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State of New Jersey DEPARTMENT OF ENVIRONMENTAL PROTECTION

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LISA P. JACKSON Commissioner

October 6, 2008

Mr. Timothy S. Rausch, Vice President Oyster Creek Nuclear Generating Station US Route 9 South PO Box 388 Forked River, New Jersey 08625-0424

Mr. Rausch:

I received your letter dated September 19, 2008 regarding your September 18, 2008 notification to the New Jersey Department of Environmental Protection (DEP) hotline of elevated tritium levels detected in storm water found during a construction excavation being performed onsite. We appreciated the opportunity to meet with Jim Randich and your staff on September 24, 2008 to discuss the issue. That meeting helped to clarify our understanding of the construction excavation footprint and the measures taken to reduce the spread of contamination during construction. Your efforts to reduce the potential for offsite migration of tritium at the Oyster Creek nuclear generating station, including the construction of the new de-mineralized water storage tank (DWST) are commendable. As noted by your staff, this tank will be used to provide 'clean' make-up water to the plant's emergency shut-down isolation condenser system, thus replacing the existing condensate storage tank, which contains tritiated water.

Your letter states that you are "confident that no spill and or discharge occurred". We do not agree. The precautions taken to reduce contamination during the excavation, cutting, and draining of the torus water storage tank (TWST) piping, located in the DWST excavation area, seem prudent. However, when the storm water, resulting from Tropical Storm Hannah, was sampled on September 8, 2008 from a puddle nearby the cut pipe, an initial (ten minute) analysis result of 12,300 picoCuries per Liter (pCi/L) was obtained from your onsite laboratory. Under New Jersey Administrative Code, Title 7, Chapter 1E, your facility was obligated to report this discharge to the environment to the DEP hotline within fifteen minutes.

Further, when a re-analysis of that sample was performed by your onsite lab utilizing a longer, more appropriate counting time (150 minutes) for the environmental assessment of tritium, the result was 21,200 pCi/L confirming the need to report the apparent discharge within fifteen minutes. DEP rules and regulations are quite clear that discharges are to be reported

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timely. Following notification, you are afforded time to conduct an in depth investigation and prepare appropriate corrective measures and mitigation strategies.

As the investigation continued, the standing water was pumped from the excavation site into storage barrels. A sample of that water was taken and analyzed at your laboratory. The results of that analysis indicated tritium levels at 400 pCi/L. Despite a third positive laboratory test result for tritium, the apparent discharge remained unreported. In fact, when questioning your staff at the September 24 meeting, they agreed that some level of tritium was certainly present in the storm water despite their lack of confidence in the laboratory results. However, notification to the DEP hotline was not received until September 19, 2008.

Your September 18, 2008 letter and our subsequent meeting with your staff have raised some serious concerns regarding your onsite laboratory practices and environmental sampling protocol. (1) Some of the storm water samples were discarded and further analysis was not possible. (2) Environmental samples were sent to your onsite laboratory for analysis. The Oyster Creek On-site Laboratory is certified by the DEP's Office of Quality Assurance for only four parameters - total organic carbon, pH, temperature, and chlorine. The lab is not certified for tritium analysis. (3) The on-site laboratory also handles "hot" samples collected from systems inside the plant containing highly elevated levels of radioactivity. There is considerable opportunity for cross contamination of samples in that environment. Oyster Creek has another laboratory contracted to perform analysis of other routinely collected environmental samples. That laboratory is certified for tritium analysis. (4) Your staff continued to analyze samples at the onsite laboratory despite your suspicions that the original samples were cross contaminated at the lab.

For all of the above reasons, we do not have confidence in the tritium data generated from the Oyster Creek On-Site Laboratory, and we are not convinced that there was laboratory error in the analysis of the storm water samples. The original sample of the storm water has been destroyed preventing further analysis to corroborate your conclusions. Your staff admits that there was some level of tritium in the storm water collected from the excavation site. These facts lead me to the conclusion that there was a discharge onsite.

While the level of tritium found in the original sample does not pose a significant health risk, there are two core issues raised as a result of this incident. The first is your reluctance to recognize the DEP rules and regulations regarding discharges, timely reporting of the discharges. and certification of your laboratory for all parameters which are routinely analyzed. The DEP rules and regulations are in place to assure that prompt and effective measures are implemented to minimize the impact that any discharge of hazardous material to environment would have on public health and safety. Therefore, it is imperative that any discharges, regardless of magnitude or impact need to be reported first and investigated afterward. Second is the apparent lack of attention to detail with regard to laboratory protocols and procedures for handling and analyzing these types of environmental samples. We understand that these lapses do not constitute any violation of Nuclear Regulatory Commission (NRC) requirements, but we have copied NRC on this letter so that they are aware of our concerns.

We have a meeting tentatively scheduled with you and your staff on October 7, 2008 to discuss the corrective action plan to mitigate these serious issues in more detail.

Sincerely yours,

Jill Lipoti, Ph.D.

Director

Sam Collins, NRC Regional Administrator, Region 1 c: Paul Baldauf, Assistant Director, Radiation Protection Programs Patrick Mulligan, Manager, Bureau of Nuclear Engineering Joseph Aiello, Manager, Office of Quality Assurance