTIGATION

Unit

System

Aff Facility: BNP : .

Schedule Ref

Organization:

Department

Discipline

Est Manhrs :

Est Comp Date :

COMPLETE

Assignment Status History

Updated Date Updated By Assgn Status 06/13/07 MILLIM02 INPROG HOLLEN 06/19/07 HOLLEN 06/19/07 ACC/PRI 06/19/07 HOLLEN NTFY/ASG 06/20/07 MILLIM02 ACC/ASG 07/12/07 HOLLEN WILLIM03 07/20/07 AWAIT/C HOLLEN 07/25/07 ACC/ASG HOLLEN 07/25/07 NTFY/ASG HOLLEN 07/25/07 ACC/ASG HOLLEN 07/25/07 AWAIT/C

HOLLEN

07/12/07

Assgn Due Date

07/27/07

Assignment Attribute Value

BENEFIT REALIZED

Name :

07/25/07

Assignment Attribute Value

EXTERNAL OF RECOMM N

Name : MICHAEL

Reqd Date

Reqd Date

07/20/07

MILLINOR

Assignment Attribute Value

INTERNAL OE RECOMM N

Name : MICHAEL

MILLINOR

Reqd Date

07/20/07

Assignment Attribute Value

1 EVALUATOR/ASSIGNEE

Reqd Date

Assignment Attribute Value

Regd Date

1A COMMITTED

Name :

Name :

Page Printed: 11/24/08

ACTION REQUEST 00236389

Assignment Attribute Value

Regd Date

1B CHANGE BASIS PLEASE EXTEND

07/11/07

Name : MICHAEL

MILLINOR

Please extend until 7/27/07 due to emergent tritium issues with SDSP.

Assignment Attribute Value

Reqd Date

2 MISCELLANEOUS

N

Name :

Assignment Attribute Value

Reqd Date.

2A COMMENTS

Name :

Assignment Attribute Value.

Reqd Date

2B COMMENTS

Name :

Assignment Attribute Value

Reqd Date

2C COMMENTS

Name :

Assignment Attribute Value

Reqd Date

2D COMMENTS

Name :

Reqd Date

Assignment Attribute Value 2E COMMENTS

Name :

COMPLETION NOTES

PLEASE INCLUDE IN DECOMISSIONING RECORDS.

CAUSE/ACTION

ASSIGNMENT COMPLETION APPROVAL

Route List: 001

Route List Initiator: HOLLEN

Send Send Action Action

PASSPORT Fac Group/Type Last Name

JOHNSJ03 BNP ERCCSUPT A JOHNSON JR.

Date Time Taken

Date/Time

HOLLEN BNP ERCUEVAL A HOLLEY

07/20/07 14:06 APPROVED 07/23/07 14:18

07/23/07 14:18 RETURNED 07/25/07 15:13

BNP ERCCSUPT A HOLLEY

Alert

HOLLEN BNP ERCUEVAL A HOLLEY

07/25/07 15:53 BYPASSED 07/25/07 15:53

07/25/07 15:53 APPROVED 07/25/07 15:53

Page : Printed: 11/24/08

ACTION REQUEST 00236389

ASSIGNMENT NUMBER 05 SUB

Type : CORR Due Date : 12/04/08 Status : COMPLETE Reschedule : 2

Pri Resp Group: ERCCSUPT

Assigned To : M MILLINOR

Sec Resp Group:

Subject : DOCUMENT EVALUATION FOR ANY LONG TERM POTENTIAL IMPACT

System

Aff Facility: BNP Unit :
UCR : Schedule Ref : LTCA

Department : Z84

Discipline :

Organization: Est Manhrs :

Est Comp Date :

Assignment Status History

Updated Date	Updated By	Assgn Status	Assgn Due Date			
06/13/07	MILLIM02	INPROG				
06/19/07	HOLLEN		10/17/07			
06/19/07	HOLLEN	ACC/PRI				
06/19/07	HOLLEN	NTFY/ASG				
10/10/07	HOLLEN		08/30/08			
10/10/07	MILLIM02	ACC/ASG				
08/21/08	HOLLEN		12/04/08			
11/17/08	MILLIM02	AWAIT/C				
11/19/08	HOLLEN	COMPLETE				

PERFORMED BY HYDROLOGY EXPERT AND IDENTIFY ANY ADDITIONAL ACTIONS DEEMED NECESSARY FROM THIS EVALUATION.

