

From: James Smith
Sent: Tuesday, February 25, 2025 3:36 PM
To: McCarthy, Brian P (GE Aerospace) <brian.p.mccarthy@ge.com>; Spitz, Ricky E <ricky.spitz@wsp.com>
Cc: Hauer, Lance M (GE Corporate) (lance.hauer@ge.com) <lance.hauer@ge.com>
Subject: RE: RE: RE: Status on the May 14, 2024 License Amendment request

Brian and Ricky

To add a little context to the Lead issue. The following was something that I was putting together before Brian called.

Here's some references regarding the lead requirement in Paragraph 30 Part B. I am working my way through the United Nuclear Corporation (UNC) ([United Nuclear Corporation \(UNC\) - Request for License Amendment to Amendment No. 59\(ML24135A218\)](#)) license amendment request and I need some help. The 2024 change request is below and I am running into problems with the changes in LC 30.B

United Nuclear Corporation (UNC) requests that Source Materials License No. SUA-1475, be amended to include the following changes described below and shown in the attached markup of Amendment No. 59 to the license.

- Page 5, Paragraph 30 Part A: move wells 701, 702, and 807 from the sampling column to the water level only column to be consistent with prior license amendments.
- Page 6, Paragraph 30 Part B: change the lead standard from 0.7 to 0.07, change pCi/L to mg/L, and delete the extra "C" at the end of this section to be consistent with prior license amendments.
- Page 7, Paragraph 30, Part C: changed annual report due date from 1/30 to 3/1. UNC requests this change to allow additional time to evaluate and incorporate the quarter groundwater sampling results which are not provided by the analytical laboratory until shortly before the current due date.
- Page 9, Paragraph 35, Part A (1): change date from 2019 to 2038; Part B (1) change date from 2019 to 2038; and Part B (2) change 2018 to 2036.

I'm looking at Amendment 52 where the changes in 30. B came into the license. It seems like the changes for lead went from 0.05 mg/L in amendment 50 ([License Amendment No. 50 for Source Material License No. SUA-1475.\(ML14205A149\)](#)) to 0.7 mg/L and were at Roy Blickwedel's request in the license amendment request for Amendment 52 ([K. McConnell Ltr Re: License Amendment Request for Revised Groundwater Protection Standards Based on Updated Background Concentrations.\(ML12150A146\)](#)). The "error" is carried through in the TER ([Technical Evaluation Report for License Amendment No. 52 for the Former Uranium Church Rock Mill Site.\(ML14339A840\)](#)) and EA ([Environmental Assessment for License Amendment No. 52 for the Former Uranium Church Rock Mill Site.\(ML14339A839\)](#)) and finally in the amended license, Amendment 52 ([License Amendment No. 52 for SUA-1475, Former Uranium Church Rock Mill Site.\(ML14339A837\)](#)).

I'm not sure that I can just administratively change this due to it being a typographical error on the NRC's part; however, I assume that since 0.7 mg/L is less restrictive than both 0.07 mg/L (your request) and the 0.05 mg/L of lead (the limits in Amendment 50) is way less restrictive for you, you could voluntarily commit to a lower limit. Alternatively, you could withdraw that aspect of the request and just leave it as 0.7 mg/L. Let me know how you want to proceed.

Thanks

Jim



P.S. Snapshots from License Amendment Request 52 are below:

Existing Conditions

30.B. Comply with the following groundwater protection standards at point of compliance Wells GW-1, GW-2, GW-3, 632, EPA-23, EPA-28, and 509-D in the Southwest Alluvium; 614, 604, EPA-4, EPA-5, and EPA-7 in Zone 1; and 517, 613, 708, and 711 in Zone 3:

Arsenic = 0.05 mg/l, beryllium = 0.05 mg/l, cadmium = 0.01 mg/l, total trihalomethanes = 0.08 mg/l, gross alpha = 15.0 pCi/l, lead = 0.05 mg/l, lead-210 = 1.0 pCi/l, nickel = 0.05 mg/l, radium-226 and 228 = 5.0 pCi/l in Zone 3, 5.2 pCi/l in the Southwest Alluvium, and 9.4 pCi/l in Zone 1; selenium = 0.01 mg/l, thorium-230 = 5.0 pCi/l, uranium = 0.3 mg/l and vanadium = 0.1 mg/l.

Justification

A data set of groundwater quality analytical results has been maintained for the site since NRC established the original License GWPSs in 1989. These data provide a more extensive, current, and robust data base for evaluation of the proposed amendments to the License. The data are

Proposed Amendment Text

30.B. Comply with the following groundwater protection standards at point of compliance Wells GW-1, GW-2, GW-3, 632, EPA-23, EPA-28, and 509-D in the Southwest Alluvium; 614, 604, EPA-4, EPA-5, and EPA-7 in Zone 1; and 517, 613, 708, and 711 in Zone 3:

Arsenic = 0.05 mg/l in the Southwest Alluvium and Zone 1, 0.757 mg/l in Zone 3; beryllium = 0.05 mg/l; cadmium = 0.025 mg/l in the Southwest Alluvium, 0.01 mg/l in Zone 1, 0.09 mg/l in Zone 3; total trihalomethanes = 0.08 mg/l; gross alpha = 15.0 pCi/l in the Southwest Alluvium and Zone 1, 39.7 pCi/l in Zone 3; lead = 0.7 mg/l in the Southwest Alluvium; 0.05 mg/l in Zone 1, 0.08 mg/l in Zone 3; lead-210 = 5.9 pCi/l in the Southwest Alluvium, 4.7 pCi/l in Zone 1, 5.7 pCi/l in Zone 3; nickel = 0.078 mg/l in the Southwest Alluvium, 0.7 mg/l in Zone 1, 0.569 mg/l in Zone 3; radium-226 and 228 = 8.2 pCi/l in the Southwest Alluvium, 12.1 pCi/l in Zone 1, 35.2 pCi/l in Zone 3; selenium = 0.01 mg/l in Zone 1 and Zone 3, 0.07 mg/l in the Southwest Alluvium; thorium-230 = 4.5 pCi/l in the Southwest Alluvium, 1.6 pCi/l in Zone 1, 17.0 pCi/l in Zone 3; uranium = 0.3 mg/l in the Southwest Alluvium, 0.238 mg/l in Zone 1, 0.395 pCi/l in Zone 3; and vanadium = 0.1 mg/l.