

ACTION REQUEST 00236389

Type : NCR 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
Owed To Fac: BNP Department : Discipline :

AR Status History

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	

T-14

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Request Attribute	Value	Reqd	Date
1A POT'L OPER/REPORT	N	Y	06/13/07
Name : MICHAEL	MILLINOR		

Request Attribute	Value	Reqd	Date
1B EQUIPMENT RELATED	N	Y	06/13/07
Name : MICHAEL	MILLINOR		

Request Attribute	Value	Reqd	Date
2 SUPERVISOR REVIEW	Y	N	06/17/07
Name : JERRY	JOHNSON JR.		

Request Attribute	Value	Reqd	Date
2A CR VALID?	Y	Y	06/17/07
Name : JERRY	JOHNSON JR.		

Request Attribute	Value	Reqd	Date
2B FURTHER INVNV REQD	Y	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	N	06/17/07
Name : JERRY	JOHNSON JR.		

Request Attribute	Value	Reqd	Date
2D OPER/REPORT ISSUE	N	Y	06/17/07
Name : JERRY	JOHNSON JR.		

Request Attribute	Value	Reqd	Date
2D1EQUIPMENT RELATED	N	Y	06/17/07
Name : JERRY	JOHNSON JR.		

Request Attribute	Value	Reqd	Date
2E MAINT RULE APPLIC	N	N	06/17/07
Name : JERRY	JOHNSON JR.		

ACTION REQUEST 00236389

Request Attribute	Value	Reqd Date
2F SYSTEM	5259	Y 06/21/07
Name : SYLVIA	EDWARDS	

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

Request Attribute	Value	Reqd Date
3 OPERATIONS REVIEW		N
Name :		

Request Attribute	Value	Reqd Date
3A IMMEDIATE REPT ISSUE	N	N 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 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	N	N 06/17/07
Name : STEVEN	GORDY	

Request Attribute	Value	Reqd Date
3B1 OPER ISSUE	N	N 06/17/07
Name : STEVEN	GORDY	

Request Attribute	Value	Reqd Date
3B2 REPORT ISSUE	N	N 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).

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

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ACTION REQUEST 00236389

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Request Attribute	Value	Reqd	Date
3B3 REW	N	N	06/17/07
Name : STEVEN	GORDY		

Request Attribute	Value	Reqd	Date
3B4 DEG/NCON	N		06/17/07
Name : STEVEN	GORDY		

Request Attribute	Value	Reqd	Date
3C TRACKING NUMBER	N	N	06/17/07
Name : STEVEN	GORDY		

Request Attribute	Value	Reqd	Date
4 REG AFF REVIEW		N	
Name :			

Request Attribute	Value	Reqd	Date
4A OPER/REPORT ISSUE	N	Y	06/18/07
Name : MARK	TURKAL		

Request Attribute	Value	Reqd	Date
4A1 OPER ISSUE	N	Y	06/18/07
Name : MARK	TURKAL		

Request Attribute	Value	Reqd	Date
4A2 REPORT ISSUE	N	Y	06/18/07
Name : MARK	TURKAL		

Request Attribute	Value	Reqd	Date
4A3 REW	N	Y	06/18/07
Name : MARK	TURKAL		

Request Attribute	Value	Reqd	Date
4A4 DEG/NCON	N		06/18/07
Name : MARK	TURKAL		

Request Attribute	Value	Reqd	Date
4B FOLLOWUP ASG REQD	N	Y	06/18/07
Name : MARK	TURKAL		

Request Attribute	Value	Reqd	Date
4C T. SPEC VIOLATION	N	Y	06/18/07
Name : MARK	TURKAL		

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Request Attribute	Value	Reqd	Date
4D ADD'L REPORT REQD	N	Y	06/18/07
Name :	MARK		TURKAL

Request Attribute	Value	Reqd	Date
4E PNSC/CSERB REQD	N	Y	06/18/07
Name :	MARK		TURKAL

Request Attribute	Value	Reqd	Date
5 CLASSIFN/ASSIGNMNT		N	
Name :			

Request Attribute	Value	Reqd	Date
5A CR VALID?	Y	Y	06/19/07
Name :	NANCY		HOLLEY

Request Attribute	Value	Reqd	Date
5B FURTHER INVN REQD	Y	Y	06/19/07
Name :	NANCY		HOLLEY

Request Attribute	Value	Reqd	Date
6 MISCELLANEOUS		N	
Name :			

Request Attribute	Value	Reqd	Date
6A COMMENTS		N	
Name :			

Request Attribute	Value	Reqd	Date
6B COMMENTS		N	
Name :			

Request Attribute	Value	Reqd	Date
6C COMMENTS		N	
Name :			