Assignment Attribute Value

Reqd Date

BENEFIT REALIZED

Name :

Assignment Attribute Value

Reqd Date

1 UNIT/SECT EVALUATR

Name :

Assignment Attribute Value

Reqd Date

1A COMMITTED

Name :

Assignment Attribute Value

Regd Date

1B CHANGE BASIS PLEASE EXTEND

N 08/20/08

Name : MICHAEL

MILLINOR

AR 236389 5

Please extend until 12/4/08. Groundwater screening points are currently being installed in this area and the report from the hydrology experts will not be available until the 4th quarter 2008.

There are no nuclear safety issues associated with groundwater related to this AR and there is no additional risk associated with extending this AR as it does not impact any SSC or other nuclear safety related component. Document evaluation for any long term potential impact performed by hydrology expert and identify any additional actions deemed necessary from this evaluation

To perform this evaluation new ground water monitoring wells will need to

Page : 10 Printed: 11/24/08

ACTION REQUEST 00236389

be installed in the area of Manhole 2-MH-2SE. These wells are scheduled to be installed in June 2008.

This action needs to be extended to 8/30/08.

This action needs to be re-assigned to Mike Millinor per E&C

Superintendent Jerry Johnson.

Assignment Attribute Value

Reqd Date

N

Name :

Assignment Attribute Value

Reqd Date

2A COMMENTS

2 MISCELLANEOUS

v

10/07/08

Name : NANCY

HOLLEY

10/07/08: Per authorization from DSO this action was determined to be Long Term Corrective Action (LTCA). See below e-mail message:

Nancy,

Here is the response from Mike Annacone giving approval to making CORR's 1, 2, 3, 4, 7, and 8 listed below Long Term Corrective Actions. If you could, let me know what our starting average age and ending average age for CORR's are once these changes are made. I took this action from the NCR review yesterday and Jerry also has some CAP actions were this data would be helpful.

Thanks,

Jeremie Varnam

Environmental & Chemistry - Sr. Specialist

Progress Energy - Brunswick Nuclear Plant

Phone: (910) 457-3197 Pager: (910) 412-0060

jeremie.varnam@pgnmail.com

\*\*\*\*\*\*\*\*\*From: Annacone, Michael J. Sent: Tuesday, October 07, 2008 11:26 AM

To: Varnam, Jeremie

Cc: Westbrook, John

Subject: RE: E&C CORL/CORR/CAPR Backlog Reduction

Jeremie,

I am ok with making items 1, 2, 4, 7, and 8 LTCA's as they are tied to PRG funded projects.

I am ok with making item 3 a LTCA as it is tied to action outside of BNP (NRR), and we have no control over the timing of their work.

Please have your unit evaluator process the above changes.

Thanks,

Mike

\*\*\*\*\*\*\*\*\*From: Varnam, Jeremie

Sent: Tuesday, October 07, 2008 8:13 AM To: Annacone, Michael J.; Johnson, Jerry

Subject: E&C CORL/CORR/CAPR Backlog Reduction

Below is a list of outstanding CORR's owned by Environmental and Chemistry. Please review these items and the comments to see if they are candidates for Long Term Corrective Actions (LTCA) or closure to action

- 1. Document Evaluation For Any Long Term Potential Impact (00236389-05 CORR 475days): This item is tied to the well installation project for the Protected Area and the ensuing hydrology study project as part of extent of condition for Tritium Recovery.
- 2. Tritium Identified in Manhole MH-4 (00236389-06 CORR 355days): This item is tied to the well installation project for the Protected Area and the ensuing hydrology study project as part of extent of condition for Tritium Recovery.

