



PATHFINDER

September 19, 2007

Mr. Keith I. McConnell, Deputy Director
Decommissioning & Uranium Recovery Licensing Directorate
Division of Waste Management & Environmental Protection
Office of Federal & State Materials & Environmental Management Programs
Mail Stop T-8F5
U. S. Nuclear Regulatory Commission
11545 Rockville Pike
Rockville, Maryland 20852-2738

Ref: Docket No. 40-2259, Source Material License No. SUA-672
Surety estimate for the Lucky Mc mill tailings site

Dear Mr. McConnell:

The enclosed revision of the Lucky Mc mill tailings site surety estimate is submitted in fulfillment of the requirement of Condition 27 of the referenced license.

This surety estimate reflects the completion of the site closure, including the decommissioning of the ground water corrective action system and all other site wells not required by the license for monitoring purposes. The only remaining site activity is the routine quarterly well sampling. Itemized in this estimate are legal expenses, primarily related to the site transfer to DOE, and the remaining monitoring costs.

Pathfinder hereby requests an amendment to the referenced license to incorporate into the Lucky Mc license a revised surety amount for tailings and mill site reclamation as required by condition 27. A summary of the adjusted surety amount is shown below.

LUCKY Mc SITE

<u>ACTIVITY</u>	<u>CURRENT SURETY</u>	<u>PROPOSED SURETY</u>
1. Mill Decommissioning	\$0	\$0
2. Tailings Reclamation	49,946	58,460
3. Long Term Surveillance	752,954	767,725
SUBTOTAL	\$ 802,900	\$ 826,185
4. Contingency (15% of 1 &2)	7,492	8,769
TOTAL	\$810,392	\$ 834,954
Increase/(Decrease)		\$ 24,562

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The long term surveillance fee has been increased, consistent with the latest available CPI adjustment (August, 2007). Supporting information for the recalculated surety estimate is enclosed (two copies). Upon your written approval, we will proceed to obtain a rider for the existing Letter-of-Credit to reflect the revised surety amount.

Sincerely,

A handwritten signature in black ink that reads "Tom Hardgrove". The signature is written in a cursive style with a long, sweeping tail on the "e".

T. W. Hardgrove
Operations Manager

Enclosure

Cc: D. B. Spitzberg, USNRC Region IV
B. Bonifas, PMC

LUCKY Mc TAILINGS SITE RECLAMATION COST ESTIMATE
September 19, 2007

Table 1 presents a cost estimate summary for the reclamation of the Lucky Mc mill site and tailings to 10 CFR 40 Appendix A standards. All site work has been completed.

The following text provides supporting information for the unit costs or total costs developed for the limited number of remaining site activities.

A. Re-vegetation:

All re-vegetation work has been completed.

B. Construction Management and Miscellaneous Expenses

Site construction has been completed; therefore, no costs are associated with construction management and incidental overhead.

Miscellaneous expenses are estimated as follows:

- 1) Engineering design/plan changes - The planned work has been completed as it relates to the tailings reclamation plan. Therefore, no cost is assigned to this item.
- 2) Mobilization - All site work has been completed.
- 3) Legal Expenses - An estimated **\$10,000.00** is applied to this activity. This is exclusive of the license termination activities, including site transfer to DOE, discussed below.
- 4) Power - All utilities for the site have been disconnected coincident with the demolition of the office and all other facilities.
- 5) Completion report preparation - The completion report has been submitted to the NRC (April, 2005).
- 6) License termination activities - The cost to terminate the NRC license and transfer the site to DOE is estimated as follows:

Lucky Mc Mill Tailings Site Reclamation Cost Estimate, September 19, 2007

Legal expenses -	5,000
Labor - 200 hrs. at \$83/hr -	16,600
Miscellaneous -	<u>2,000</u>
Total	\$23,600

Note that the final survey, and survey caps, signs, and monument installations have been completed.

C. Groundwater Restoration:

Alternate concentration limits (ACLs) have been approved for the site. The corrective action program has been terminated for the site.

