

Oyster Creek Tritium Project

Timeline of Events

Updated January 19, 2011

- April 13, 2009:** During a routine inspection, twelve inches of standing water was observed in an underground electrical, concrete vault. Per station process, the water was pumped into drums and sampled.
- April 15, 2009:** Chemistry samples indicated that the standing water contained tritium above normal background levels.
- April 15, 2009:** Exelon notified the N.J. Department of Environmental Protection (DEP) and the U.S. Nuclear Regulatory Commission (NRC) of the discovery of the elevated tritium concentrations in the water.
- April 16, 2009:** Exelon issued a [press release](#) informing the public/media about the discovery of tritiated water inside of a concrete vault at the plant.
- April 17, 2009:** Exelon issued a [press release](#) confirming that the tritium found on April 15 is confined to the site.
- April 17, 2009:** Tritium in concentrations greater than background was found in an existing monitor well. Update notifications were made to the N.J. DEP and NRC.
- April 25, 2009:** Oyster Creek Nuclear Generating Station was taken off line due to transformer failure unrelated to the tritium discovery.
- April 26, 2009:** A 3/16ths of an inch hole was identified in condensate transfer piping. This pipe was subsequently replaced on April 28, 2009.
- April 30, 2009:** Exelon issued a [press release](#) informing the public/media that the source of the leaks had been located and that pipe replacement was in-progress.
- May 2, 2009:** Replacement of the leaking sections of pipe completed.
- May 15, 2009:** Exelon completed its 30-day follow-up to the N.J. DEP regarding the tritium leak.
- Spring 2009:** Oyster Creek conducted a root cause analysis to confirm the source of the leak.
- June 2009:** Oyster Creek completed its internal root cause analysis launched in spring 2009.
- June 1, 2009:** Water with tritium concentrations above background was identified in a pipe vault on the southeast corner of the reactor building. All pipes in the vault were inspected with no leakage identified. The source of tritium was historic actuations of the isolation condensers.

- June 1, 2009:** Exelon conducted courtesy notifications to the N.J. DEP and NRC.
- June 8, 2009:** Oyster Creek mailed a Community Newsletter to area residents updating them on general plant activities and events, and about the tritium leak discoveries and pipe repairs.
- June 18, 2009:** Oyster Creek Generating Station hosted a Community Information Night. About 137 members of the public attended to learn about plant operations and ask questions of our plant experts.
- June 30, 2009:** Exelon issued a [press release](#) updating the public/media on Oyster Creek's tritium analysis including pipe excavation status and water sample results.
- July 2009:** Exelon submitted a 90-page report to the N.J. DEP for the agency's review that detailed the contamination of groundwater on site and the extensive monitoring system in place.
- July 9, 2009:** Oyster Creek mailed a [summary of the root cause analysis](#) findings to 8,300 neighbors in the 10-mile radius around the plant.
- Aug. 13, 2009:** The N.J. DEP and Exelon held a meeting to discuss the N.J. DEP's questions and issues.
- Aug. 24, 2009:** A second leak of tritiated water was discovered inside the turbine building, coming from a pipe penetration sleeve.
- Aug. 25, 2009:** Exelon notified the N.J. DEP and NRC of the turbine building penetration leak.
- Aug. 26, 2009:** Exelon issued a [press release](#) announcing power reduction to allow plant teams to make repairs to a 6-inch pipe carrying tritiated water.
- Aug. 29, 2009:** Exelon issued a [press release](#) announcing that the station returned to full power and that during power reduction, plant teams also analyzed seven additional pipes.
- Sept. 24, 2009:** A meeting was held between N.J. DEP and Exelon regarding Oyster Creek's on-site release of tritium contaminated water. Oyster Creek's plans to prevent recurrence were discussed.
- Oct. 2009:** Oyster Creek begins an aggressive buried pipe mitigation initiative. The station's plan is to move direct buried piping either above ground, into monitored concrete trenches/vaults, or some alternate protective measure to prevent potential leakage to the environment and ensure consistent monitoring of the pipes.
- Oct. 30, 2009:** Oyster Creek held a second Community Information Night. About 130 members of the public attended to learn about the plant.
- Nov. 2009:** Exelon submitted a 40+- page environmental assessment and plan for an aggressive buried pipe mitigation initiative to the N.J. DEP for review and comment. The execution of this plan began in October 2009.

- May 7, 2010:** The N.J. DEP announces the launch of a new investigation into the 2009 leak of tritium.
- May 7, 2010:** Exelon issued a [press release](#) updating the public/media on the company's extensive actions to fix, assess, monitor and eliminate the source of tritium contamination under the plant since a leaking pipe was discovered in April 2009.
- May 12, 2010:** Chemistry analysis detected tritium at higher than background levels in a pipe vault on southeast corner of the reactor building.
- May 12, 2010:** Exelon conducted courtesy calls to the N.J. DEP and the NRC notifying them of the detection of tritium at higher than background levels.
- May 13, 2010:** Exelon placed a [newspaper advertisement](#) about the facts of tritium at Oyster Creek.
- May 14, 2010:** Oyster Creek issued a [letter](#) to its neighbors to update residents about the 2009 leaks.
- June 4, 2010:** N.J. DEP commissioner Bob Martin toured Oyster Creek Generating Station's monitoring wells and the intake and discharge canals.
- June 10, 2010:** Oyster Creek held a Community Information Night. About 160 members of the public attended to learn about the plant's operations and have their questions answered about tritium.
- June 16, 2010:** Oyster Creek Generating Station is over a third of the way through the aggressive, 16-month, \$12 million buried pipe mitigation initiative. The project will provide containment for approximately 45 pipes that are currently directly buried or not easily accessible. The project is on track to be completed by the end of 2010.
- July 2010** Oyster Creek completed the installation of eight new on-site monitoring wells.
- July 21, 2010** The eight new monitoring wells were sampled and seven of the eight wells showed no signs of tritium. The eighth well, which was installed directly in the plume, was found to have 5,900 picocuries per liter, well below the EPA's drinking water standard of 20,000 picocuries per liter.
- Sept. 2010** Oyster Creek completed the installation of a pumping well that will be used to actively pump groundwater from the aquifer to clean it up quicker than it would have cleaned up under natural conditions.
- Dec 2010** Oyster Creek completed an aggressive buried pipe mitigation initiative. The station moved direct buried piping either above ground, into monitored concrete trenches/vaults, or some alternate protective measure to prevent potential leakage to the environment and ensure consistent monitoring of the pipes.
- Jan 2011** The station continues to pump groundwater from the aquifer using the pumping well. It is then discharged into the intake structure. The water will be extensively diluted as it cycles through the plant into the discharge canal.