Page : 11 Printed: 11/24/08

ACTION REQUEST 00236389

- 3. Account For The SDSP Evaporation Pathway In The Open (00233857-09 CORR 347days): This item cannot be completed until input is received from the NRR. Actual completion date is tentatively scheduled for 4/30/09.
- 4. Secure Any Known Path of Sodium Hypochlorite From (00245126-05 CORR 297days): BCR 10229 has been approved. This project is ranked #9 on the Plant's Top Ten Plant Health items and has been approved by PRG.
- 5. Restore U2 Reactor Water Sulfate Concentration Below (00271485-05 CORR 175days): Can this item be closed to the open action plan that is on the Operational Focus List to drive resolution.
- 6. Develop Qualification Method for Oil and Grease Analysis (00236171-19 CORL 242days): Can this CORL be close to an action plan to develop and implement the procedure and analysis.
- 7. Update Hydro-Geological Studies of Plant Backfill (00233865-30 CORR 396days): This item is tied to the Storm Drain Stabilization Pond Tritium recovery project and the associated protected area well installation project.
- 8. Complete Sampling Profile of Storm Drain Catch Basin (00268357-40 CORR 150days): This item is tied to the Storm Drain Stabilization Pond Tritium recovery project and the associated protected area well installation project.

Thanks.

Jeremie Varnam

Environmental & Chemistry - Sr. Specialist Progress Energy - Brunswick Nuclear Plant

Phone: (910) 457-3197 Pager: (910) 412-0060 jeremie.varnam@pgnmail.com

Assignment Attribute Value

Reqd Date

2B COMMENTS

Name :

2C COMMENTS

Reqd Date

Name :

Assignment Attribute Value

Assignment Attribute Value

2D COMMENTS

Name :

Ŋ

Assignment Attribute Value

Reqd Date

Reqd Date

2E COMMENTS

N

Name :

Assignment Attribute Value

44146

3A LTCA APPROVAL

Name :

Assignment Attribute Value

Reqd Date

Reqd Date

3B LTCA CONCURRENCE

N

Name :

COMPLETION NOTES

CAUSE/ACTION

Page : 12

Printed: 11/24/08

ACTION REQUEST 00236389

#### ASSIGNMENT COMPLETION APPROVAL

Route List: 001

Alert

PASSPORT Fac Group/Type Last Name

JOHNSJ03 BNP ERCCSUPT A JOHNSON JR.

HOLLEN BNP ERCUEVAL A HOLLEY

Route List Initiator: MILLIM02

Send Send Action Action
Date Time Taken Date/Time

11/17/08 13:09 APPROVED 11/18/08 06:24

11/18/08 06:24 APPROVED 11/19/08 13:53

Page : 13 Printed: 11/24/08

ACTION REQUEST 00236389

ASSIGNMENT NUMBER 06 SUB

Type : CORR Due Date : 12/31/08 Status : COMPLETE Reschedule : 3

Pri Resp Group: ERCCSUPT

Sec Resp Group:

Assigned To : M MILLINOR

Subject : TRITIUM IDENTIFIED IN MANHOLE MH-4

Aff Facility: BNP

Unit UCR : . Schedule Ref : LTCA

System

Organization:

Department

: Z84

Discipline

Est Manhrs :

Est Comp Date :

Assignment Status History

Assignment Sta	tus History		•
Updated Date	Updated By	Assgn Status	Assgn Due Date
10/17/07	PETRUD	INPROG	12/20/07
10/17/07	PETRUD	NTFY/ASG	
10/17/07	PETRUD	NTFY/PRI	
10/17/07	PETRUD	ACC/PRI	•
10/17/07	PETRUD	NTFY/ASG	
10/17/07	MILLIM02	ACC/ASG	
12/18/07	HOLLEN		06/30/08
06/21/08	HOLLEN		11/06/08
11/06/08	HOLLEN		12/31/08
11/19/08	MILLIM02	AWAIT/C	
11/19/08	HOLLEN	COMPLETE	•

EVALUATE CONDITIONS AND IDENTIFIY ANY ADDITONAL ACTIONS NEEDED BASED ON REPORT FROM THE HYDROLOGICAL EXPERTS.

