



**Powering Our Community
for Today and Tomorrow**

Oyster Creek Tritium and Buried Pipe Mitigation Project Fact Sheet

- Oyster Creek Generating Station completed an aggressive, 16-month, buried pipe mitigation initiative at the end of 2010. 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. The project provides containment for approximately 45 pipes that were previously direct buried or not easily accessible. The Oyster Creek project is part of an Exelon Nuclear-wide buried pipe initiative.

Tritium Monitoring

- The station has monitored both the intake and discharge canals at the plant, as well as at the Route 9 bridge, on a daily basis since April 2009. These test samples continue to show no detectable levels of tritium.
- Since April 2009, Oyster Creek has provided the NJDEP Bureau of Nuclear Engineering (BNE) ongoing reports concerning station plans to address tritium piping at the station. The collected data shows a steep, continuous reduction in tritium concentrations in monitoring wells at Oyster Creek, as great as 90 percent in most cases.
- Theoretically, if someone were to drink eight glasses of water from the discharge canal **every day for a year**, the most exposure they would get is 0.006 millirem. The average American receives 620 millirem per year in background exposure from natural and manmade sources.* This is more than 130,000 times greater than the potential exposure from the tritium leak at Oyster Creek.
- Oyster Creek has taken more than 1,000 surface water samples since April 2009, and voluntarily shares those samples with the State of New Jersey. The environmental monitoring program followed by the nuclear industry is one of the most comprehensive and exacting of any of the nation's private sector facilities and is carefully tracked by the Nuclear Regulatory Commission.

*Source: National Council on Radiation Protection and Measurements

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- As part of the station's remediation investigation, Oyster Creek installed new monitoring wells and continues to take additional samples which are also shared with the state. These new wells allow us to further characterize and monitor any tritium at the site. These new wells also reflect the downward trend in tritium concentrations at Oyster Creek.
- Tritium is an isotope of hydrogen that produces a very weak level of radiation. It is produced naturally in the upper atmosphere when cosmic rays strike atmospheric gases and is produced in larger quantities as a by-product of the nuclear energy industry. When combined with oxygen, tritium has the same chemical properties as water. Tritium can be found at very low levels in nearly all water sources.

A tritium fact sheet from the U.S. EPA can be downloaded at <http://www.epa.gov/radiation/radionuclides/tritium.html>

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