

From: [Ruedig, Liz](#)
To: [Martha Poston-Brown](#)
Cc: [Ross, Sandra](#); [Thomas Lancaster](#)
Subject: [External_Sender] RE: Change to LC 19
Date: Thursday, December 29, 2022 10:30:19 AM
Attachments: [image001.png](#)

Hi Marti –

Yes, had a wonderful holiday season full of little kids and dogs! Very energetic. Hope you had a wonderful season & some great leave also.

Totally comfortable with your proposed language for the license. Just a note – we intentionally left the reference to the license in the RPEM (instead of specific language), so that if/when the license language is updated, we don't end up with contradictory language & needing update in multiple places. Tried to use that strategy throughout, to make all our future lives' easier. Fingers crossed, it'll pay off!

As a note – this email can be made available to the public.

Happy New Year!

BHP

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From: Martha Poston-Brown <Martha.Poston-Brown@nrc.gov>
Sent: Tuesday, December 27, 2022 6:54 AM
To: Ruedig, Liz <elizabeth.ruedig@bhp.com>
Cc: Ross, Sandra <Sandra.Ross@bhp.com>; Thomas Lancaster <Thomas.Lancaster@nrc.gov>
Subject: Change to LC 19

Liz –

Good Morning. I hope you had a wonderful holiday season. I am putting together the paperwork for the ES&H license amendment request and just want to verify something. In the July 2021, October 2021 and the April 2022 draft license condition 19 was modified to remove the requirement that “monitoring data shall be reported in the format shown in Regulatory Guide 4.14, Revision 1, April 1980 Table 3.” The justification for removal was that the format was not consistent with the requirements of 10 CFR 40.65.

10 CFR 40.65 requires reporting on the quantity of each principal radionuclide released to unrestricted areas in liquid or gaseous effluent and any such information the commission may require to estimate the maximum potential annual radiation dose to the public, but a format, identification of appropriate information to provide in the report and the units for reporting that information are not specified.

Conversely, Regulatory Guide 4.14 Table 3 identified data that would be important to be included in environmental reports such as:

- Sample location
- Sample collection date
- Concentration of radionuclide in pCi (Unat; Th-230, Ra-226, Pb 210, Rn 222, etc.)
- Radon flux in pCi/m²
- Flowrate (for stack release or liquid release)
- For liquid samples if groundwater or surface water
- Analysis method used
- Sample type

I had hoped that the RPEM still specified that this level of detail would be provided in the environmental reports but the April 2022 RPEM only has Section 1.2 Footnote 4 which says routine monitoring to demonstrate compliance with public dose limits and groundwater protection standards contained in 10 CFR 20.1101, 10 CFR 20.1301, 40 CFR 190.10 and the license and Section 5.2 which says “reporting will be consistent with the requirements of the license.” And of course. 10 CFR 20.1101, 10 CFR 20.1301 and 40 CFR 190.10 are all related to public dose limits they do not specify the information that would be necessary for the commission to “estimate the maximum potential annual dose to the public” or provide sufficient detail related to the environmental monitoring program.

I would like to propose that rather than remove the requirement to report in the format shown in Regulatory Guide 4.14 Revision 1 Table 3. We modify that license requirement to say “ The information to be included in the environmental report shall follow that provided in Regulatory Guide 4.14 Revision 1 Table 3 as is applicable to the site conditions present during the monitoring period” or something similar. That way, the NRC gets the information it needs to be able to estimate the maximum dose but you are not tied to the format in Table 3 and have the flexibility to not report on data on items that are no longer applicable based on site conditions. Thoughts? Please advise. Thank you.

Marti

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