

Christopher Long - FW: Unit 2 Spent Fuel Pool. Monitoring Wells and Underground Piping Inspections as of 6/29/06

From: "Cox, Mark R" <mcox90@entergy.com>
To: <cxl1@nrc.gov>
Date: 07/21/2006 12:45:24 PM
Subject: FW: Unit 2 Spent Fuel Pool. Monitoring Wells and Underground Piping Inspections as of 6/29/06

FOIA Request

From: Hinrichs, Gary H
Sent: Thursday, June 29, 2006 6:19 PM
To: Hinrichs, Gary H; Dacimo, Fred R.; Rubin, Paul W; Ventosa, John A; Comiotes, James; Mayer, Donald M; Conroy, Patric W; McMullin, Kathleen M; Cox, Mark R; Sullivan, Brian A; Small, Albert J
Cc: Rutkoske, Michael J; Adler, Joseph J.; Loope, Dennis
Subject: Unit 2 Spent Fuel Pool. Monitoring Wells and Underground Piping Inspections as of 6/29/06

Interim Status Report

- An Interim Status Report from GZA was describing the ground water characteristics we know based on Phase 1 and Phase 2 well data. A meeting with the NRC and DEC Hydrologists and regulators was held on June 12 and 13.

Unit 2 Spent Fuel Pool Leak

- Leak collection box installed over crack in fuel pool wall has collected water Since April 5, 2006.
- To date, there have not been any fresh isotopes from the Unit 2 pool identified in the samples.
- Samples are collected weekly

Date	Volume (ml)	Tritium (pCi/L)	Boron (ppm)
4/5/06	105	5.6M	407
4/14/06	674	8.7M	1426
4/21/06	403	10.4M	1585
4/26/06	7	10.1M	1598
5/3/06	46	9.2M	813
5/10/06	1008	8.1M	320
5/15/06	1263	11.9M	941

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5/24/06	1386	12.4M	960
5/31/06	901	2.4M	618
6/7/06	431	10.6M	64
6/14/06	165.5	9.3M	74
6/21/06	121.5	8.6M	126
6/28/06	158	-	-

Unit 2 Spent Fuel Pool Inspection

- ROV technologies began inspection between wall and fuel racks. Some problems have been encountered due to the flexibility of the narrow pole used to support the camera resulting in the loss of focus on the wall. Also some of the dimensions are smaller than indicated on the drawings preventing the camera from entering the area. A go-no go gauge has been used before we put a camera in the area.
- The camera inspection of the transfer canal is underway. There are no indications of through wall leaks, but there are some indications that will warrant some further review
- The spent fuel pool floor assessment will also be performed by ROV starting next week. This will provide us information to plan a floor cleaning.

Monitoring Wells

- All Phase 1 and 2 wells have been drilled and all wells have sampled and split with the NRC and NYS DEC for independent analysis.
- Well completion activities of packer testing, geophysics testing, surveying, and final packer installation are in progress
- 12 additional wells (Phase 2A) are being planned in response to the SR-90 found in MW-42 (located in EDG alleyway near IP1 fuel pool), MW 37, 49 and 50 (located near discharge canal) and the Unit 1 Containment Spray Sump. The purpose of these wells is to determine the SR-90 plume. A tracer test will be performed following the installation of the wells. Two well drilling rigs are currently working on-site.
- An Interim Ground Water Well Sampling Frequency and Analysis program has been established for the new and existing wells. The wells will be sampled on a Bi-weekly, Monthly and Quarterly frequency.
- Split samples with the NRC and NYS DEC continue to be arranged.
- All baseline sampling for SR-90 has been completed and we are seeing low levels of SR-90 in many of the wells to the south and west of Unit 1. Some of these wells are

located on Unit 3. The results are being analyzed.

Source Reduction

- A Unit 1 West Pool Demineralizer has been placed in-service (4 days a week, 10 hours a day). A system will be installed to run the system 24/7. The expected completion date is July 31. To date this demineralizer has remove ~9.5 Ci.
- The resin bed was replaced with a bed to improve SR-90 collection and to improve demineralizer efficiency.
- A transfer system was installed at the Unit 1 Containment Spray Sump and moved approximately 14,000 gallons of 300pCi/L of SR-90 water. This water was processed through a demineralizer, and stored in the Unit 1 Annulus. After sampling for reduced SR-90, the water was released via the north curtain drain processing system. The sump was inspected and the line from Unit 1 Annulus was video inspected. The east wall of the sump has several wet spots. A sample line is being planned to find what is behind this wall.
- A new collection well will be installed in the Unit 2 FSB starting next week. The purpose of the well is to remove tritium form the source below the pool. If the tritium levels begin to decrease over time, this would be another indication the Unit 2 pool does not have an active leak.

Storm Drain and Curtain Drains

- An inspection of storm drains and curtain drains has been completed. In general the Unit 2 and 3 storm drains are functional and intact. Approximately ¼ to 1/3 of the drain lines is full of silt, gravel and debris. The cleaning and facilitating minor repairs will start next week. The debris from the storm drains will be collected, dried, analyzed and disposed of appropriately.

Underground piping, tanks and sump inspection

- Potential tritium sources identified during the KT analysis have been scheduled for evaluation thru Sept 2006.
- The Unit 2 PAB sump was identified as a potential source. MW-34, located in the transformer yard has an increasing trend in Tritium. Other wells in the area have a declining trend. This well is located west of the Unit 2 PAB Sump. An ER is being developed to install a stainless steel liner in that sump. This project will have an impact to Operations while the sump is out of service. A review of RHR pump flooding will be performed

Commitments

- Letter sent to NRC on 4/10/2006 discussed current status of groundwater contamination included 9 commitments involving modifying REMP, environmental monitoring, well sampling frequency and Unit 2 fuel pool inspection. A review of commitment status will be performed in July