CAMECO RESOURCES
CROW BUTTE OPERATION

86 Crow Butte Road
P.O. Box 169
Crawford, Nebraska 69339-0169

(308) 665-2215
(308) 665-2341 – FAX

May 18, 2011

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Mr. Michael Linder, Director
Nebraska Department of Environmental Quality
P.O. Box 98922
Lincoln, NE 68509-8922

Subject: Class III UIC Permit NE0122611
April 2011 Monthly Restoration Report

Dear Mr. Linder:

Please find enclosed the April 2011 Monthly Restoration Reports for Mine Units 2, 3, 4, 5 and 6. The reverse osmosis (RO) units continue to inject permeate and reductant into Mine Units 2 and 3. Mine Units 4 and 5 are in ion exchange. A hydrologic bleed was maintained in Mine Unit 6 for excursion control.

The bioremediation study in Mine Unit 4 was completed on April 6, 2011. A confidential report summarizing this study is on file at Crow Butte.

If you have any questions regarding this submittal, please feel free to contact me at (308) 665-2215, ext. 114.

Sincerely,
Cameco Resources
Crow Butte Operation

Larry Teahon

Larry Teahon
SHEQ Manager

Enclosures: As Stated

cc: Dave Carlson, NDEQ Chadron Office
Ron Burrows, NRC
CBO File
ec: CR - Cheyenne

CROW BUTTE MINE

MONTHLY RESTORATION REPORT

APRIL 2011

MINE UNIT 2

1. RESTORATION ACTIVITY DURING MONTH:

	YES	NO	
a. Groundwater Transfer		X	(if yes, complete part 2)
b. Groundwater Sweep		X	(if yes, complete part 3)
c. Groundwater Treatment	X		RO PR15, P97, P120, I137P, I188P, and P209.
d. Wellfield Recirculation		X	
e. Other (explain):		X	

2. LIST WELLS USED IN GROUNDWATER TRANSFER DURING THE MONTH:

3. LIST WELLS USED IN GROUNDWATER SWEEP DURING THE MONTH:

4. LIST WELLS SAMPLED DURING MONTH AND ASSAY RESULTS:

P97, P120, I137P, I188P, and P209.

Mine Unit 2 Restoration Data

Well	Date	U_3O_8	V	Total CO_3	pH	Ca	Na	Cl	SO_4	Cond
P97	04/06/11	2.78								
P97	04/13/11	2.72								1434
P97	04/20/11	2.51								
P97	04/26/11	2.72								1414
P120	04/06/11	0.93								
P120	04/13/11	0.87								877
P120	04/20/11	0.92								
P120	04/27/11	0.95								860
I137P	04/06/11	0.37								
I137P	04/13/11	0.33								462
I137P	04/27/11	0.58								444
I188P	04/06/11	0.92								
I188P	04/13/11	0.97								862
I188P	04/20/11	1.04								
I188P	04/27/11	1.09								862
P209	04/06/11	2.55								
P209	04/13/11	2.43								1715
P209	04/20/11	2.40								
P209	04/27/11	2.60								1661

CROW BUTTE MINE

MONTHLY RESTORATION REPORT

APRIL 2011

MINE UNIT 3

1. RESTORATION ACTIVITY DURING MONTH:

	YES	NO	
a. Groundwater Transfer		X	(if yes, complete part 2)
b. Groundwater Sweep		X	(if yes, complete part 3)
c. Groundwater Treatment	X		RO and Reductant CM1-11, IJ13P, P228, P251, I298P, I326P, I343P, RES1E, RES2E, and RES3E.
d. Wellfield Recirculation		X	
e. Other (explain):		X	

2. LIST WELLS USED IN GROUNDWATER TRANSFER DURING THE MONTH:

3. LIST WELLS USED IN GROUNDWATER SWEEP DURING THE MONTH:

4. LIST WELLS SAMPLED DURING MONTH AND ASSAY RESULTS:

CM1-11, P228, P251, P298P, I326P, I343P, RES1E, RES2E, and RES3E.

