



Entergy Nuclear Northeast  
Entergy Nuclear Operations, Inc.  
Indian Point Energy Center  
450 Broadway, Suite 1  
Buchanan, NY 10511  
**Fred Dacimo**  
**Site Vice President**

---

June 26, 2007  
IP-ADM-07-065

Mr. Stuart F. Gruskin  
Executive Deputy Commissioner  
New York State Department of Environmental Conservation  
Office of the Executive Deputy Commissioner, 14<sup>th</sup> Floor  
625 Broadway  
Albany, New York 12233-9016

Re: Detection of Tritium in Indian Point Sewer System

Dear Mr. Gruskin:

I am writing to you in response to the concerns raised in your May 24, 2006 letter concerning Tritium contamination in the IPEC sewer system. First, let me inform you that Entergy has conducted an aggressive investigation and has determined that Tritium is not present in IPEC's sewage effluent. IPEC has had a long standing routine program for the monitoring of gamma radioactivity in its sewage effluent. In October of 2006, Entergy added Tritium as a constituent of interest, in response to a nuclear industry initiative to improve monitoring of potential Tritium effluents.

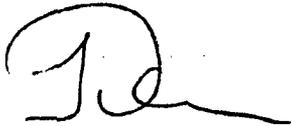
As a result of that sampling program, Entergy began to observe sporadic indications of possible Tritium contamination in its on-site sewage station. In response to the recognition that very low levels of Tritium could be present in its sewage effluent, Entergy took two immediate actions including; notification to regulators and stakeholders and an aggressive investigation to determine the cause of the apparent Tritium detections. It is Entergy's confirmed policy to communicate new information to stakeholders as the issues are developing, with the recognition that this sometimes leads to reporting of issues that later turn out to be inconsequential in nature.

Entergy conducted an investigation with the objective of determining the validity of the analytical results and sampling schemes, and finding the source of the Tritium contamination, such as infiltration of contaminated ground water into the sewage system or possible cross connections with radioactive systems. Sewage systems were repeatedly re-sampled at various sewage collection locations at increased frequency. Laboratory protocols were scrutinized, spiked and blank samples were analyzed, and duplicate samples sent to independent laboratories for confirmatory analysis.

B-54

Our investigation revealed that infiltration of contaminated ground water into the sewer system was not a likely scenario based on the system's configuration and elevation relative to the ground water contamination. Drain systems that could be potential sources of Tritium contamination were traced and no cross-connections with sewage systems were found. Investigation of the analytical protocols and data revealed that the positive Tritium results were in-valid, as indicated by the presence of a low energy noise "peak", without a standard beta energy continuum. It was also found that the magnitude of the noise peak decreased and disappeared overtime. This phenomenon was also observed by our independent laboratory. The exact cause of this phenomenon has not been determined and is still under investigation, but it is clear that Tritium contamination has not been present. Additionally, we did analyze our sewage effluent for Sr-90 which was also negative.

In summary, Entergy took aggressive action upon the recognition that Tritium might be present in its sewage effluent, even though the apparent concentration was a small fraction of the sewage effluent limits and of no health consequence. Entergy determined that Tritium was not and is not present in its sewage effluent, there are no unrecognized pathways for migration of Tritium off-site.



Fred Dacimo  
Site Vice President  
Indian Point Energy Center  
450 Broadway, Suite 1  
Buchanan, New York 10511