Request Attribute	Value	Reqd	Date
6D COMMENTS		N	
Name :			

Request Attribute	Value	Reqd	Date
6E COMMENTS		N	
Name :			

Request Attribute	Value	Reqd	Date
6F LAST COM ITM DUE			
Name :			

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Request Attribute Value Reqd Date
 6G EQUIP PRI ISSUE N
 Name :

Request Attribute Value Reqd Date
 6H RESP MGR N
 Name :

Request Attribute Value Reqd Date
 6I EQUIP PRI STATUS N
 Name :

ACTION REQUEST APPROVAL REVIEW

Route List: 001	Route List Initiator: MILLIM02				
Alert	Send	Send	Action	Action	
PASSPORT Fac Group/Type Last Name	Date	Time	Taken	Date/Time	
JOHNSJ03 BNP ERCCSUPV A JOHNSON JR.	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

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ASSIGNMENT NUMBER 02 SUB

Type : INVN Due Date : 07/27/07
Status : COMPLETE Reschedule : 1 Pri Resp Group: ERCCSUPT
Assigned To : N HOLLEY Sec Resp Group:
Subject : ADVERSE CONDITION INVESTIGATION

Aff Facility: BNP Unit : System :
UCR : Schedule Ref :
Organization: Department : Z58 Discipline :
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		07/12/07
06/19/07	HOLLEN	ACC/PRI	
06/19/07	HOLLEN	NTFY/ASG	
06/20/07	MILLIM02	ACC/ASG	
07/12/07	HOLLEN		07/27/07
07/20/07	MILLIM02	AWAIT/C	
07/25/07	HOLLEN	ACC/ASG	
07/25/07	HOLLEN	NTFY/ASG	
07/25/07	HOLLEN	ACC/ASG	
07/25/07	HOLLEN	AWAIT/C	
07/25/07	HOLLEN	COMPLETE	

Assignment Attribute Value Reqd Date
BENEFIT REALIZED N
Name :

Assignment Attribute Value Reqd Date
EXTERNAL OE RECOMM N Y 07/20/07
Name : MICHAEL MILLINOR

Assignment Attribute Value Reqd Date
INTERNAL OE RECOMM N Y 07/20/07
Name : MICHAEL MILLINOR

Assignment Attribute Value Reqd Date
1 EVALUATOR/ASSIGNEE N
Name :

Assignment Attribute Value Reqd Date
1A COMMITTED N
Name :

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Assignment Attribute Value		Reqd Date
1B CHANGE BASIS	PLEASE EXTEND	N 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		N
Name :		

Assignment Attribute Value		Reqd Date
2B COMMENTS		N
Name :		

Assignment Attribute Value		Reqd Date
2C COMMENTS		N
Name :		

Assignment Attribute Value		Reqd Date
2D COMMENTS		N
Name :		

Assignment Attribute Value		Reqd Date
2E COMMENTS		N
Name :		

COMPLETION NOTES
PLEASE INCLUDE IN DECOMMISSIONING RECORDS.

CAUSE/ACTION

ASSIGNMENT COMPLETION APPROVAL

Route List: 001	Alert		Route List Initiator: HOLLEN	Send	Send	Action	Action
PASSPORT Fac	Group/Type	Last Name	Date	Time	Taken	Date/Time	
JOHNSJ03	BNP ERCCSUPT	A JOHNSON JR.	07/20/07	14:06	APPROVED	07/23/07 14:18	
HOLLEN	BNP ERCUEVAL	A HOLLEY	07/23/07	14:18	RETURNED	07/25/07 15:13	
	BNP ERCCSUPT	A HOLLEY	07/25/07	15:53	BYPASSED	07/25/07 15:53	
HOLLEN	BNP ERCUEVAL	A HOLLEY	07/25/07	15:53	APPROVED	07/25/07 15:53	

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

Aff Facility: BNP Unit : System :
UCR : Schedule Ref : LTCA
Organization: Department : Z84 Discipline :
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	NTPY/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 N
Name :

Assignment Attribute Value Reqd Date
1 UNIT/SECT EVALUATR N
Name :

Assignment Attribute Value Reqd Date
1A COMMITTED N
Name :

Assignment Attribute Value Reqd 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

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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
2 MISCELLANEOUS	N
Name :	

Assignment Attribute Value	Reqd Date
2A COMMENTS Y	N 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 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.
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.