Mine Unit 3 Restoration Data

Well	Date	U_3O_8	V	Total CO_3	pH	Ca	Na	Cl	SO_4	Cond
CM1-11	04/06/11	0.42								
CM1-11	04/13/11	0.52								1849
CM1-11	04/20/11	0.79								
CM1-11	04/27/11	0.79								1708
P228	04/06/11	2.11								
P228	04/13/11	2.23								963
P228	04/20/11	1.87								
P228	04/27/11	1.94								904
P251	04/06/11	1.36								
P251	04/13/11	1.50								2092
P251	04/20/11	1.74								
P251	04/27/11	1.34								1735
I298P	04/06/11	0.08								
I298P	04/13/11	0.11								560
I298P	04/20/11	0.23								
I298P	04/27/11	0.14								545
I326P	04/06/11	4.22								
I326P	04/13/11	6.13								1824
I326P	04/20/11	4.86								
I326P	04/27/11	3.66								1192
I343P	04/06/11	3.69								
I343P	04/13/11	7.35								2020
I343P	04/20/11	8.34								
I343P	04/27/11	11.61								2871
RES1E	04/06/11	2.42								
RES1E	04/13/11	2.16								1061
RES1E	04/20/11	2.20								
RES1E	04/27/11	2.34								1046
RES2E	04/06/11	4.54								
RES2E	04/13/11	4.16								1647
RES2E	04/20/11	3.75								
RES2E	04/27/11	3.44								1590
RES3E	04/06/11	2.91								
RES3E	04/13/11	2.70								1124
RES3E	04/20/11	2.62								
RES3E	04/27/11	2.76								1106

CROW BUTTE MINE

MONTHLY RESTORATION REPORT

APRIL 2011

MINE UNIT 4

1. RESTORATION ACTIVITY DURING MONTH:

	YES	NO	
a. Groundwater Transfer		X	(if yes, complete part 2)
b. Groundwater Sweep		X	(if yes, complete part 3)
c. Groundwater Treatment	X		IX CM2-4, P394, P424, P429, P434, P442, P443, P447, P450, P461, I549P, I551P, and I613P
d. Wellfield Recirculation		X	
e. Other (explain): Bioremediation test concluded on April 6, 2011.	X		

2. LIST WELLS USED IN GROUNDWATER TRANSFER DURING THE MONTH:

3. LIST WELLS USED IN GROUNDWATER SWEEP DURING THE MONTH:

4. LIST WELLS SAMPLED DURING MONTH AND ASSAY RESULTS:

CM2-4, P394, P424, P429, P434, P442, P443, P447, P450, P461, I549P, I551P, and I613P.

Mine Unit 4 Restoration Data

Well	Date	U_3O_8	V	Total CO_3	pH	Ca	Na	Cl	SO_4	Cond
CM2-4	04/06/11	3.80								
CM2-4	04/13/11	3.73								3430
CM2-4	04/20/11	3.79								
CM2-4	04/27/11	4.00								3390
P394	04/06/11	18.69								
P394	04/13/11	16.86								4690
P394	04/20/11	15.37								
P394	04/27/11	16.01								4700
P424	04/06/11	8.49								
P424	04/13/11	8.68								4320
P424	04/27/11	8.24								4220
P429	04/06/11	17.06	<1							
P429	04/13/11	15.83								2358
P429	04/20/11	14.47								
P429	04/27/11	14.04								2263
P434	04/06/11	8.66								
P434	04/13/11	8.78								4540
P434	04/20/11	7.43								
P434	04/27/11	7.20								4200
P442	04/06/11	25.45	<1							
P442	04/13/11	24.22								4460
P442	04/20/11	22.33								
P442	04/27/11	24.12								4400
P443	04/06/11	14.38	<1							
P443	04/13/11	15.16								4270
P443	04/20/11	15.10								
P443	04/27/11	15.98								4260
P447	04/06/11	10.69	<1							
P447	04/13/11	9.08								4600
P447	04/20/11	8.22								
P447	04/27/11	7.85								4530
P450	04/06/11	18.15								
P450	04/13/11	17.52								4880
P450	04/20/11	17.41								
P450	04/27/11	16.04								4860

Mine Unit 4 Restoration Data

Well	Date	U_3O_8	V	Total CO_3	pH	Ca	Na	Cl	SO_4	Cond
P461	04/06/11	8.66								
P461	04/13/11	7.98								4570
P461	04/20/11	7.14								
P461	04/27/11	7.62								4560
I549P	04/06/11	4.31								
I549P	04/13/11	6.03								4540
I549P	04/20/11	5.72								
I549P	04/27/11	6.22								4340
I551P	04/06/11	20.64								
I551P	04/13/11	19.72								4730
I551P	04/20/11	18.45								
I551P	04/27/11	18.47								4710
I613P	04/06/11	11.85	<1							
I613P	04/13/11	8.46								3300
I613P	04/20/11	8.16								
I613P	04/27/11	8.14								3130

