Health Physics Study / Technical Information Document

(HPSTID)

Cover Page

Number: HPSTID-06-012

Title: Additional Information for HPSTID 06-011, Expanded Discussion of Historical Sample Results.

Comments:

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B.3

On site ground water monitoring wells were drilled during the fall of 2004. While establishing the wells, samples were taken in November 2004 by the vendor for informational purposes. Samples from well locations BD-1. BD-3, SD-2, SD-3, SW-1 and SW-2 were analyzed and initial results indicated tritium concentrations above the minimum detectable concentration. The SW-1 sample result was consistent with historical values obtained from the nearby PAB 7' dewatering location. The other well locations were resampled and analyzed as soon as possible, taking extra precautions to not cross-contaminate the samples during analysis preparation in the primary laboratory and the resample results indicated less than the minimum detectable concentration.

During the spring / summer 2005 sampling time period, well locations SD-1, SW-1, and SW-3 were analyzed and initial results indicated tritium concentrations above the minimum detectable concentration. The SW-1 sample result was consistent with the PAB 7' dewatering location. Well SD-1 was resampled and analyzed as soon as possible, to prevent sample cross-contamination the analysis preparation was performed in the secondary laboratory and the resample result indicated no detectable tritium present. As of July 2006, well SD-1 has been sampled a total of eight times (over two years) and with the exception of the laboratory cross-contaminated sample all tritium results have been less than the minimum detectable concentration. Well SW-3 tritium results are consistent with dewatering sample results from the Unit 2 Tunnel.

Currently well SW-1, which is immediately outside the FSB and PAB, near the PAB 7' dewatering location is the only location indicating positive tritium activity. The typical tritium minimum detectable concentration is less than 600 pCi/L.