Cameco

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February 8, 2016

CERTIFIED MAIL # 7015 1520 0000 2613 0894

Mr. Robin Jones, District 1 Supervisor
Land Quality Division
Wyoming Department of Environmental Quality
200 West 17th Street, Lower Level
Cheyenne, Wyoming 82002

January 2016 Excursion Report Summary, Cameco Resources, Smith Ranch-Highland Uranium Project, Permit 633

Dear Mr. Jones:

Power Resources, Inc. d/b/a/ Cameco Resources (Cameco) is submitting the January 2016 Monthly Excursion Report Summary for the Smith Ranch-Highland Uranium Project. The Cameco Excursion Report table is attached. Monitor Well DM-003A remained on excursion from the previous report period and Monitor Well DM-004A was deemed officially off excursion during the report period, after three (3) consecutive sample results showed concentrations below the UCL parameters.

During the report period, concentrations at Monitor Well DM-003A showed a slight decline from the previous report period with conductivity dropping below the UCL. Chloride and alkalinity remain above the UCL parameters. Monitor Well DM-004A was confirmed on excursion December 4, 2015 exceeding two of the three UCL parameters, chloride and alkalinity. Concentrations in Monitor Well DM-004A dropped below the UCL parameters during the report period and the well was deemed officially off excursion on January 12, 2016, after three (3) consecutive samples showing off excursion.

Cameco plans to continue with the current pumping regime as the results demonstrate that a positive impact is being made on the water quality in Monitor Well DM-003A. As an additional component of the DM-003A excursion control effort and recently elevated concentrations at monitor Well DM-004A, Cameco has installed a recovery well (DX-113) between the monitor well ring and Mine Unit D patterns. Flow rates between recovery well DX-113 and recovery at the mine unit patterns will be adjusted to create a groundwater gradient from the monitor ring toward the patterns. Recovery well DX-113 was drilled in November 2015 and completed in December 2015. Completion of the trenching required to pipe water from DX-113 to Header

NM5501

House D-1 is anticipated to be completed by the end of 1st Quarter 2016, with production to be initiated shortly thereafter.

In the Notification of Excursion for DM-004A, dated December 8, 2015, Cameco requested that Wyoming Department of Environmental Quality (WDEQ) – Land Quality Division (LQD) make a determination if the water quality changes do or do not fit the intended definition of an excursion as outlined in W.S. § 35-11-103(f)(ii). Discussion was had with LQD during a meeting held on December 17, 2015. In that discussion it was agreed that LQD would respond to Cameco's request and state that the water quality at both Monitor Well DM-003A and Monitor Well DM-004A does not fit the intended definition of an excursion. In that response LQD will propose an adequate sampling plan going forward and will request that the sample result information be reported in the annual report. Further discussion was had at a meeting with LQD on January 27, 2016. The agreement continued that LQD would respond with their determination that Monitor Well DM-003A and DM-004A are not typical excursion as defined by statute. LQD's response may request that Cameco provide a potential plan of mitigation, which would allow Cameco the liberty to make adjustments to pumping efforts knowing that DM-004A may go above the UCL values. This plan would also allow Cameco the ability to sample as necessary to effectively make changes to pumping and cleanup efforts.

Please contact me at 307-358-6541, ext. 476 or Kenneth_Garoutte@cameco.com if you have questions.

Respectfully,

Victoria Gittens for.

Ken Garoutte
Safety, Health, Environment, Quality (SHEQ) Manager

KG/vg

Attachments: Cameco Resources Excursion Report Table
Monitor Well Reports for DM-003A
Monitor Well Reports for DM-004A

cc: File SR 4.3.3.3
Special Volume: Monthly Excursion Reports Summary Updates Permit 633
Mr. Doug Mandeville, NRC - CERTIFIED MAIL # 7015 1520 0000 2613 0900
Document Control Desk, NRC - CERTIFIED MAIL # 7015 1520 0000 2613 0917

ec: Cameco-Casper

Cameco Resources Excursion Report
Permit No 633
January 2016

Well Identification	Initial Sample Date	Confirmation Sample Date	Excursion Status (on/off)	Parameters Exceeded	Verbal Notification Date	Written Notification Date	Excursion Resolution Date	LQD Concurrence Notification Date
DM-003A (Replacement well for DM-003)	8/26/2014	N/A	**ON**	Chloride Alkalinity	Made Previously as DM-003			
DM-004A	12/1/2015	N/A	**ON**	Chloride Alkalinity	12/4/2015	12/8/2015	1/12/2015 (After 3 consecutive samples below UCL parameters)	

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Smith Ranch - Highland Operation