CROW BUTTE MINE

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MINE UNIT 5

1. RESTORATION ACTIVITY DURING MONTH:

	YES	NO	
a. Groundwater Transfer		X	(if yes, complete part 2)
b. Groundwater Sweep		X	(if yes, complete part 3)
c. Groundwater Treatment	X		IX BL5-5, I676P, P707, P709, P731, P748, P773, P790, P796, P800, P1075, P1093, and P1232.
d. Wellfield Recirculation		X	
e. Other (explain):		X	

2. LIST WELLS USED IN GROUNDWATER TRANSFER DURING THE MONTH:

3. LIST WELLS USED IN GROUNDWATER SWEEP DURING THE MONTH:

4. LIST WELLS SAMPLED DURING MONTH AND ASSAY RESULTS:

BL5-5, I676P, P707, P709, P731, P748, P773, P790, P800, P1075, P1093, and P1232.

Mine Unit 5 Restoration Data

Well	Date	U_3O_8	V	Total CO_3	pH	Ca	Na	Cl	SO_4	Cond
BL5-5	04/06/11	0.43								
BL5-5	04/13/11	0.40								3290
BL5-5	04/20/11	0.51								
BL5-5	04/27/11	0.67								3250
I676P	04/06/11	15.27	<1							
I676P	04/13/11	15.59								4230
I676P	04/20/11	14.68								
I676P	04/27/11	14.69								4240
P707	04/06/11	8.97	<1							
P707	04/13/11	8.87								2905
P707	04/20/11	8.29								
P707	04/27/11	8.85								2978
P709	04/06/11	14.52	<1							
P709	04/13/11	14.32								4320
P709	04/20/11	13.44								
P709	04/27/11	13.29								4330
P731	04/06/11	8.64	<1							
P731	04/13/11	8.76								3310
P731	04/20/11	8.51								
P748	04/06/11	16.66	<1							
P748	04/13/11	16.79								4450
P748	04/20/11	15.28								
P748	04/27/11	15.66								4430
P773	04/06/11	4.00	<1							
P773	04/13/11	3.62								2960
P773	04/27/11	3.71								3010
P790	04/06/11	11.61	1.1							
P790	04/13/11	11.19								4380
P790	04/27/11	10.57								4320
P800	04/06/11	4.40	<1							
P800	04/13/11	4.12								2796
P800	04/20/11	4.41								
P800	04/27/11	4.70								2810
P1075	04/06/11	12.28								
P1075	04/13/11	12.08								3650
P1075	04/20/11	11.98								
P1075	04/27/11	11.36								3670

Mine Unit 5 Restoration Data

Well	Date	U_3O_8	V	Total CO_3	pH	Ca	Na	Cl	SO_4	Cond
P1093	04/06/11	15.87								
P1093	04/13/11	16.43								3430
P1093	04/20/11	15.74								
P1093	04/27/11	16.09								3470
P1232	04/06/11	15.56								
P1232	04/13/11	15.73								4060
P1232	04/27/11	14.55								4000

CROW BUTTE MINE

MONTHLY RESTORATION REPORT

APRIL 2011

MINE UNIT 6

1. RESTORATION ACTIVITY DURING MONTH:

	YES	NO	
a. Groundwater Transfer		X	(if yes, complete part 2)
b. Groundwater Sweep		X	(if yes, complete part 3)
c. Groundwater Treatment		X	
d. Wellfield Recirculation		X	
e. Other (explain):	X		Wellfield bleed for excursion control. P1567 and P1633.

2. LIST WELLS USED IN GROUNDWATER TRANSFER DURING THE MONTH:

3. LIST WELLS USED IN GROUNDWATER SWEEP DURING THE MONTH:

4. LIST WELLS SAMPLED DURING MONTH AND ASSAY RESULTS:

P1567 and P1633.

Mine Unit 6 Restoration Data

Well	Date	U_3O_8	V	Total CO_3	pH	Ca	Na	Cl	SO_4	Cond
P1567	04/06/11	11.73								
P1567	04/13/11	11.71								4540
P1567	04/27/11	12.98								4540
P1633	04/06/11	45.60								
P1633	04/13/11	48.79								4920
P1633	04/27/11	39.69								4760