

December 16, 2003

Smith Ranch - Highland Uranium Project P. O. Box 1210

Glenrock, Wyoming USA 82637

Casper: 307-235-1628 Douglas: 307-358-6541 Fax: 307-358-4533

Addressee Only
Mr. Gary Janosko, Chief FCLB
Fuel Cycle Licensing Branch, NMSS
Mail Stop T-8A33
U.S. Nuclear Regulatory Commission
Washington D.C. 20555

RE: Smith Ranch – Highland Uranium Project

Docket No. 40-8964, SUA-1548

Annual Surety Updates for Ruth and North Butte Satellite Facilities

Dear Mr. Janosko:

In accordance with License Condition 9.5 of Source Material License SUA-1548, please find enclosed two (2) copies of the proposed Surety Estimate Revisions for Power Resource's, Inc. (PRI) Ruth and North Butte Satellite facilities. These estimates were concurrently submitted to the WDEQ-LQD in the Annual Report for each facility.

As your staff is aware, the Surety Estimates and Letters of Credit for each of these facilities are separate to accommodate the separate WDEQ-LQD Mine Permits. There has been no activity at either facility in the past year and none is planned for 2004. The Surety Estimates are based on the estimates previously approved by both the NRC and WDEQ, and have been escalated to the most recently available CPI information (October 2003). Therefore, the Ruth Surety Estimate has been increased by \$2,300 to \$104,600 and the North Butte Surety Estimate has been increased by \$1,100 to \$56,500.

Upon WDEQ-LQD and NRC approval of the Surety Estimate Revisions, PRI will update the existing surety instruments to the applicable amounts. Until that time, the existing surety instruments will remain in place.





If you have any questions, please don't hesitate to call me at the Smith Ranch-Highland Uranium Project at 307-358-6541, ext. 62.

Sincerely,

W.F. Kearney

Manager-Health, Safety & Environmental Affairs

WFK/ksj

cc:

S.P. Collings w/o atta

R. Knode w/o atta

File 4.6.4.1

#### TOTAL DECOMMISSIONING AND RECLAMATION COST ESTIMATE

I.	BUILDING DEMOLITION AND DISPOSAL COSTS	\$40,055
II.	EVAPORATION POND DECOMMISSIONING COSTS	\$21,274
III.	MISC. SURFACE RECLAMATION COSTS	\$6,821
IV.	WELL PLUGGING AND ABANDONMENT	\$1,781
v.	FINAL STATUS SURVEY REPORT	\$10,000
	SUBTOTAL	\$79,931
	PROJECT MANAGEMENT AND MISCELLANEOUS COSTS (15%) <sup>1</sup>	\$11,990
	CONTRACTOR PROFIT, OVERHEAD, AND MOBILIZATION COSTS (10%) <sup>2</sup>	\$7,993
	TOTAL	\$99,914
	CPI ESCALATOR - DECEMBER 2001 TO DECEMBER 2003 (4.7%)	\$4,696
	TOTAL CALCULATED SURETY (IN 2003 DOLLARS)	\$104,600

<sup>&</sup>lt;sup>1</sup> Based on WDEQ-LQD Guideline No. 12 (1/2001), Section II(B)(12)(except b) and (13).
<sup>2</sup> Based on WDEQ-LQD Guideline No. 12 (1/2001), Section II(B)(12)(b).