Assignment Attribute Value

Reqd Date

BENEFIT REALIZED

Name :

N

Assignment Attribute Value

Reqd Date

1 UNIT/SECT EVALUATR

Name :

Assignment Attribute Value

Regd Date

1A COMMITTED

Name :

Assignment Attribute Value

1B CHANGE BASIS PLEASE EXTEND

Reqd Date 12/18/07

Name : MICHAEL

MILLINOR

11/5/08: Please extend until 12/31/08. Wells have been installed in the area of MH-4, but the report from the hydrologists is not yet available. Data is currently being collected to generate the report.

This item involves groundwater wells being installed in the environment in areas outside the plant. This item has no affect on plant equipment or no impact on nuclear safety.

Please extend to 6/30/08 as the hydrologists have been unable to evaluate the area. Current plans are to initiate evaluation in January 2008 with recommendations available by the end of the 2nd quarter 2008

Page : 14 Printed: 11/24/08

ACTION REQUEST 00236389

06/20/08: Please extend until 11/6/08. Wells have been installed in the area of MH-4, but the report is not yet available. Data is currently being collected to generate the report.

This item involves groundwater wells being installed in the environment in areas outside the plant. This item has no affect on plant equipment or no impact on nuclear safety.

Please extend to 6/30/08 as the hydrologists have been unable to evaluate the area. Current plans are to initiate evaluation in January 2008 with recommendations available by the end of the 2nd quarter 2008

Assignment Attribute Value

Reqd Date

2 MISCELLANEOUS

N

Name :

Assignment Attribute Value

Reqd Date

2A COMMENTS

Y

10/07/08

Name : NANCY

HOLLEY

10/07/08: Per authorization from DSO this action was determined to be Long Term Corrective Action (LTCA). See below e-mail message: Nancy,

Here is the response from Mike Annacone giving approval to making CORR's 1, 2, 3, 4, 7, and 8 listed below Long Term Corrective Actions. If you could, let me know what our starting average age and ending average age for CORR's are once these changes are made. I took this action from the NCR review yesterday and Jerry also has some CAP actions were this data would be helpful.

Thanks,

Jeremie Varnam

Environmental & Chemistry - Sr. Specialist

Progress Energy - Brunswick Nuclear Plant

Phone: (910) 457-3197
Pager: (910) 412-0060
jeremie.varnam@pgnmail.com

\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*\*\*\*\*\*\*\*From: Annacone, Michael J. Sent: Tuesday, October 07, 2008 11:26 AM

To: Varnam, Jeremie Cc: Westbrook, John

Subject: RE: E&C CORL/CORR/CAPR Backlog Reduction

Jeremie,

I am ok with making items 1, 2, 4, 7, and 8 LTCA's as they are tied to PRG funded projects.

I am ok with making item 3 a LTCA as it is tied to action outside of BNP (NRR), and we have no control over the timing of their work.

\*

Please have your unit evaluator process the above changes.

Thanks,

Mika

\*\*\*\*\*\*\*\*\*\*\*\*From: Varnam, Jeremie

Sent: Tuesday, October 07, 2008 8:13 AM

To: Annacone, Michael J.; Johnson, Jerry

Subject: E&C CORL/CORR/CAPR Backlog Reduction

Below is a list of outstanding CORR's owned by Environmental and Chemistry. Please review these items and the comments to see if they are candidates for Long Term Corrective Actions (LTCA) or closure to action plans.

1. Document Evaluation For Any Long Term Potential Impact (00236389-05 CORR 475days): This item is tied to the well installation project for the Protected Area and the ensuing hydrology study project as part of extent of condition for Tritium Recovery.

