Has Entergy identified any other contamination on-site or in the environment that may be associated with the Indian Point 2 spent fuel pool?

On October 5, 2005, Entergy notified the NRC that tritium activity (2.11 E-4 microcurie/milliliter, i.e. uCi/ml) was identified in a monitoring well that was previously established in 2000 for the monitoring for existing contaminants [e.g., polychlorinated biphenyls (PCBs), oil, and radioactive materials] in support of the transfer of the property from Consolidate Edison to Entergy, i.e., "due diligence." As derived from 10 CFR 20, Appendix B, Table 2, such levels of tritium (H-3) in water, if ingested continuously over the course of a year, would produce a total effective dose equivalent of about 10 millirems.

1. The well (MW-111) is located within the Protected Area in the vicinity of the Indian Point 2 transformer yard, an area that is relatively close (within about 150 yards) to both the Unit 1 and Unit 2 spent fuel pools. Entergy indicated that no tritium activity in excess of its established Lower Level of Detection was identified when the well was sampled in 2000. Since that time, no other sampling of this well occurred until October 2005. No radioactive material was identified in three other monitoring wells for which sample results were available.

This single data point does not necessarily confirm leakage from the Unit 2 spent fuel pool, since there could be other sources responsible, including but not limited to, the Unit 1 spent fuel pool. Accordingly, Entergy is continuing efforts to characterize the extent of tritium contamination of the site, including sampling of other available monitoring wells and establishing additional wells as necessary.

The NRC Special Inspection charter was revised to include review of the licensee's efforts to establish the source and extent of radiological contamination reported in the MW-111 monitoring well.

In mid-October, Entergy reported sample results from five additional existing shallow wells, located in the vicinity of the Indian Point 3 Turbine Building. The only radionuclide identified was tritium (H-3) in the following concentrations:

T-1 (inside Turbine Building, NE corner) 1.6 E-6 uCi/ml (1600 pCi/L);

T-2 (inside Turbine Building, SW corner) 7.7 E-7 uCi/ml (770 pCi/L;

U-3-1 (outside Turbine Building, NW corner) 4 E-7 uCi/m (400 pCi/L);

U-3-2 (outside Turbine Building, NW corner) 9.6 E-7 uCi/ml (960 pCi/L);

U-3-3 (outside Turbine Building, NW corner) 4.4 E-7 uCi/ml (440 pCi/L).

For perspective, the Federal Environmental Protection Agency regulation, 40 CFR 141 limits tritium concentration in drinking water to 20,000 pCi/L (or 2 E-5 uCi/ml). The highest sample (T-1) contained a tritium concentration that was less than 10% of the tritium concentration permitted by EPA standards for drinking water.