

RAI 12.H:

Description of Deficiency: The information provided in TR Section 2.6 does not meet the applicable requirements of 10 CFR Part 40, using the review procedures in Section 2.6.2 and using acceptance criteria in Section 2.6.3 of NUREG-1569.

Request for Additional Information: Please address the following issues regarding the proposed preoperational environmental monitoring program for the MEA:

H. RG 4.14 provides recommended values for the lower limit of detection (LLD) for radionuclides in various environmental media. The applicant provided a description of its laboratory measurements in regards to significant figures reported for environmental media measurements in TR Appendix Q. Several reported LLD values are not within RG 4.14 recommended values, even after taking into account the applicant's rationale described in TR Appendix Q (i.e., reporting LLD values with one significant figure, consistent with RG 4.14).

The following examples are not consistent with RG 4.14 recommended LLD values:

	Recommended	Reported
Table 2.9-5 – Radiological Analysis for Private Water Supply Wells		
March 2011 Well 723, Pb-210 (pCi/L) (dissolved)	1	1.6
Table 2.9-26 – Niobrara River Dissolved Radiological Water Quality		
March 2011 sample at N1 for Th-230 (pCi/L)	0.2	0.3
April 2011 sample at N1 for Pb-210 (pCi/L)	1	1.6
July 2011 sample at N2 for Th-230 (pCi/L)	0.2	0.4
October 2011 sample at N1 for Th-230 (pCi/L)	0.2	0.3
Table 2.9-27 - Niobrara River Suspended Radiological Water Quality		
June 2011 sample at N1 for Pb-210 (pCi/L)	1	9
Table 2.9-33 – Total Radionuclides and Metals in Tissue of Northern Pike		
Ra-226 (microCi/kg)	5 x 10 ⁻⁸	2 x 10 ⁻⁷
Th-230 (microCi/kg)	2 x 10 ⁻⁷	8 x 10 ⁻⁶

Please provide all environmental media samples with measured values that have an LLD consistent with RG 4.14 or justification for an alternate program.

RAI 12.H Response (02/04/15):

Section 2.9.5 revised to address baseline sampling for vegetation, food, and fish.

Table 2.9-5 has been revised to reflect the correct LLD's as required in Reg. Guide 4.14.

Table 2.9-37 (previously submitted as Table 2.9-32) has been revised to reflect the fish samples collected in 2014 to meet the LLD's as required in Reg. Guide 4.14.

Table 2.9-44 has been added to reflect the results of the vegetation samples collected in 2013.

Appendix Q – Analytical results for the vegetation sampling.

Appendix X – Analytical results for fish samples collected in 2014; these results replace the prior data submitted.