ACTION REQUEST 00236389

ASSIGNMENT COMPLETION APPROVAL

Route List: 001

Route List Initiator: MILLIM02

Alert	Send	Send	Action	Action
PASSPORT Fac Group/Type Last Name	Date	Time	Taken	Date/Time
JOHNSJ03 BNP ERCCSUPT A JOHNSON JR.	11/17/08	13:09	APPROVED	11/18/08 06:24
HOLLEN BNP ERCUEVAL A HOLLEY	11/18/08	06:24	APPROVED	11/19/08 13:53

ACTION REQUEST 00236389

ASSIGNMENT NUMBER 06 SUB

Type : CORR Due Date : 12/31/08
Status : COMPLETE Reschedule : 3 Pri Resp Group: ERCCSUPT
Assigned To : M MILLINOR Sec Resp Group:
Subject : TRITIUM IDENTIFIED IN MANHOLE MH-4

Aff Facility: BNP Unit : System :
UCR : Schedule Ref : LTCA
Organization: Department : Z84 Discipline :
Est Manhrs : Est Comp Date :

Assignment Status History

Updated Date	Updated By	Assgn Status	Assgn Due Date
10/17/07	PETRU D	INPROG	12/20/07
10/17/07	PETRU D	NTFY/ASG	
10/17/07	PETRU D	NTFY/PRI	
10/17/07	PETRU D	ACC/PRI	
10/17/07	PETRU D	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 IDENTIFY ANY ADDITIONAL ACTIONS
NEEDED BASED ON REPORT FROM THE HYDROLOGICAL EXPERTS.

Assignment Attribute Value Reqd Date
BENEFIT REALIZED N
Name :

Assignment Attribute Value Reqd Date
1 UNIT/SECT EVALUATR N
Name :

Assignment Attribute Value Reqd Date
1A COMMITTED N
Name :

Assignment Attribute Value Reqd Date
1B CHANGE BASIS PLEASE EXTEND N 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

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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	N 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:

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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
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Thanks,
Mike

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Sent: Tuesday, October 07, 2008 8:13 AM
To: Annacone, Michael J.; Johnson, Jerry
Subject: E&C CORL/CORR/CAPR Backlog Reduction

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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.

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	Reqd	Date
2B COMMENTS	N	
Name :		

Assignment Attribute Value	Reqd	Date
2C COMMENTS	N	
Name :		

Assignment Attribute Value	Reqd	Date
2D COMMENTS	N	
Name :		

Assignment Attribute Value	Reqd	Date
2E COMMENTS	N	
Name :		

Assignment Attribute Value	Reqd	Date
3A LTCA APPROVAL	N	
Name :		

Assignment Attribute Value	Reqd	Date
3B LTCA CONCURRENCE	N	
Name :		

ACTION REQUEST 00236389

COMPLETION NOTES

CAUSE/ACTION

ASSIGNMENT COMPLETION APPROVAL

Route List: 001

Route List Initiator: MILLIM02

PASSPORT Fac	Alert	Group/Type	Last Name	Send Date	Send Time	Action Taken	Action Date/Time
JOHNSJ03	BNP	ERCCSUPT	A JOHNSON JR.	11/19/08	13:35	APPROVED	11/19/08 13:42
HOLLEN	BNP	ERCUEVAL	A HOLLEY	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 $\mu\text{Ci/ml}$ (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

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

Corrective Action Plan

	DESCRIPTION	CAUSE	CODE	ORG	CORRECTIVE ACTION	ASSIGNMENT TYPE *	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	N/A	Have hydrologists evaluate groundwater in area for tritium source determination.	CORR	Marty McGowan/Jerry Johnson	11/20/07
N/A or:EQ Malfunction	There is no known current equipment malfunction or inappropriate act associated with the current situation. Item appears to be historical.	Cannot determine due to historical in nature	L1	N/A	None Document evaluation for any long term potential impact	N/A CORR	N/A M. McGowan	N/A 10/17/07
OTHER	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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

**Provide justification for corrective actions with initial due date that exceeds 120 days.

ATTACHMENT 3
 Sheet 2 of 2
ADVERSE CONDITION INVESTIGATION FORM
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Corrective Action Plan

	DESCRIPTION	CAUSE	CODE	ORG	CORRECTIVE ACTION	ASSIGNMENT TYPE*	ASSIGNEE/ CONCURRENCE	DUE OR COMPLETION DATE**
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N/A or: EQ Malfunction	There is no known current equipment malfunction or inappropriate act associated with the current situation. Item appears to be historical.	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	N/A	N/A	N/A	N/A	N/A	N/A

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

**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.

File w/
Tritium
GEX

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**
 - 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**
 - Sitewide communication from Chris
- **Respond to media inquiries**

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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.

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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.

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Communications Action Plan

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

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

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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 federal 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 all Section 1 bullets.
Day of notification (one hour following State notification)	Notify ANI Bill Wendland: 860-682-1301	Dave Corlett	

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