Page : 15 Printed: 11/24/08

ACTION REQUEST 00236389

- 2. Tritium Identified in Manhole MH-4 (00236389-06 CORR 355days): This item is tied to the well installation project for the Protected Area and the ensuing hydrology study project as part of extent of condition for Tritium Recovery.
- 3. Account For The SDSP Evaporation Pathway In The Open (00233857-09 CORR 347days): This item cannot be completed until input is received from the NRR. Actual completion date is tentatively scheduled for 4/30/09.
- 4. Secure Any Known Path of Sodium Hypochlorite From (00245126-05 CORR 297days): ECR 10229 has been approved. This project is ranked #9 on the Plant's Top Ten Plant Health items and has been approved by PRG.
- 5. Restore U2 Reactor Water Sulfate Concentration Below (00271485-05 CORR 175days): Can this item be closed to the open action plan that is on the Operational Focus List to drive resolution.
- 6. Develop Qualification Method for Oil and Grease Analysis (00236171-19 CORL 242days): Can this CORL be close to an action plan to develop and implement the procedure and analysis.
- 7. Update Hydro-Geological Studies of Plant Backfill (00233865-30 CORR 396days): This item is tied to the Storm Drain Stabilization Pond Tritium recovery project and the associated protected area well installation project.
- 8. Complete Sampling Profile of Storm Drain Catch Basin (00268357-40 CORR 150days): This item is tied to the Storm Drain Stabilization Pond Tritium recovery project and the associated protected area well installation project.

Thanks,

Jeremie Varnam

Environmental & Chemistry - Sr. Specialist Progress Energy - Brunswick Nuclear Plant

Phone: (910) 457-3197 Pager: (910) 412-0060 jeremie.varnam@pgnmail.com

Assignment Attribute Value

2B COMMENTS

Name :

Reqd Date

N

Assignment Attribute Value

2C COMMENTS

Name :

Reqd Date

N

Assignment Attribute Value

2D COMMENTS

Name ·

Regd Date

N

Assignment Attribute Value

2E COMMENTS

Name :

Regd Date

N

Assignment Attribute Value

3A LTCA APPROVAL

Name :

Reqd Date

N

Assignment Attribute Value

3B LTCA CONCURRENCE

Reqd Date

Name :

Page : 16 Printed: 11/24/08

ACTION REQUEST 00236389

COMPLETION NOTES

CAUSE/ACTION

ASSIGNMENT COMPLETION APPROVAL

Route List: 001

Alert

PASSPORT Fac Group/Type Last Name

JOHNSJ03 BNP ERCCSUPT A JOHNSON JR.

HOLLEN BNP ERCUEVAL A HOLLEY

Route List Initiator: MILLIM02

Send Send Action Action
Date Time Taken Date/Time

11/19/08 13:35 APPROVED 11/19/08 13:42

11/19/08 13:42 APPROVED 11/19/08 13:52

# ATTACHMENT 3 Sheet 1 of 2

## ADVERSE CONDITION INVESTIGATION FORM

Form CAP-NGGC-0200-3-18

Action Request Number: 236389 Investigator: Mike Millinor

## 1. Adverse Condition Description

Tritium has been identified in manhole 2-MH-2SE. The tritium activity was 1.949E-5  $\mu$ Ci/ml (19,490 pCi/L). The approximate location of the manhole is in the vicinity of the stack and the intake structure.

## 2. Investigation Summary

- What Should Be: This is the first time this manhole was analyzed for tritium. Even though there have been several manholes identified with tritium at the plant, it is not the norm for tritium to be found in manholes.
- What Is: Discussions with the engineer who performed the inspection in the
  manhole indicate that the tritiated water found in the manhole was groundwater.
  Tritium is not normally expected to be found in manholes even though there have
  been several manholes identified with tritium. However, the site hydrology as it is
  currently understood indicates that groundwater inside the backfill area at the site
  moves toward the intake canal.
- How it happened: It appears to be historical and it is unknown at this time as to how the tritium entered the groundwater in this area.
- Why it happened: It appears to be historical and it is unknown at this time why
  tritium entered the groundwater. The immediate area hydrology will have to be
  verified to determine if this is a current component leak or historical movement of
  existing groundwater containing tritium is moving towards the area.

