From: Vanags, Uldis
Sent: Tuesday, January 25, 2011 10:43 AM
To: McKenney, Michael P
Cc: Miller, Elizabeth; Wark, Stephen
Subject: Request for information on new tritium indication

Hi Mike: Please provide the following information listed below on a daily basis pertaining to the station investigation on the new tritium indications in wells GZ-24 and GZ-6.

1) Report daily any analysis results for wells GZ-24 and GZ-6. With the data include the lower limit of detection and the sigma value.

Sample Location	Sample ID	Date	Time	Reported Activity (pCi/L)	Uncertainty Standard Deviations (pCi/L
GZ-06	GZ-06 1/24/11 1317 1A dist	**1/24/2011**	13:17	< 672	+/- 4.18E+02
GZ-06	GZ-06 1/26/11 1315 1A dist	**1/26/2011**	13:15	1,024	+/- 4.24E+02
GZ-24	GZ-24 1/25/11 1023 1A dist	**1/25/2011**	10:23	6,748	+/- 1.46E+03
GZ-24	GZ-24 1/26/11 1248 1A dist	**1/26/2011**	12:48	8,139	+/- 1.54E+03

2) Please explain what the sampling frequency is for these wells.

GZ-24 has been increased to a daily sampling frequency as this is the well of concern. GZ-2 and GZ-6 have been increased to twice weekly sampling frequency. These wells are down-gradient of GZ-24 and, to date, have not contained concentrations of tritium that are identifiable at the VY Chemistry Laboratory.

3) Is a gamma analysis being done and if so what do the results show?

Any sample that is shipped offsite for analysis is required to be sampled for gamma-emitting radionuclides. Samples from GZ-6 are shipped weekly to the Dept. of Health lab. In addition, the monthly GZ-series samples that analyzed at Teledyne-Brown are analyzed for gamma-emitting radionuclides. To date, no gamma-emitting radionuclides have been identified in monitoring well GZ-6. The lines currently being investigated do not contain significant concentrations of gamma-emitting radionuclides as they are typically drain lines from gas systems.

4) What is the plan for investigating the source of the tritium in GZ-24?

A detailed Action Plan has been developed which includes many actions occurring in a logical order. Near-term actions include the following: perform a pressure-drop test of the Stack Sump Discharge Line, implement a modification to allow internal inspection of drain lines, and explore the potential for dye injection testing. In addition, a systematic problem-solving analysis has been performed.

5) Are there briefings planned for state officials and other interested parties. such as the weekly call in update that was done for the first tritium investigation.

Yes, they will be weekly on Thursdays @ 3:30 PM.

Let me know if you need any clarification on these questions.

Thanks,
Uldis

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