

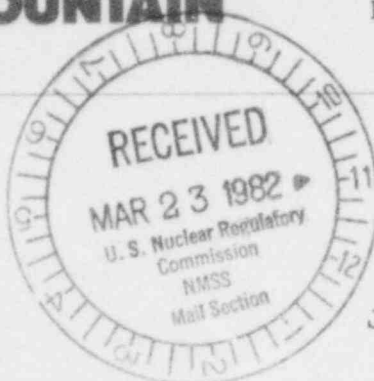


**ROCKY MOUNTAIN  
ENERGY**

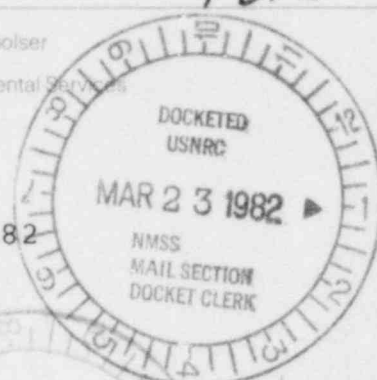
A Subsidiary of  
Union Pacific Corporation

Ref: UR 82-014

40-8380  
PDR



Clark M. Bolser  
Manager  
Environmental Services



January 19, 1982

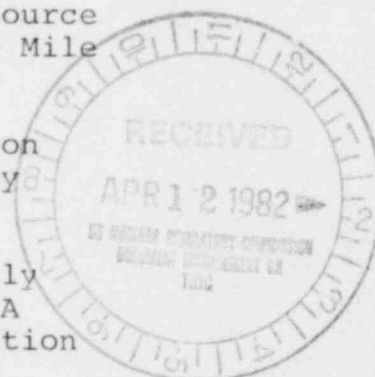
Mr. Ross A. Scarano, Chief  
Uranium Recovery Licensing Branch  
Division of Waste Management  
U.S. Nuclear Regulatory Commission  
Willste Building  
7915 Eastern Avenue  
Silver Spring, MD 20910

Dear Mr. Scarano:

Re: License SUA-1228  
Docket No. 8380

As required by the recently issued Source  
Material License for Rocky Mountain Energy's Nine Mile  
Lake Project, enclosed are the following:

1. Results of the alpha contamination  
survey (Attachment A) required by  
Condition no. 17.
2. A copy of the NPDES permit jointly  
issued by the Wyoming DEQ and EPA  
(Attachment B) required by Condition  
no. 29.
3. A copy of the surety instrument, that  
is, the Reclamation Performance  
Bond posted with the Wyoming DEQ and  
correspondence concerning the bond  
amount (Attachment C), required by  
Condition no. 37.



Applicant.....
Check No.....
Amount/Fee Category.....
Type of Fee.....
Date Check Rec'd.....
Received By.....

Regarding the alpha contamination survey required  
by Condition no. 17, it should be noted that although no  
surveyed areas exceeded 1000 dpm total alpha, all areas with  
a count greater than 500 dpm total alpha have been decontam-  
inated as a precautionary measure.

Concerning the Reclamation Performance Bond,  
note that the current bond covers the cost of Patterns 3 and  
4 restoration as well as estimated decommissioning and  
reclamation costs for a 27 acre pond which was never constructed.  
The bond therefore reflects a much greater reclamation  
liability than actually exists.

10 Longs Peak Drive  
Box 2000  
Broomfield, Colorado 80020  
303/469-8844

8204260423

**FEE EXEMPT** 20077

C

info only

Mr. Ross Scarano  
January 19, 1982  
Page Two

Should you have any questions concerning these materials,  
please call at your convenience.

Sincerely,

*Michael R. Neumann*

M.R. Neumann  
Licensing Specialist

Enclosures

cc: F. Ross/K. Kalman (NRC)  
J.A. Yopps  
J.A. Yellich  
R.E. Iwanicki/P.R. Spieles


**ROCKY MOUNTAIN  
ENERGY**

# MEMORANDUM

Date January 13, 1982

To Lyda Hersloff

From Pat Spieles

Subject Alpha Contamination Survey

RECEIVED JAN 15 1982

Total alpha contamination surveys were conducted in the Nine Mile Lake plant building on October 16, 1981. An Eberline RM-19 alpha meter with a AC-3-8 probe was used. The instrument was calibrated prior to use with 50.9 cpm = 1000 dpm/100 cm<sup>2</sup>.