### 3. Corrective Action Plan

CAP-NGGC-0200	Rev. 18	·

# ATTACHMENT 3 Sheet 2 of 2 ADVERSE CONDITION INVESTIGATION FORM Form CAP-NGGC-0200-3-18

## **Corrective Action Plan**

	DESCRIPTION	CAUSE TO THE STATE OF THE STATE	CODE	ORG	CORRECTIVE ACTION		CONCURRENCE.	DUE OR COMPLETION DATE**
ADVERSE CONDITION	Tritium was identified in water in manhole 2-MH-2SE that is coming from groundwater.	N/A	N/A	N/A	Have hydrologists evaluate groundwater in area for tritium source determination.	CORR	Marty McGowan/Jerry Johnson	11/20/07
VA or EQ Malfunction	inappropriate act associated with	Cannot determine due to historical in nature	L1	N/A	None <sub>.</sub>	N/A	N/A	N/A
					Document evaluation for any long term potential impact	CORR	M. McGowan	10/17/07
OTHER	N/A	N/A	, <b>N/A</b>	N/A	N/A	N/A	N/A ·	N/A

<sup>\*</sup>Designate which assignments are Long Term Corrective Action (non-outage related LTCA requires approval by DSO – Manager PE&RAS for corporate).

CAP-NGGC-0200	Rev. 18	٠.	*	

<sup>\*\*</sup>Provide justification for corrective actions with initial due date that exceeds 120 days.

# ATTACHMENT 3 Sheet 2 of 2 ADVERSE CONDITION INVESTIGATION FORM Form CAP-NGGC-0200-3-18

## **Corrective Action Plan**

att-diversery.	DESCRIPTION	CAUSE *	CODE	ORG	CORRECTIVE ACTION	ASSIGNMENT	ASSIGNEE/ CONCURRENCE	DUE OR COMPLETION DATE**
ADVERSE CONDITION	Tritium was identified in water in manhole 2-MH-2SE that is coming from groundwater.	N/A	N/A		Have hydrologists evaluate groundwater in area for tritium source determination.	CORR	Marty McGowan/Jerry Johnson	11/20/07
	equipment malfunction or	Cannot determine due to historical in nature	L1	N/A	None	N/A	N/A	N/A
•			·	·	Document evaluation for any long term potential impact	CORR	M. McGowan	10/17/07
OTHER	N/A	N/A	; <b>N/A</b>	N/A	N/A	N/A	N/A	N/A

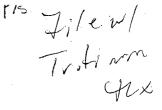
<sup>\*</sup>Designate which assignments are Long Term Corrective Action (non-outage related LTCA requires approval by DSO – Manager PE&RAS for corporate).

CAP-NGGC-0200	Rev. 18	,

<sup>\*\*</sup>Provide justification for corrective actions with initial due date that exceeds 120 days.

Discussions held by the hydrology experts on 11/17/08 indicate, based on the hydrology work performed in the protected area, that there are no long term impacts to the area from the tritium in this manhole. The groundwater in the area is moving towards the intake canal as expected and no additional actions are necessary.

The tritium in this manhole was discussed with the hydrology experts. Several wells have been installed in this area (area 11) and are not indicating tritium. The tritium in this manhole appears to be coming from an up gradient manhole where there are significant concentrations of tritium. The tritium in this case is being transported by interconnected conduits to this manhole. Per the hydrologists there are no other actions necessary related to the tritium in this manhole.



## **Communications Plan**

## January 2010

(The below Talking Points, Timeline and Questions and Answers are for internal use only by those Progress Energy employees directly involved with the Groundwater Protection Initiative (GWPI). These documents should not be released to non-Progress Energy employees.)

## Summary

An operator doing a routine inspection discovered a leak in a pipe on plant property Sunday, January 10, 2010. The pipe carries secondary plant and water treatment building waste water for chemical processing. Approximately 1,000 gallons of water containing a low level of tritium (5,590 picocuries per liter) leaked into the surrounding soil. The pipe was shut off, and crews expect to complete repairs by week's end. Based on the leak location and low tritium levels, there is no health or safety risk to the public or to employees on-site.

