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RETURN ORIGINAL TO PDR, HQ.

40-8829

Ferret  
Exploration  
Company of  
Nebraska, Inc.

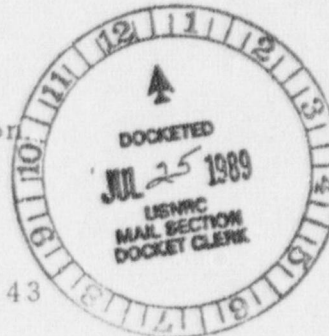


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July 21, 1989

Mr. Gary Konwinski  
U.S. Nuclear Regulatory Commission  
Uranium Recovery Field Office  
Box 25325  
Denver, Colorado 80225



RE: SUA 1441, License Condition 43

Dear Gary:

License Condition 43 of SUA 1441 requires an annual review of the surety to account for inflation. A detailed review in June 1988 of the cost of restoration and reclamation of the Crow Butte pilot plant indicated a cost of \$638,764. This review was recently updated and the cost of restoration and reclamation was estimated at \$640,554. A copy of the detailed estimate is attached.

Since the present bond is set at \$850,000, it is more than adequate for the restoration and reclamation of the Crow Butte pilot plant.

If you have any questions regarding this, or need any further information, please contact me.

Sincerely,

*Stephen P. Collings*

Stephen P. Collings  
Vice President

cc: Bill Gidley  
Ralph Knode  
Chuck Miller

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PDR ADOCK 04008829 PDC  
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Log	Aug 19-2
Remitter	
Check No.	3552
Amount	\$150-24
Fee Category	AND
Type of Fee	
Date Check Rec'd.	8/13/89
Date Completed	
By:	Quin

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DESIGNATED ORIGINAL

Certified By Mary C. Wood

89-0840

PILOT PLANT BONDING ESTIMATES  
JULY 1989

GROUNDWATER RESTORATION	QUANTITY	UNITS	RATE	COST
RO PROCESSING				
HALD RECOVERY	4647324	GAL	0.001357	\$6,308.87
PERMEATE INJECTION	2742440	GAL	0.001357	\$3,722.47
REDUCTANT TREATMENT				
PERMEATE INJECTION	11933320	GAL	0.001423	\$16,987.00
CIRCULATION	9042640	GAL	0.000342	\$3,096.51
LBS. REDUCTANT	11161	LBS	0.690000	\$7,700.86
RECIRCULATION				
CIRCULATION WITH IX-C	16454640	GAL	0.000111	\$1,818.54
LABOR ( 10 MEN PER 90 GPM )	11.37	MEN/YR	28000	\$318,358.75
LABORATORY COSTS	44820364	TOT. GAL.	0.001515	\$67,942.39
* TOTAL COST GROUNDWATER RESTORATION	\$0.010	/GAL		\$425,934.59

FACILITY DECOMMISSIONING

BUILDINGS ( 6 PEOPLE 1 MO. )	0.5	MEN/YR	28000	\$14,000.00
EQUIPMENT ( 4 PEOPLE 1 MO. )	0.3	MEN/YR	28000	\$9,333.33
PLUG AND ABANDON WELLS ( 29 )	163	FOOT	0.8	\$13,020.00
RECONTOUR POND & PLANT SITE	00000	YD.	0.8	\$64,000.00
EQUIPMENT ( CRANES ETC. )				\$5,000.00
SUPERVISION ( 1 PERSON 2 MO. )	0.2	MEN/YR	30000	\$6,333.33

TOTAL COST FACILITY DECOMMISSIONING \$111,746.67

LAND RECLAMATION

REPLACE TOPSOIL, PLOWING	7200	CU.YD.	0.75	\$5,400.00
REVEGETATION ( PLANT, SEED, FERTILIZER, MULCH )	6.7	ACRES	1500	\$10,050.00
CONTINUED MAINTENANCE (2 YR )	1	MEN/YR	28000	\$28,000.00

