

NRC Studied Possible Contamination From Spent Nuclear Fuel Pool Leak

The same results would arise from samples of "clean" soil in a 'pristine' environment

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Soil, concrete and bedrock near a suspected spent fuel pool leak at the decommissioned Connecticut Yankee nuclear power plant do not exhibit dangerous levels of contamination, the Nuclear Regulatory Commission reported Wednesday.

NRC inspectors on Nov. 7 took samples for testing at the Oak Ridge Institute of Science and Education in Tennessee. Connecticut Yankee officials also took samples for independent testing.

NRC official Marie Miller said it remains inconclusive whether the pool that housed spent nuclear fuel rods ever leaked, but it is certain there is no active seepage.

Connecticut Yankee has said contamination was limited to a 4-by 4-foot cube on the east side of the spent fuel pool building slated for demolition this year.

Miller said soil samples from an excavation outside the spent fuel pool wall have "no detectable" levels of tritium and strontium-90.

The soil contained low levels of cesium-137, most likely from fallout from nuclear testing decades ago, Miller said.

Those radioactive isotopes in high doses may cause cancer.

Of the three-crushed bedrock samples tested, the NRC found one sample with slightly higher levels of cesium and strontium - in line with nuclear bomb testing in the desert decades ago.

The NRC hasn't received the test results for tritium yet, though Connecticut Yankee's testing found no detectable levels, Miller said.

There is also no cause for concern with two boring samples taken from the concrete spent fuel pool wall, Miller said.

Low levels of strontium, tritium and cesium were found on the outer wall sections, and in decreasing levels in sections closer to the fuel pool, she reported.

The NRC, noting that Connecticut Yankee's findings were consistent with the Oak Ridge Institute readings, said independent groundwater testing would continue at the plant site.

As of early January, Connecticut Yankee had excavated 15,000 tons of soil and bedrock from the plant site.

NRC spokesman Neil Sheehan said the agency would release a full report on the Connecticut Yankee findings later this month, but wanted to release the information Wednesday to allay public concerns.

Connecticut Yankee spokeswoman Kelley Smith said the NRC test results confirm the company's earlier finding that the contaminated soil adjacent to the spent fuel pool was confined to a small area on the plant site, which has been cleaned as part of ongoing decommissioning activities.

"We will also be conducting additional tests on the spent fuel pool concrete to determine if any further cleanup is needed prior to the demolition of the spent fuel pool building this year," Smith said.

Connecticut Yankee permanently shut down in 1996, after producing 110 billion kilowatt-hours of electricity over 28 years.