## **Target Audiences**

- Elected officials (State and local)
- Key leaders
- Media
- **Employees**

## **Strategies**

- Inform key leaders, elected officials, regulators
  - o When Reportability is determined, brief selected officials and stakeholders on investigation in accordance with the GWPI.
  - Outreach should communicate the company's commitment to health and safety.
- Inform employees
  - o Sitewide communication from Chris
- Respond to media inquiries

final information in this record was deleted in

accordance with the Freedom of Information Act

Exemptions

## **Talking Points**

In accordance with the Nuclear Energy Institute (NEI) GWPI all personnel briefing state and local officials should provide the information contained in Section 1. (NEI, of which Progress Energy is a member, is the policy organization of the nuclear energy and technologies industry and participates in both the national and global policy-making process.)

Section 2 provides additional information that may be helpful during briefings.

#### Section 1

- This informal communication is being made as part of the NEI Groundwater Protection Initiative.
- Crews are repairing a pipe on plant property that leaked tritiated water. Once repaired, the system will be tested and returned to service.
- At 8:30 a.m. January 10, 2010, an operator on regular rounds discovered the underground Waste Neutralization Basin Flash Mixer Return Pipe had developed a leak. The eight-inch fiberglass pipe carries secondary plant and water treatment building waste water for chemical processing.
- Approximately 1,000 gallons of water containing a low level of tritium (5,590 picocuries per liter) leaked into the surrounding soil. The EPA Drinking Water Standard is 20,000 picocuries per liter.
- Once the leak was discovered, the system was secured and the leak was isolated. The spill has been contained within the plant backfill and is unlikely to migrate off-site or reach the water table.
- The affected area is located approximately 15 feet west of the Water Treatment Building, within the plant's site boundary, approximately 1.7 miles inside Progress Energy property, and involves roughly 100 cubic feet of soil.
- Immediate remedial actions involving the affected area includes: pumping the water from the saturated ground back into the waste neutralization basin, removal of the tritiated soil, and sampling of soil in the area for tritium analysis.
- Since the water is contained onsite, there is no dose impact to a member of the public.

## Section 2 (General talking points)

- Tritium is a radioactive isotope of the element hydrogen. Tritium is produced naturally and is also a byproduct of the nuclear process. It is commonly found in water and is produced commercially for items such as exit signs, aircraft dials and wristwatches.
- The Harris Nuclear Plant, like all nuclear plants, periodically makes controlled releases of tritium as allowed by our operating license. These levels are well below release limits set by federal regulations.
- The Harris Nuclear Plant, and all Progress Energy nuclear plants, monitor radiation levels. The Harris plant provides the Nuclear Regulatory Commission (NRC) with an annual report of plant discharges and the results of environmental monitoring.

## **Communications Action Plan**

Date	Action	Responsible	Status/Comments
Monday	Discussion with NRC	Dave Corlett	Complete
afternoon, 1/11	- Joe Austin	(Licensing)	-
	- Patrick Lessard		
Tuesday, 1/12	Discussion with NRC	Dave Corlett	
a.m.	-Randy Musser	(Licensing)	
	404-562-4603		
Tuesday, 1/12	Brief Operations Staff	Heather Baxter	
a.m.	- Shift Manager	Dave Corlett	
	- Manager - Shift Ops	Market and the second s	
Tuesday, 1/12	Confirmation analysis	Heather Baxter	
a.m.	from HEEC received		
Tuesday, 1/12	NGG Site Vice	Chris Burton	
a.m.	Presidents and Jim	(Vice President)	
	Scarola.	,	
	Inform PGM when		
	complete.		
0800 Tuesday,	Pre-job brief of staff	Dave Corlett	Brief should include all HNP
1/12	making communication	(Licensing)	staff listed on this
			communication plan.
the second second	Ground Water Prote	ction Initiative Commun	ucation
1200 Tuesday,	Notify Main Control	Dave Corlett	Licensing will assist in
1/12	Room that GWPI	(Licensing)	preparation of NRC Event
1/12	Communication will be	(Dicensing)	Notification
	occurring at 1300		- Notification
	NC Government:		
1300 Tuesday,	- Division of Radiation	Mike Robinson	Review all Section 1 bullets
1/12	Protection	(Chemistry	Review and Section 1 Banets
1/12	(1. Section Chief):	Superintendent)	Division points of contact
	Lee Cox		share same number.
Informal GWPI	(2. Radiation		
Communication	Emergency		
	Coordinator):		
	Dale Dusenbury		
	919-571-4141 x232	•	