TOTAL COST LAND RECLAMATION \$43,450.00

BY-PRODUCT WASTE DISPOSAL

SOIL AROUND PROD/INJ WELLS ( 10 WELLS, 3 FT RADIUS, 2.5 IN DEEP @ 95#/FT^3 )	2	CU.YD.	105	\$104.21
SPENT RESIN (145 CU.FT. @ 45#/FT^3)	5	CU.YD.	105	\$563.09
USED FILTERS ( 100 CU.FT. )	4	CU.YD.	105	\$380.09
POND SLUDGE (40 GR/L @ 900#/FT^3)	104	CU.YD.	105	\$10,934.65
MISCELLANEOUS MATERIAL ( @ 700#/FT^3 )	11	CU.YD.	105	\$1,111.11
TRANSPORTATION (18 YD^3/LD @ \$1.8/M1)	7	LOADS	135	\$9,416.25

TOTAL ESTIMATED DISPOSAL 126 CU.YD. \$22,598.99

GROUND WATER MONITORING COST

SAMPLE ANALYSIS			\$15,824.00
LABOR ( PART TIME 9 MO. )	0.75 MEN/YR	28000	\$21,000.00

TOTAL MONITORING COST			\$36,824.00
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GRAND TOTAL

\$640,554.25

\* ASSUMES 90 GPM PROCESS, ESTIMATED GALLONS BASED ON CELL #2 RESTORATION

The above figures represent the maximum costs anticipated in conjunction with restoration and reclamation. They have been updated to reflect the restoration accomplished to date, and this new data has been used to update the estimate of cost to complete restoration and reclamation.

Ref : Technical position on financial assurance dated Oct 88, pg 20.



## DATA BASE

	QUANTITY	UNITS	\$/UNIT	COST/GAL
RO PROCESSING				
HALO RECOVERY & PERMEATE INJECTION				
RO	60	HP	0.000011	\$0.000663
DOWNHOLE	10	HP	0.000011	\$0.000111
RO FEED	5	HP	0.000011	\$0.000055
DECARBONATOR	5	HP	0.000011	\$0.000055
PERMEATE	15	HP	0.000011	\$0.000166
ACID	266	GAL/WK	0.000000	\$0.000191
ANTISCALANT	5	GAL/WK	0.000020	\$0.000105
CLEANING	1	GAL/WK	0.000012	\$0.000012
TOTAL DOLLARS/GALLON				\$0.001357

## REDUCTANT ADDITION

DOWNHOLE	10	HP	0.000011	\$0.000111
PERMEATE	15	HP	0.000011	\$0.000166
DOSI TUBE	20	EA/WK	0.000005	\$0.000066
TOTAL DOLLARS/GALLON				\$0.000342

## CIRCULATION

DOWNHOLE	10	HP	0.000011	\$0.000111
TOTAL DOLLARS/GALLON				\$0.000111

## LABORATORY COSTS - GROUNDWATER RESTORATION

ON-SITE	4525	\$/MO	0.000000	\$0.001149
3 EA PRODUCTION COMPOSITE	390	\$/MO	0.000000	\$0.000099
8 EA RADON	18	\$/MO	0.000000	\$0.000005
20 EA MONITOR COMP.	2370	\$/QTR	0.000000	\$0.000201
6 EA AIR PARTICULATE	492	\$/QTR	0.000000	\$0.000042
18 EA BIOASSAYS	216	\$/QTR	0.000000	\$0.000018
2 EA SEDIMENT	40	\$/QTR	0.000000	\$0.000003
TOTAL DOLLARS/GALLON				\$0.001516

## LABORATORY COSTS - GROUNDWATER MONITORING

8 EA RADON	18	\$/MO	6	\$108.00
20 EA MONITOR COMP.	2370	\$/QTR	2	\$4,740.00
6 EA AIR PARTICULATE	492	\$/QTR	2	\$984.00
2 EA SEDIMENT	80	\$/6MO	1	\$80.00
14 STABILIZATION ( SAMPLES FOR 6 MONTHS )	1652	\$/MO	6	\$9,912.00
TOTAL ANALYSIS COST				\$15,824.00