CBRMarslandPEm Resource

From: John Schmuck [John_Schmuck@Cameco.com]
Sent: Wednesday, May 28, 2014 5:26 PM
To: Lancaster, Thomas
Cc: Sabrina Fox; Larry Teahon; Doug Pavlick; Jack Cearley
Subject: FW: Clarification to December 23. 2013 Marsland TR RAI Admin Section 2, #17
Attachments: Table 5 7-1 Marsland Expansion Area Operational Effluent and Environmental Monitoring Plan revised 5-28-2014.doc

Tom - Attached please find revisions to Table 5.7-1 of the Marsland TR. These are being offered in addition to the RAI response revision noted below.

From: John Schmuck
Sent: Tuesday, May 27, 2014 10:47 AM
To: Lancaster, Thomas (Thomas.Lancaster@nrc.gov)
Cc: Sabrina Fox; Larry Teahon; Doug Pavlick
Subject: Clarification to December 23. 2013 Marsland TR RAI Admin Section 2, #17

Tom - Cameco's December 23, 2013 response to NRC Marsland TR RAI Admin Section 2, #17 has an error. The RAI response will be clarified to be consistent with the text on page 2-456 states there are two ephemeral drainages with six total sampling locations.

Thanks. .john

Hearing Identifier: CrowButte_Marsland_Public
Email Number: 92

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From: John Schmuck

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Recipients:
"Sabrina Fox" <Sabrina_Fox@cameco.com>
Tracking Status: None
"Larry Teahon" <Larry_Teahon@cameco.com>
Tracking Status: None
"Doug Pavlick" <Doug_Pavlick@cameco.com>
Tracking Status: None
"Jack Cearley" <Jack.Cearley@arcadis-us.com>
Tracking Status: None
"Lancaster, Thomas" <Thomas.Lancaster@nrc.gov>
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MESSAGE	1001	5/28/2014 5:26:20 PM
Table 5 7-1 Marsland Expansion Area Operational Effluent and Environmental Monitoring Plan revised 5-28-2014.doc	47168	

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Table 5.7-1 Marsland Expansion Area Operational Effluent and Environmental Monitoring Plan

Type of Sample	Sample Collection			Sample Analysis		
	Number	Location	Method	Frequency	Frequency	Type of Analysis
AIR						
Particulates	3	At or near site boundaries and in sector(s) having the highest predicted concentrations of airborne particulates[a]	Continuous	Weekly filter change or more frequently as required by dust loading	Quarterly composites of weekly samples	Nat-Uranium, Ra-226, Th-230, Pb-210
	1	At or close to nearest residence(s)[a]	Continuous	Weekly filter change or more frequently as required by dust loading	Quarterly composites of weekly samples	Nat-Uranium, Ra-226, Th-230, Pb-210
	1	Control or background location[a]	Continuous	Weekly filter change or more frequently as required by dust loading	Quarterly composites of weekly samples	Nat-Uranium, Ra-226, Th-230, Pb-210
Radon Gas	5	Same locations as air particulates[a]	Continuous using RadTrak type DRNF	Continuous	Continuous	Rn-222
WATER						
Groundwater	One each	Wells (within license boundary and 1 km radius [c] • Private wells • MEA Brule wells • MEA Ore Zone wells	Grab	Quarterly	Quarterly	Dissolved and suspended Nat-Uranium, Ra-226, Th-230, Pb-210, Po-210
Surface Water	Three~~Two~~ sampling points along~~from~~ each of two~~3 designated~~ ephemeral drainages ~~sampling points~~ (total of 6 samples)	Surface waters passing through license area (subject to available flow)[b, d]	Grab	Quarterly	Quarterly	Suspended and dissolved Nat-Uranium, Ra-226, Th-230, Pb-210, Po-210

Table 5.7-1 Marsland Expansion Area Operational Effluent and Environmental Monitoring Plan

Type of Sample	Sample Collection			Sample Analysis		
	Number	Location	Method	Frequency	Frequency	Type of Analysis
VEGETATION	None	N/A	N/A	N/A	N/A	N/A
FOOD	None	N/A	N/A	N/A	N/A	N/A
FISH	None	N/A	N/A	N/A	N/A	N/A
SOIL AND SEDIMENT						
Soil	5 or more	At same locations used for collection of air particulate samples[a]	Grab (0 to 5 cm)	Annually	Annually	Nat-Uranium, Ra-226, Pb-210
Sediment	Three sampling points along each of two~~Two from each~~ ephemeral drainages ~~sampling~~ (total of 6 samples~~points (6~~)	Same as surface water sample locations[b, d]	Grab (minimum of 3 samples for each sample composite)	Annually	Annually	Nat-Uranium, Ra-226, Th-230, Pb-210
DIRECT RADIATION						
Continuous	One each	Air monitoring stations[a]	Dosimeter	Continuous	Quarterly	Gamma exposure rate, using Sodium Iodide scintillometer

[a] Figure 2.9-2
[b] Figure 2.7-4
[c] Figures 2.2-4 and 2.9-3
[d] upstream and downstream
N/A = not applicable
MEA = Marsland Expansion Area