Monitor Well Report

Well ID: DM-003A

	Chloride (mg/L)	*Alkalinity (mg/L $CaCO_3$)*	*Conductivity (µMhos/cm)*	*U_3O_8 (mg/L)*	*Water Elevation*	*Comment*
NRC/WDEQ UCL	18	188	962			
01/26/2016	31	272	957	0	803.0	
01/19/2016	31	268	962	0	802.9	
01/12/2016	32	273	987	0	806.2	
01/05/2016	33	279	979	0	807.0	
12/29/2015	32	269	1000	0	810.6	
12/22/2015	32	275	968	0	811.3	
12/15/2015	33	279	990	0	814.7	
12/08/2015	34	276	1009	0	819.8	
12/01/2015	35	293	1013	0	825.1	
11/24/2015	34	279	1003	0	824.1	
11/17/2015	34	283	973	0	820.7	
11/10/2015	33	281	986	0	818.9	
11/03/2015	33	278	1004	0	834.4	
10/27/2015	34	282	972	0	833.1	
10/20/2015	37	280	1015	0	833.6	
10/13/2015	35	278	1024	0	832.4	
10/06/2015	34	279	1019	0	834.4	
09/29/2015	33	281	1034	0	834.0	
09/22/2015	28	282	1025	0	836.0	
09/15/2015	35	274	1011	0	840.5	
09/08/2015	34	270	1022	0	840.1	
09/01/2015	35	276	1040	0	837.4	
08/25/2015	35	292	1040	0	835.6	

02/03/2016

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Monitor Well Report

Well ID: DM-003A

	Chloride (mg/L)	*Alkalinity (mg/L $CaCO_3$)*	*Conductivity (µMhos/cm)*	*U_3O_8 (mg/L)*	*Water Elevation*	*Comment*
NRC/WDEQ UCL	18	188	962			
08/18/2015	35	291	1046	0	833.2	
08/11/2015	35	291	1019	0	830.7	
08/04/2015	35	277	1024	0	831.2	
07/28/2015	34	283	1024	0	834.4	
07/21/2015	37	279	1058	0	834.4	
07/14/2015	36	288	1067	0	835.1	
07/07/2015	39	288	1083	0	838.2	
06/30/2015	40	301	1104	0	844.1	
06/23/2015	40	306	1090	0	845.7	
06/16/2015	39	306	1108	0	844.0	
06/09/2015	41	302	1094	0	841.9	
06/02/2015	41	293	1110	0	840.3	
05/26/2015	42	306	1090	0	837.3	
05/19/2015	34	311	1131	0	836.8	
05/12/2015	46	314	1165	0	839.2	
05/05/2015	47	315	1201	0	841.4	
04/28/2015	49	331	1158	0	837.3	
04/21/2015	48	331	1166	0	838.2	
04/15/2015	48	337	1168	0	838.8	
04/07/2015	49	322	1201	0	827.0	
04/01/2015	49	311	1201	0	826.7	
03/24/2015	49	323	1195	0	827.4	
03/17/2015	49	324	1149		825.0	

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Monitor Well Report

Well ID: DM-003A

	Chloride (mg/L)	*Alkalinity (mg/L $CaCO_3$)*	*Conductivity (µMhos/cm)*	*U_3O_8 (mg/L)*	*Water Elevation*	*Comment*
NRC/WDEQ UCL	18	188	962			
03/10/2015	46	326	1223	0	824.8	
03/04/2015	42	324	1164	0	827.5	
02/24/2015	50	326	1128	0	826.2	
02/17/2015	50	327	1160	0	825.8	
02/10/2015	48	324	1128	0	827.0	
02/03/2015	50	329	1168	0	826.3	
01/27/2015	50	324	1202	0	827.0	
01/20/2015	49	317	1122	0	826.8	
01/13/2015	49	318	1132	0	826.7	
01/06/2015	52	344	1148	0	829.8	

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Monitor Well Report

Well ID: DM-004A

	Chloride (mg/L)	*Alkalinity (mg/L $CaCO_3$)*	*Conductivity (µMhos/cm)*	*U_3O_8 (mg/L)*	*Water Elevation*	*Comment*
NRC/WDEQ UCL	18	188	962			
01/12/2016	16	183	832	0	817.2	
01/05/2016	20	188	828	0	817.8	
12/29/2015	18	182	822	0	821.3	
12/22/2015	19	190	807	0	822.3	
12/15/2015	20	195	829	0	826.0	
12/08/2015	20	204	840	0	831.3	
12/03/2015	19	194	810	0	834.2	
12/02/2015	19	185	813		834.7	
12/01/2015	19	190	808		834.8	
10/06/2015	18	187	825		836.8	
08/11/2015	17	189	802		844.8	
06/09/2015	15	181	791		843.0	
04/15/2015	14	183	786		841.6	
02/19/2015	14	176	806		836.2	
02/02/2015	14	174	807		836.1	