

**RAI 33:**

Description of Deficiency: Staff cannot complete its evaluation of NUREG-1569, Acceptance Criterion 5.7.6.3(4).

Basis for Request: NUREG-1569, Acceptance Criterion 5.7.6.3(4), states: "Monitoring equipment by type, specification of the range, sensitivity, calibration methods and frequency, availability, and planned use is adequately described. The application demonstrates that the ranges of sensitivity for monitoring equipment will be appropriate to expected facility operation." In TR Section 5.7.6, the applicant provides a description of survey equipment to be used in its contamination control program. However, it does not address the issues related to NUREG-1569, Acceptance Criterion 5.7.6.3(4).

Request for Additional Information: Please address the following issues related to the proposed survey equipment described in TR Section 5.7.6:

A. Please provide the information requested in NUREG-1569, Acceptance Criterion 5.7.6.3(4).

B. Staff observes that the proposed Ludlum Model 44-38 probe is rated with a beta cutoff energy of 200 keV (refer to ADAMS accession No. ML13086A183). Some of the uranium decay products have beta energies that are below this cutoff energy. Please provide information on how surface contamination with beta-emitting radionuclides will be evaluated.

C. Please state whether the practice of washing the soles of shoes prior to exiting the restricted area will be used at the MEA. If this practice will be used, please demonstrate the minimum detectable concentration for contamination surveyed on the wet soles of shoes. Cameco 12/23/2014 Response: This issue is currently being addressed in the context of Draft License Conditions to the underlying license for the Crow Butte facility. Cameco will revise the Marsland application to comport with the revisions to the underlying license prior to operations.

**RAI 33(C) Response (2/20/2015):**

Crow Butte has discontinued the practice of washing the soles of shoes prior to exiting the restricted area. The soles of shoes will not be washed prior to exiting the restricted area at the MEA.