				<u> </u>		<u> </u>		Process	Warehouse	Generator
ILDI	NG	DEMOL	ITI	ON AND	DISPOSAL			Building	Building	Building
	Ę					1				
		tion Cost	<u> </u>			<del></del>		<del> </del>		ļ
Α.		uipment		<del></del>			<del></del>			<del> </del>
4	$\sqcup$				n site includes 6			<del> </del>		
4	اــا				Assume \$2000 f	or disman	tling.			ļ
1			ipm	ent Disma	ntling Costs	<del> </del>		\$2,000	\$0	\$(
B.		ilding		C	(0)	<del> </del>			5000	
4		Total Vol				<u>. </u>	10101	80000		
4					er WDEQ Guide	line 12, A	pp. K (\$/ft²)	\$0.165		
		btotal Buil		g Demoliti	on Costs	<del> </del>		\$13,200	\$990	\$24
C.	_	ncrete Flo		L		ļ <u>.                                    </u>		·		ļ
		Area of C						4000		150
					er WDEQ Guide	line 12, A	pp. K (\$/ft²)	\$3.05	<del></del>	
1					emolition Costs	ļ		\$12,200	\$1,830	\$45
D.		ncrete Foo				<u> </u>				<b></b>
	Ш	Length of	Cor	ncrete Foo	ting (ft)			280		
					er WDEQ Guide		pp. K (\$/lin. ft)	\$11.15		
					Demolition Cost	<u>s</u>		\$3,122		<del></del>
		l Demoliti			Building	<u> </u>		\$30,522		\$700
Tot	al I	emolition	ı Co	sts		<u> </u>		\$34,048	<u>                                     </u>	
Die		al Costs		<del> </del>	<del></del>	<del></del>	<del> </del>	<del> </del>	<del> </del>	<del> </del>
		uipment		<del> </del>		<del> </del>		<del></del>	<del>                                     </del>	<del></del>
A.			. Da	- Dimmdu	ct Material Disp	ocal A are	ement hetween	<del></del>	<del> </del>	<del> </del>
┼─	142				t 185 cy dispose			<del> </del>	<del> </del>	
	$\vdash$				sed on 2001 ope			<del> </del>	<del> </del>	<del> </del>
<del> </del>	-				ime of 15 cy.	lainig cos	is at Triginaria.	<del></del>	<del></del>	<del> </del>
+	-	# Trips	qui	I VOIL	inc of 15 cy.		<del></del>	<del> </del>	0	
	$\vdash$	Transport	- ti -	n Heit Co	et (\$/tein)	<del></del>		\$700		
-	-	Disposal				<del> </del>	<del></del>	\$700	<del></del>	<del></del>
┼─								\$700		<del></del>
<del> </del>		btotal Equ			sai Costs .	+		3700	- 30	<del></del>
В.		ildings (O			f building materi	1(6)		0.75	0.5	0.
-	AS				Dunding materi	1 (11)		100	<del></del>	
	-	Building				<del></del>	<del></del>	40	<del></del>	
	$\vdash$	Building				<del> </del>		20		
┼	<del>                                     </del>	Building			toriolo (ou)	<del> </del>		267		
┼─	-	Volume C	I BI	inding Ma	nterials (cy) ssuming 25% sw	ioli footos	\(\(\mu\)\)	334		
	<del> </del>	Volume I	or L	Asposai (a	SSUMING 25% SW	o 12 Apr	V'(C/m)	\$5.44		
<del>-</del>					WDEQ Guidelin	C 12, App	7. K (3/cy)	\$1,817		
<del> _</del>		btotal Bui		g Disposa	COSIS	<del>- </del> -	<del></del>	\$1,017	\$207	- 50
C.		ncrete Flo		<u> </u>	110				<del> </del>	<del> </del>
<del> </del>	As				ct Material Disp			<del></del>	<del> </del>	<del> </del>
—	<u> </u>						irley Basin at no	<del>- </del>	<del></del>	<del> </del>
	<u> </u>				sed on 2001 ope	rating cos	ts at Highland.	4000	(00	15
ᆚ	1_			rete Floor				4000		
┷	_				Concrete Floor (f	9		0.5	<del></del>	<del></del>
1	丄		of Co	oncrete Fl	oor (cy)			74	11	<del> </del>
	II.	On-Site		I		1	İ	1	1	ì
I	<u> </u>			e (%) <sup>2</sup>				90%	100%	100

	ii		Process	Warehouse	Generator
BUILDI	ING D	EMOLITION AND DISPOSAL	Building	Building	Building
		Disposal Unit Cost per WDEQ Guideline 12, App. K (\$/	cy) . \$4.13	\$4.13	\$4.13
	1 6,	abtotal On-Site Disposal Costs	\$275	\$4.13	\$12
<del> </del>		RC-Licensed Facility	Ψ275	<b>Ψ</b> 13	
<del></del>		Percentage (%) <sup>2</sup>	10%	0%	0%
<del></del>		Volume for Disposal (cy)	7.4	0	0,0
<del>                                     </del>	$\vdash$	Volume for Disposal (assuming 50% swell factor) (cy)	11	0	0
	1-1-	# Trips	1	0	0
	<del>                                      </del>	Transportation Unit Cost (\$/trip)	\$700	\$0	\$0
	11	Disposal Unit Cost (\$/cy)	\$0	\$0	\$0
	S	ubtotal NRC-Licensed Facility Disposal Costs	\$700	\$0	\$0
		otal Concrete Floor Disposal Costs	\$975	\$45	\$12
D.		rete Footing (On-Site)			
		ength of Concrete Footing (ft)	280	0	0
		verage Depth of Concrete Footing (ft)	4	4	4
		verage Width of Concrete Footing (ft)	1	1	1
		olume of Concrete Footing (cy)	41	0	0
	D	isposal Unit Cost per WDEQ Guideline 12, App. K (\$/cy)	\$4.13	\$4.13	\$4.13
		otal Concrete Footing Disposal Costs	\$169	\$0	\$0
Sub		Disposal Costs per Building	\$3,661	\$252	\$94
		posal Costs	\$4,007		
III. Rac	diatio	n Surveys and Soil Sampling	···		
ASS		ons: Based on NRC regulations and ambient levels of radia			
<del> </del>		te, environmental and personnel monitoring (TLD) not req	uirea.		
A.		pment (Alpha/Gamma Surveys and Smear Samples)		0	
		Weeks	\$250		\$250
		ental Rate (\$/week)	\$500	\$250	\$250
<del> </del>		Equipment Costs	\$300	- 30	40
B.		r (Surveys and Soil Sampling)	80	.0	-
<b>  </b>		Hours abor Cost (S/hr)	\$15		\$15
<del>  </del>		Labor Costs	\$1,200	\$0	\$0
C.		ytical Costs	- 41,200		
<del> </del> -		Samples	5	0	0
<del> </del>		a-226 Analytical Cost (\$/sample)	\$60		\$60
<del>  </del>		Analytical Costs	\$300		\$0
10,1	htotal	Radiation Survey and Soil Sampling Costs	\$2,000		
		diation Survey and Soil Sampling Costs	\$2,000		
1	1-1				
SUBTO	TALI	BUILDING DEMOLITION AND DISPOSAL COSTS	\$36,183		\$800
TOTAL	BUI	LDING DEMOLITION AND DISPOSAL COSTS	\$40,055		
Notes:		ed on radiation surveys conducted by Pathfinder Mines Co	o. during October and N	November, 200	1 (see
	site t	ransfer letter dated November 2, 2001).		<u> </u>	

