

**CAMECO RESOURCES
CROW BUTTE OPERATION**



86 Crow Butte Road
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(308) 665-2341 – FAX

January 16, 2012

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
December 2011 Monthly Restoration Report

Dear Mr. Linder:

Please find enclosed the December 2011 Monthly Restoration Reports for Mine Units 2, 3, 4, 5 and 6. Mine Unit 2 was placed into recirculation on July 7, 2011 in order to homogenize the aquifer in preparation for stability monitoring. This mine unit has been put back into reverse osmosis treatment so that permeate can be injected into patterns connected to Wellhouses 3 and 5. The reverse osmosis (RO) units continue to inject permeate and reductant into Mine Units 3 and 5. In Mine Unit 4, permeate is being injected into one wellhouse while the other two wellhouses remain in ion exchange. A hydrologic bleed was maintained in Mine Unit 6 for excursion control.

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
SHEQ Manager

Enclosures: As Stated

cc: Lindsey Phillips, NDEQ Chadron Office
Ron Burrows, NRC
CBO File
ec: CR - Cheyenne

CROW BUTTE MINE
 MONTHLY RESTORATION REPORT
 DECEMBER 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, I180P, 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, I188P, and P209.

CROW BUTTE MINE
MONTHLY RESTORATION REPORT
DECEMBER 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, 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, I298P, I326P, I343P, RES1E, RES2E, and RES3E.

CROW BUTTE MINE
 MONTHLY RESTORATION REPORT
 DECEMBER 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 | | RO and Reductant P371, P429, P430, P437, P438, P442, P443, P447, and I613P. IX P393, P394, P434, P450, P456, P461, I548P, I549P, and I551P |
| d. Wellfield Recirculation | | X | |
| e. Other (explain): | | | |

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:

P371, P394, P429, P430, P437, P438, P442, P443, P447, P450, P456, P461, I549P, I551P, and I613P.

CROW BUTTE MINE
 MONTHLY RESTORATION REPORT
 DECEMBER 2011
 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 | | RO and Reductant BL5-5, I676P, P707, P709, P773, P790, P800, and I854P. |
| 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, P709, P773, P790, P800, and I854P.

CROW BUTTE MINE
 MONTHLY RESTORATION REPORT
 DECEMBER 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

