

Vermont Nuclear Decommissioning Citizens Advisory Panel

Draft Counter Proposal

Vermont Department of Health Groundwater Monitoring Through License Termination

Submitted on 11.23.15

It is the opinion of the Vermont Nuclear Decommissioning Citizens Advisory Panel that the independent environmental surveillance of Vermont Yankee (VY) conducted by the Vermont Department of Health (VDH) continue with the financial support of the owner of the NRC licenses for the facility and its spent fuel storage installation until those licenses are terminated. The bases for this opinion are:

1. Until the structures, systems and components at VY are decontaminated and dismantled to meet site release criteria, there will remain an extremely large quantity of radioactive materials. The best way to know whether these materials have leaked into the environment is by measuring the groundwater, soils, sediments and other environmental media on and around the site.
2. As shown during the tritium leak investigation of 2010 when the VDH identified tritium in river water long before VY did, and again in December 2014 when the VDH identified strontium-90 in groundwater and VY did not, the VDH radiochemistry laboratories always strive to measure lower, more health-protective concentrations of radionuclides in environmental media.
3. The Vermont Department of Health has independent regulations for public health protection from groundwater and atmospheric releases from the facility, and those regulations are by law deemed satisfied with the measurements made by the VDH, not those made by VY.
4. The VDH laboratories are needed not only now while materials are in storage, but also when the structures, systems and components are decontaminated and dismantled in the future in what will be the largest industrial activity in Vermont's history. Maintaining the VY funded laboratory capabilities now and through that future work is more effective than attempting to restore those capabilities many years from now.
5. The VDH will also independently measure and report on transuranic radioactive isotopes of americium, neptunium and plutonium. Transuranics and strontium-90 with high energy alpha and beta radiations not only result in higher physiological health impacts as compared to tritium and other more common radioactive materials, but have been shown to be of high financial impact during the decommissioning of nuclear facilities including Maine Yankee and Connecticut Yankee.
6. The citizens of Vermont have relied on the independent VDH laboratory analysis of split samples from the VY site and its surrounding public environment which have been published for more than forty years. This independence and ease of access to data is a cornerstone of Vermont's public health system and it provides Vermonters greater confidence that their land, water, air and health are fully protected.

Submitted by William Irwin, Sc.D., CHP; Radiological & Toxicological Sciences Chief; the Vermont Department of Health.