EVAP	ORATION POND DECOMMISSIONING	Pond No. 1	Pond No. 2
I. E	Byproduct Material Removal and Loading		
	A.   Volume of Byproduct Material		•
	Area of Pond Bottom (ft <sup>2</sup> )	22,138	21,947
	1. Area with Fill (ft²)	2,813	0
	Average Thickness of Fill (in)	3.5	0
	Volume of Fill (cy)	30	0
	2. Remaining Area with Pond Residue (ft²)	19,325	21,947
	Average Thickness of Pond Residue (in)	I	0.5
	Volume of Pond Residue (cy)	60	34
	3. Area of Liner (ft²)	22,138	21,947
	Thickness of Liner (in)	0.036 2.5	0.036
	Volume of Liner (cy)   Volume of Liner Assuming 25% Void Space (cy)	2.5	2.4
	4. Area of Contaminated Sump and Drain (ft²)	0	
-	Length of Sump and Drain (ft)	0	240
<del></del>	Volume of Sump and Drain (cy)	. 0	9
	5. Diameter of Contaminated Soil (ft)	0	10
	Depth of Contaminated Soil (in)	0	. 6
<del>-  </del>	Volume of Contaminated Soil (cy)	0	1
	Subtotal Volume of Byproduct Material (cy)	93	47
E	3. Equipment (Front End Loader)		
	# Hours	40	20
	Operating Cost (\$/hr)	\$60	\$60
	Subtotal Equipment Costs	\$2,400	\$1,200
C	C. Labor		
	# Hours	40	20
	# Laborers	3	3
	Labor Cost (\$/hr)	\$15	\$15
	Subtotal Labor Costs	\$1,800	\$900
2	Subtotal Byproduct Material Removal and Loading Costs	\$4,200	\$2,100
7	Total Byproduct Material Removal and Loading Costs	\$6,300	
II. 7	Fransportation and Disposal		
***	Total Volume of Byproduct Material (cy)	93	47
<del>-  </del>	Assumptions: Per Byproduct Material Disposal Agreement between		
	PRI and Pathfinder, first 185 cy disposed of at Shirley Basin at no		
	cost. Transportation based on 2001 operating costs at Highland.		-
I A	A. Transportation		
	Volume of Soil per Trip (cy/trip)	30	30
	# Trips	3	. 2
	Cost per Trip (\$/trip)	\$700	\$700
	Subtotal Transportation Costs	\$2,100	\$1,400
E	B. Disposal		
	Disposal Unit Cost (\$/cy)	\$0	\$0
	Subtotal Disposal Costs	\$0	\$0
	Subtotal Transportation and Disposal Costs	\$2,100	\$1,400
17	Total Transportation and Disposal Costs	\$3,500	
111.	Ripping	···	
<del> </del>	Area (acres)	0.5	0.5
	Ripping Unit Cost per WDEQ Guideline 12, App. I (\$/acre)	\$474.92	\$474.92
1 <del></del>	Subtotal Ripping Costs	\$237	\$237
1 12			
	Total Ripping Costs	\$474	