Well Plugging:

Exclusive of the seven wells monitored as specified in the license, all wells associated with the site have been abandoned by plugging with bentonite chips, concrete capping three feet below the land surface, and soil backfilling to the surface. All related surface equipment such as well sheds, power lines, etc. have been removed.

D. Fencing:

The existing restricted area fence has been repaired as needed over its entire length, and it has been modified in the vicinity of the No. 8 production well (south end of site). No additional costs for fencing are anticipated.

E. Radiological Survey and Environmental Monitoring:

Post Reclamation Ra226 Survey:

The post reclamation gamma/Ra226 survey field work has been completed. A report on the survey and any subsequent cleanup effort was included in the TRP completion report (April, 2005).

Environmental Monitoring:

An environmental monitoring program will consist solely of the quarterly sampling of seven monitor wells. Monitoring will continue until the anticipated site transfer to DOE by the fourth quarter of 2008. Labor costs, semi-annual report

preparation, and other miscellaneous expenses are based on the use of a consultant at current rates that Pathfinder has paid.

Labor and Program Administration -

1 technician for 20 hrs/qtr for four quarters:
20 hrs/qtr x 4 qtrs x \$52.00/hr = \$4,160.

1 vehicle (including mileage) for two days/qtr for four quarters:
2 days/qtr x 4 qtrs x \$125.day = \$1,000.

Administration and general overhead, and general engineering/consultant oversight (including report preparation) -

Administration/overhead = \$500/mo x 12 mo/yr
x 1.0 yr = \$6,000.

Engineering/consultants = \$400/mo x 12 mo/yr
x 1.0 yr = \$4,800.

Analytical Work -

Based upon current costs for the outside analytical work done at Lucky Mc to maintain the environmental monitoring program as required by the license (post-ACLs approval), and including a ten percent general inflation adjustment, the following would apply:

	<u>Quarterly Cost</u>
Water sample analyses	\$ 2,225

Total Analytical Costs for 4 quarters:

\$2,225/qtr x 4 qtrs = \$8,900.

Total Costs for Environmental Monitoring:

\$4,160 + \$1,000 + \$6,000 + \$4,800 + \$8,900 = **\$24,860.**

F. Inflation Adjustment of the Long Term Surveillance Fee

Consumer Price Index, all urban consumers:

August, 2007 = 207.9
December, 1978 = 67.7

207.9/67.7 x \$250,000 = **\$767,725.**

**Table 1. Pathfinder Mines Corporation, Lucky Mc Mine
Tailing and Mill Site Reclamation Cost Estimate Summary**

Activity	Quantity	Unit Cost (\$)	Cost	Footnote*
Regrading:	0 CY	0.73 /CY	\$0	
Tailings/millsite cover & protection:				
Radon barrier placement	0 CY	1.30 /CY	\$0	
Filter bed stockpiled on site	0 CY	2.00 /CY	\$0	
Rock mulch stockpiled on site	0 CY	2.00 /CY	\$0	
Small riprap stockpiled on site	0 CY	4.50 /CY	\$0	
Large riprap placement	0 CY	4.50 /CY	\$0	
Topsoil - Borrows	0 CY	0.70 /CY	\$0	
Revegetation:				
Discing & seeding	0 AC	99.00 /AC	\$0	
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SUBTOTAL	—	—	\$0	
Contractors' mobilization/demobilization			\$0	
TOTAL RECLAMATION CONTRACTOR COST			\$0	
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Construction management			\$0	
Other miscellaneous expenses			\$33,600	B
Completion Report Preparation			\$0	
Groundwater restoration			\$0	
Fencing			\$0	
Radiological surveys			\$0	
Environmental monitoring			\$24,860	E
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	TOTAL		\$58,460	
	Contingency (15%)		\$8,769	
	Site Surveillance		\$767,725	
	GRAND TOTAL		\$834,954	

* See the corresponding text section for an explanation of the derivation of costs.
All tailings-related regrading and cover/erosion protection placement has been complete