The results were as follows:

<u>Survey Site</u>	<u>Total dpm/100 cm<sup>2</sup></u>
IX columns exterior	< 200
R/O feed tank exterior	< 200
Upper deck railing	< 200
Assay station bench	< 200
Lunchroom table	< 200
Yellowcake receiver (exterior)	< 200
Yellowcake receiver (interior)	980
Clarifier exterior	< 200
Eluant tank 201	790
Reverse osmosis unit	< 200
Workshop bench	< 200
Floor - IX columns	590
Floor - RO feed tank	< 200
Floor - Assay station	< 200
Floor - Lunch room	< 200
Floor - Yellowcake receiver	980
Floor - Eluant tank	< 200
Floor - R/O unit	200
Floor - Workshop	< 200

PRS/ima

cc: M. Neumann

7.18-9



Attachment C

MRN  
(86.2.46)

ED HERSCHLER  
GOVERNOR

## Department of Environmental Quality

### LAND QUALITY DIVISION

401 WEST 19TH STREET

TELEPHONE 307-777-7756

CHEYENNE, WYOMING 82002

June 5, 1980

Mr. M.R. Neumann  
Field Environmental Coordinator  
Rocky Mountain Energy Company  
PO Box 3719  
Casper, WY 82602

RE: License to Explore No. 4

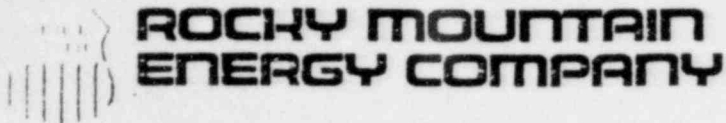
Dear Mr. Neumann:

Enclosed please find a copy of the approved Increase/Decrease Rider for Bond No. 4330515. If you have any questions, please contact our office.

Sincerely,

Lisa Geesey  
Adjudicator

LG:sh  
Enclosure  
cc: District IV



May 30, 1980

Mr. Dennis Morrow, District Engineer  
District IV, Land Quality Division  
DEPARTMENT OF ENVIRONMENTAL QUALITY  
30 East Grinnell Street  
Sheridan, WY 82801

Dear Mr. Morrow:

RE: Nine Mile Lake, Reclamation Performance Bond

In response to your letter of May 1, 1980, and our last conversation on May 2nd, enclosed is a Reclamation Performance Bond increase rider in the amount of \$458,660.00. This amount, added to the existing bond of \$40,000.00, brings the total bond amount to \$498,660.00, as was requested in your letter of May 1st.

This bond amount reflects the cost of surface and sub-surface reclamation for the entire Nine Mile Project, including restoration of the proposed Pattern IV and Cell Number One (Reservoir "C") of the commercial evaporation pond.

If you have any questions, please feel free to give me a call.

Sincerely,

*Michael R. Neumann*

M. R. Neumann  
Field Environmental Coordinator

MRN/ph

cc: Glen Mooney (DEQ)  
Roger Schaffer (DEQ)  
Russ Hynes  
Kent Loest  
Clark Bolser



# Department of Environmental Quality

LAND QUALITY DIVISION

DISTRICT IV OFFICE

30 EAST GRINNELL STREET

TELEPHONE 307-672-6488

SHERIDAN, WYOMING 82801

May 1, 1980

Mr. Mike Neumann  
Field Environmental Coordinator  
Rocky Mountain Energy Co.  
P.O. Box 3719  
Casper, Wyoming 82602

RE: Nine Mile Lake ISL Uranium Project, LE4

Dear Mr. Neumann:

In response to your letter of April 9, 1980 to Glenn Mooney, the total bond required for the Nine Mile Lake Project is \$498,660. An increase of \$458,660 is needed immediately. We cannot wait for an analysis from your legal department.

The anniversary date for the License for the Nine Mile Project is May 6. Wyoming Statutes require that bonding be revised yearly. The bond increase for Nine Mile is almost one year overdue. Please initiate action to secure the requested bond increase rider. Please submit the completed bond rider within twenty (20) days of the receipt of this letter.