Informal GWPI	- Division of Water	Mike Robinson	Review <b>all</b> Section 1 bullets
Communication	Quality	(Chemistry	
	(1. Director):	Superintendent)	Division points of contact
(continued)	Coleen Sullins	1	share same number.
(33.11.11.11)	(2. Deputy Director):	. *	
	Chuck Wakild		
	919-807-6300	·	·
			·
	Notify John Warner	·	
•	when complete.		
Day of notification	Notify Power Agency	John Warner (Support	When called by Mike
	- Cecil Rhodes	Services Manager)	Robinson, John Warner will
(Following	919-760-6231		notify the following to begin
report to State)	- Kevin Josupait	Dave Corlett (back-up)	communications: Julia
	919-760-6236		Milstead, Dave Corlett.
	- Linda Anderson		
	919-760-6220		When called by John Warner,
	- Thom LaPonzina		Julia Milstead will notify the
	919-760-6209		following to begin
			communications: Kathy
			Hawkins, Marty Clayton, Andy
		·	Honeycutt, Ashley Turton and
	·		Len Anthony
Day of notification	Progress Energy	John Warner	
,	- Gary Little (Insurance	¥	
(Following	& Treasury)	Dave Corlett (back-up)	
report to State)	770-6807		
Day of notification	NSRC	John Warner	
	- Ed Hux		
(Following	H: EX. 6	Dave Corlett (back-up)	
report to State)	C: Ex6		
	- Stew Ebneter		
* .	Exb		
- C C	)	77 .1 77	
Day of notification	Notify appropriate	Kathy Hawkins	Appropriate officials
CE-11 DCM	State legislators and	(Public Affairs	determined by Kathy.
(Following PGM	key <b>State</b> leaders	Director)	·
report to State)	·		
• •			
	1	· ·	

Day of notification (Following PGM report to State)	Inform appropriate local officials in the 10 mile EPZ	Marty Clayton/Andy Honeycutt (Community Relation Managers)	Appropriate officials determined by CRMs.
Day of notification (Following PGM report to State)	Inform appropriate elected <b>federal</b> officials	Ashley Turton (Federal Regulatory Affairs)	Appropriate officials determined by Ashley.
Day of notification  (Following PGM report to State)	Site communication at Harris Plant	Julia Milstead (Site Communication)	
Day of notification  (thirty minutes following State notification)	Notify NRC - Joe Austin - Patrick Lessard - Randy Musser 404-562-4603	Dave Corlett  Dave Corlett	
Day of notification  (thirty minutes following State notification)	Notify NEI Kathy Yhip 202-739-8013	Mike Robinson	Review all Section 1 bullets. Email also required per NEI 07-07. kcy@nei.org GW notice@nei.org
Day of notification  (thirty minutes following State notification)	Notify INPO Marty Prystupa 770-644-8360	John Warner (Support Services) Dave Corlett (back-up)	
Day of notification (thirty minutes following State notification)	Notify Public Utilities Commission	Len Anthony (General Counsel)	Review <b>all</b> Section 1 bullets.
Day of notification  (one hour following State notification)	Notify ANI Bill Wendland: 860-682-1301	Dave Corlett	

	·		
NRC Event Notification	NRC Operations Center	Shift Manager Kara Stacy	<b>Note:</b> NUREG-1022 requires notification w/in four hours of State Notification.
(One hour following State notification)			