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AR 00931098 Report

Aff Fac:	Oyster Creek	**AR Type:**	CR	**Status:**	APPROVED
Aff Unit:	NA	**Owed To:**	A5332CAP	**Due Date:**	07/14/2009
Aff System:	--			**Event Date:**	06/14/2009
CR Level/Class:	4/D			**Disc Date:**	06/14/2009
How Discovered:	H02			**Orig Date:**	06/14/2009
WR/PIMS AR:		**Component #:**			

Action Request Details

Subject: ANOMOLIES IN TRITIUM ANALYSIS RESULTS

Description:

Originator: JHANSI R KANDASAMY Supv Contacted: Tim Rausch

Condition Description:
This IR is generated to address the analysis results of the daily intake sample taken on Friday 6/12/09.
The original sample indicated Tritum activity of 16,700 pCi/L. A split sample was reanalyzed and it also showed activity at 16,600 pCi/L. A new sample was taken and analyzed on 6/13/09 and the analysis indicated LLD.

Immediate actions taken:
Discussed issue with SLT and the IMT. gnerated this IR to review the analysis and determine if further actions are required.

Recommended Actions:
1. Corporate Chemistry review lab practices
2. Review if there were any plant manipulations in progress during the sampling to determine impact/contribution
3. Review past Tritium avtivity results from the 1990's when Tritium was discharged from the CST failure for similarities
4. Review CRA report for potential contributers or hydrogeological behaviors.

Operable Basis:
N/A

Reportable Basis:
N/A

Reviewed by: THOMAS A DUNN 06/15/2009 01:10:33 CDT
Reviewer Comments:
none

SOC Reviewed by: LYNDA FILEPPI 06/16/2009 09:50:10 CDT
SOC Comments:
06/15/09 JJV- Per discussion with the Tritium Issues Management Team, this was apparently a false positive result because the observed tritium concentrations were higher than those in nearby monitoring wells in spite of the fact that there is a large dilution factor due to the cooling water intake flow. In addition, a sample collected from the intake several hours later was < LLD for tritium.

Filed

Create another New Issue Create another Issue from '00934636' Print Close window

****AS REQUIRED, PRINT ISSUE REPORT AND PROVIDE TO YOUR SUPERVISOR****
Note: This is your only notice. You will not have an opportunity to print this confirmation later.

Exelon Nuclear Issue - Statement of Confirmation

Issue #: 00934636 **Originator:** CALVIN C TAYLOR **Submit Date:** June 24, 2009

Basic Information

Affected Facility: Oyster Creek

Dscv Date: 06/22/2009 23:00

How Discovered Code: H03A

Event Date: 06/22/2009 23:00

Affected Unit: NA

Affected Sys: --

Subject: NRC COMMENTS ON TRITIUM MASS FLUX ANALYSIS OF H-3 GROUNDWATE

Well
Cohansy

Required Information

Condition Description:

NRC inspector stated that he believes that we are underestimating the plume in the Conhansey aquifer by up to a factor of 10 and therefore believes our release could be as much as 10 times the 66 Currie value we stated in the CRA mass flux report. The NRC inspector stated that there was a potential direct path to the Cohansey through the Cape May with a smaller leak rate and also a potential direct and preferential path to the intake because of last year's ESW excavation creating a loose fill and penetrating the clay layer between the Cape May and Cohansey. In addition, the NRC inspector has an issue with Exelon's decision to characterize the intake canal sample that indicated an elevated level of tritium as invalid (IR 931098).

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The station maintains a position that it would have required the leak to have gone undetected for greater than one year in order to reach 66 Curries of H-3. Any leak of this magnitude would have been detected during sampling for the License Renewal inspection of the ESW cable vault in October 2008. In addition, exposure of the exterior of the piping to this leakage would have resulted in significantly more corrosion than what was found. The following data support this conclusion:

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800,000 gallons of 6 million pCi/L tritiated water equals 18 Curries of H-3.

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Releasing 66 Ci of H-3 requires 3 million gallons of 6 million pCi/L tritiated water.

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In 2008, the station had a demineralized water through-put of 4.4 million gallons.

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During the period January 1 – April 26, 2009, there was a 1.25 million gallon demineralizer through-put.

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The above through-puts do not include documented usage of 175,000 gallons for the new Demineralized Water Storage Tank, 100,000 gallons for the Isolation Condenser bleed and feed, steam leaks, aux boiler operation, and other known losses/uses.

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The ESW cable vault was pumped late last year October and no tritium was detected. . In addition, a cable replacement was performed in 2006 from the ESW cable vault to and through the turbine building penetration.

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Engineering observation that the corrosion on the exterior of the pipe appeared to be the result of being exposed to the leak environment for less than a year.

Immediate actions taken: None required.

Recommendation for action: Provide positions on elevated intake sample result and on bounding value for release volume.

Supervisor Verbally Jhansi Kandasamy

Contacted

Optional Additional Information

Routing

Owed To Group: ACAPALL

Routed to Group: CR-OSC