If you have any questions, please feel free to contact our office.

Sincerely,

A handwritten signature in cursive script, appearing to read "Dennis Morrow".

Dennis Morrow  
District IV Engineer

DM/kn

cc: Roger Shaffer - LQD - Chey.

Received by: Michael R. Neumann Date: 5/2/80





THE STATE OF WYOMING

MAR 31 1980

ED HERSCHLER  
GOVERNOR

## *Department of Environmental Quality*

LAND QUALITY DIVISION

DISTRICT IV OFFICE

30 EAST GRINNELL STREET

TELEPHONE 307-672-6488

SHERIDAN, WYOMING 82801

March 27, 1980

Mr. Michael R. Neuman  
Environmental Specialist  
Rocky Mountain Energy Co.  
4704 Harlan St.  
Denver, Colorado 80212

RE: Nine Mile Lake Project, License to Explore No. 4

Dear Mr. Neuman:

This letter is in response to your letter of March 21, 1980 enclosing the estimate of reclamation costs for the Nine Mile Project.

Our review of the estimate encountered two problems. First, we must disallow deduction of the salvage value of the reverse osmosis and process equipment. As we pointed out in our meeting on February 22, 1980, it is Land Quality policy not to allow deductions for salvage value for various reasons. We agreed at that time to consider salvage value since title to this equipment would be in the State's name. However, our Cheyenne office has since advised us to disallow the salvage value in this case also as we have no idea if the equipment would have the indicated value or any value at all after use in the projected restoration operation.

The second problem is the request that the reclamation bond estimate be kept confidential. We cannot allow this for two reasons. First, the public has a right to know if the State is upholding its responsibilities in assuring the reclamation of the lands of the State. The assurance of reclamation by holding of reclamation bonds is the primary means of doing this. The public must have some assurance that such bonds are adequate and we are not willing to keep the basic estimates confidential.

The second reason is of a more practical nature. The cost of reclamation used as basis for the bond must reflect the cost to the State of doing the necessary restoration and reclamation, not the cost to the operator. Therefore, the costs must be those incurred by the state going into the open market place on a one time only basis. It is felt the reason RME wishes to keep some of

Rocky Mountain Energy, LE#4

March 27, 1980

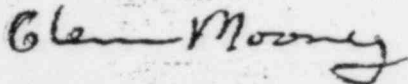
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the cost data confidential is that they reflect discounts given by the various vendors to RME because of your potential market. These discounts would not be available to the State because, hopefully, this situation will seldom arise.

Omitting the salvage value of \$38,000 brings the total bond to \$415,550. Adding a standard 20% contingency for the State's expenses brings the total to \$498,660. The present bond is \$40,000. We therefore request a bond increase in the amount of \$458,660. A form 2LE Increase/Decrease Rider is enclosed for your convenience.

Please call if you have any questions. Thank you for your cooperation.

Sincerely,

A handwritten signature in cursive script that reads "Glenn Mooney".

Glenn Mooney  
Geologist

GM/kn

Encl: Form 2LE Increase/Decrease Rider



**ROCKY MOUNTAIN  
ENERGY COMPANY**

March 21, 1980

Mr. Dennis Morrow  
WYOMING DEQ  
Land Quality Division  
District IV  
30 East Grinnel Street  
Sheridan, WY 82801

Dear Mr. Morrow:

RE: Nine Mile Lake Reclamation Bond Estimate;  
License to Explore #4-A

As agreed upon during our February 22nd meeting in your office, we are submitting with this letter a revised reclamation cost estimate for the Nine Mile Lake Project. This revision replaces the February 21, 1980, estimate, which should be discarded. Included in the revised estimate are the projected costs of restoring an additional test pattern (Pattern IV), which will probably be leached by means of a carbonate lixiviant and the cost of reclaiming a cell of the proposed commercial evaporation pond (not constructed).

Also, in accordance with our February 22nd meeting, RMEC requests that Items II, III, and IV be considered Company Confidential and filed accordingly. For convenience sake, I have enumerated Items II, III and IV on a separate page and included the respective totals only in Part V, Total Reclamation Costs.

We believe that this reclamation cost estimate should provide an adequate basis for the establishment of a reclamation bond. Upon receiving written concurrence from the DEQ, we will procure a bond in the amount agreed upon.

By the way of this letter, RMEC also requests that the bond posted for the hydraulic borehole mining (HBM) operation, License to Explore No. 31, be released at this time. The HBM site was reclaimed during September and October of 1979. Reclamation procedures involved disposing of the liquid effluent and sludge from the impoundment within the borehole cavity. The two cased boreholes were then backfilled to the surface with

Mr. Dennis Morrow  
March 21, 1980  
Page Two

fill and the casing cut off below the ground level. The casing in the observation wells was pulled and the holes plugged below the surface and backfilled to ground level. The two metal tanks, located south of the impoundment, were dismantled and transported from the site.

Finally, the impoundment was backfilled, the entire site graded to approximate original contour, and seeded. Seeding, which was done the last week of October, consisted of drilling the site with a mixture of western wheatgrass, green needlegrass, thick-spike wheatgrass, streambank wheatgrass, yellow sweet clover and alkali sacaton at a rate of 10 pounds P.L.S. per acre. The barbed wire fence around the site has been left in place until such time as the vegetation is capable of withstanding grazing pressure, at which time the fence will be removed.

If you have any questions, please give me a call.

Sincerely,

*Mike Neumann*

M. R. Neumann  
Environmental Specialist  
Nine Mile Lake

MRN/ph  
Attachment

cc: K. W. Loest  
File 86.6.2.13  
Glen Mooney (DEQ)  
R. R. Roberts

1980 ESTIMATE OF RECLAMATION COSTS  
NINE MILE LAKE ISL TEST SITE

I. Surface Reclamation - Disturbed Areas

	<u>Cost/Acre</u>	<u>Acres</u>	<u>Total Cost</u>
A. Evaporation Ponds <sup>1</sup>			
1. Backfill & contouring	1430	36	\$51480.00
2. Ripping & chiseling	30	30	900.00
3. Topsoil replacement	240	36	8640.00
4. Revegetation (mulching, seeding, fertilizing)	500	36	18000.00
5. Sludge Haulage	.85/yd <sup>3</sup>	<u>121000 yd<sup>3</sup></u>	<u>102850.00</u>
Total Affected Area		36	181870.00
B. Wellfields - Revegetation			
1. Pattern II	500	1.3	650.00
2. Pattern III	500	3.0	1500.00
3. Pattern IV	<u>500</u>	<u>3.0</u>	<u>1500.00</u>
Total Affected Area		10.1	3650.00
C. Miscellaneous - Revegetation			
1. Plant site	500	0.3	150.00
2. Roads, parking area	500	4.0	1500.00
3. Office site	500	0.5	250.00
4. Topsoil stockpiles	500	15.0	7500.00
5. Borrow & disturbed areas	500	<u>5.0</u>	<u>2500.00</u>
Total Affected Area		24.8	11900.00
	TOTAL	70.9	197420.00

<sup>1</sup>Includes old evaporation pond (six acres), new treated water reservoir (three acres), proposed cell of commercial evaporation reservoir (27-acres)

## II. Subsurface Restoration - Pattern III<sup>2</sup>

	<u>Total Cost</u>
A. Reverse Osmosis (R.O.) Equipment	\$35000.00
B. Water Pre-Treatment Equipment	10000.00
C. Sample Analysis - \$315/sample x 36 samples	11340.00
D. Chemical Reagents	3300.00
E. Labor, Operating, Overhead Costs	<u>57500.00</u>
Subtotal	117140.00

## III. Subsurface Restoration - Pattern IV<sup>3</sup>

A. Sample Analysis	11340.00
B. Chemical Reagents	1000.00
C. Labor, Operating, Overhead Costs	<u>28750.00</u>
Subtotal	41090.00
TOTAL	158230.00

## IV. Decommissioning Costs

A. Equipment Removal, Decontamination	22000.00
B. Well Abandonment	
1. Pattern wells - 66 @ \$500/well	33000.00
2. Baseline wells - 16 @ \$250/well	4000.00
3. Pond monitor wells - 18 @ \$50/well	<u>900.00</u>
Subtotal	59900.00
C. Salvage Value	
1. R.O. circuit	(30000.00)
2. Process equipment	<u>(8000.00)</u>
Subtotal	(38000.00)
TOTAL	21900.00

<sup>2</sup>Assumes 6-month restoration period

<sup>3</sup>Assumes 3-month restoration period

## V. Total Reclamation Costs

A. Surface Reclamation	197420.00
B. Subsurface Restoration	158230.00
C. Decommissioning	<u>21900.00</u>
GRAND TOTAL	\$377550.00

Signed and executed this 20th day of May  
ROCKY MOUNTAIN ENERGY COMPANY, A UTAH CORPORATION

Bond No. 4330515  
1980

BY: \_\_\_\_\_

TITLE: \_\_\_\_\_

State of \_\_\_\_\_ )

County of \_\_\_\_\_ ) SS.

The foregoing instrument was acknowledged before me by \_\_\_\_\_, this \_\_\_\_\_ day of \_\_\_\_\_, 19\_\_\_\_.

Witness my hand and official seal.

(Notary Public or other authorized officer)

My Commission Expires: \_\_\_\_\_

SURETY

Signed and executed this 20th day of May, 1980:

BY: G. Dennis McArdle

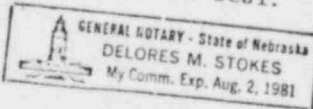
TITLE: Attorney in fact

State of Nebraska )

County of Douglas ) SS.

The foregoing instrument was acknowledged before me by G. Dennis McArdle, this 20th day of May, 1980.

Witness my hand and official seal.



Delores M. Stokes  
(Notary Public or other authorized officer)

My Commission Expires: August 2, 1981

RESIDENT AGENT FOR SERVICE

Resident Agent: \_\_\_\_\_  
(Signature) Date: \_\_\_\_\_

(Printed Name) Address: \_\_\_\_\_

Approved as to form and execution:

Attorney General \_\_\_\_\_

BY: \_\_\_\_\_ Assistant \_\_\_\_\_ Date: \_\_\_\_\_

APPROVED: \_\_\_\_\_  
Administrator, Land Quality Division Date: \_\_\_\_\_

Record No. \_\_\_\_\_

Page 2

State of Wyoming  
Department of Environmental Quality  
Land Quality Division  
Hathaway Building  
Cheyenne, Wyoming 82002

RECLAMATION PERFORMANCE BOND INCREASE/DECREASE RIDER

To be attached to and form a part of Surety Company Bond No. 4330515,  
written by AMERICAN CASUALTY COMPANY OF READING, PENNSYLVANIA, AS SURETY, on behalf of  
ROCKY MOUNTAIN ENERGY COMPANY, A UTAH CORPORATION, AS PRINCIPAL, in the sum  
of FORTY THOUSAND AND NO/100 Dollars (\$ 40,000.00)  
in favor of the State of Wyoming and executed on MAY 6, 1978

Whereas, the Department of Environmental Quality, Land Quality Division,  
issued License to Explore number 4-A1 and dated MAY 6, 1978  
pursuant to the application of the Principal.

Whereas, said bond and rider shall cover any and all land affected or to be  
affected by the exploration operation under the above mentioned license since the date  
of issuance of the license.

Now, therefore, the amount of the bond is increased/decreased by \_\_\_\_\_  
FOUR HUNDRED FIFTY EIGHT THOUSAND SIX HUNDRED SIXTY Dollars (\$ 458,660.00)  
to a total sum of FOUR HUNDRED NINETY EIGHT THOUSAND SIX HUNDRED SIXTY  
Dollars (\$ 498,660.00), to cover the additional/reduced cost of reclaiming all  
affected lands. It is further understood and agreed that all other terms and conditions  
of this bond shall remain unchanged.

The following land is to be a part of this rider:  
Township 35 North, Range 79 West, 6th PM Natrona County  
Section 27: SWSE, SESW  
Section 34 NENW  
including Section 34: N1/2 NE1/4 NW1/4 (20 Acres)  
Section 27: SE1/4 SW 1/4 (40 Acres)  
W 1/2 SE1/4 (portion (17.7 Acres))  
Appendix C

License No. 4-A1