EVAPORATION POND DECOMMISSIONING	Pond No. 1	Pond No. 2
Assumptions: Surface grade = 0%; Avg. haul distance = 100 ft.		
Volume of Soil (cy)	5400	5400
Backfilling Unit Cost per WDEQ Guideline 12, App. E (\$/cy)	\$0.145	\$0.145
Subtotal Backfilling Costs	\$783	\$783
Total Backfilling Costs	\$1,566	
V. Grading		
Area (acres)	1.5	1.5
Rough Grading Unit Cost per WDEQ Guideline 12, App. M (\$/acre		\$50.35
Final Grading Unit Cost per WDEQ Guideline 12, App. G (\$/acre) Subtotal Grading Costs	\$38.35	\$38.35
Total Grading Costs	\$133 \$266	\$133
Total Grading Costs	3200	· · · · · · · · · · · · · · · · · · ·
VI. Replacement of Topsoil		
Assumptions: Surface grade = 0%; Avg. haul distance = 400 ft.		
Volume of Topsoil (cy)	3756	3756
Application Unit Cost per WDEQ Guideline No.12, App.E (\$/cy)	\$0.47	\$0.47
Subtotal Topsoil Replacement Costs	\$1,765	\$1,765
Total Topsoil Replacement Costs	\$3,530	
VII. Seeding/Revegetation		······································
Area (acres)	1.5	1.5
Disking/Seeding (\$/acre)	\$250	\$250
Mulching (Sacre)	\$300	\$300
Subtotal Seeding/Revegetation Costs	\$825	\$825
Total Seeding/Revegetation Costs	\$1,650	
VIII Fence Removal		
Length (ft)	800	800
Removal Unit Cost per WDEQ Guideline 12, App. H (\$/ft)	\$0.68	\$0.68
Subtotal Fence Removal Costs	\$544	\$544
Total Fence Removal Costs	\$1,088	<del></del>
IX. Radiation Surveys and Soil Sampling		
Assumptions: Based on NRC regulations and ambient levels of radiation	n	
on-site, environmental and personnel monitoring (TLD) not require	d.	
A. Equipment (Alpha/Gamma Surveys and Smear Samples)		
# Weeks	1	1
Rental Rate (\$/week)	\$250	\$250
Total Equipment Costs	\$250	\$250
B. Labor (Surveys and Soil Sampling)	· · · · · · · · · · · · · · · · · · ·	
# Hours	40	40
Labor Cost (\$/hr)	\$15	\$15
Total Labor Costs	\$600	\$600
C. Analytical Costs	•	
# Samples	10	10
Ra-226 Analytical Cost (\$/sample)	\$60	\$60
Total Analytical Costs	\$600 \$1,450	\$600 \$1.450
Subtotal Radiation Survey and Soil Sampling Costs	\$1,450	\$1,450
Total Radiation Survey and Soil Sampling Costs	\$2,900	
SUBTOTAL EVAPORATION POND DECOMMISSIONING COSTS	\$12,037	\$9,237
TOTAL EVAPORATION POND DECOMMISSIONING COSTS	\$21,274	

Removal Unit Cost per WDEQ Guideline 12, App. C (\$/cy)					<del></del>			<del>,</del>	<del></del>
Labildings, Roads, and Parking Areas	77700		UDEA CE I	DECT AN	T A STATE ON Y	<u> </u>			
A. Gravel Removal   Assumptions: Surface Grade = 0%; Avg. haul distance = 500 ft.   Volume (cy)   1500   Removal Unit Cost per WDEQ Guideline 12, App. C (\$/cy)   \$0.66   Total Gravel Removal Costs   \$900   B. Ripping   Area (acres)   Ripping Unit Cost per WDEQ Guideline 12, App. I (\$/acre)   \$474.9;   Total Ripping Costs   \$955   C. Replacement of Topsoil   Assumptions: Surface grade = 0%; Avg. haul distance = 400 ft.   Volume of Topsoil (cy)   2071   Application Unit Cost per WDEQ Guideline No. 12, App.E (\$/cy)   \$0.41   Total Topsoil Replacement Costs   \$972   D. Seeding/Revegetation   Area (acres)   \$1.00   Area (acres)   \$255   Mulching (\$acre)   \$255   Mulching (\$acre)   \$288   Removal Unit Cost per WDEQ Guideline 12, App. H (\$/ft)   \$0.66   Total Fence Removal Costs   \$1,957   Total Topsoil Replacement Costs   \$1,957   Total Topsoil Replacement Costs   \$1,957   Total Topsoil Cost per WDEQ Guideline 12, App. H (\$/ft)   \$0.66   Total Fence Removal Costs   \$1,957   Total Topsoil Cost per WDEQ Guideline 12, App. H (\$/ft)   \$0.66   Total Fence Removal Costs   \$1,957   Total Topsoil Cost per WDEQ Guideline 12, App. H (\$/ft)   \$0.66   Total Fence Removal Cost   \$1,957   Total Topsoil Cost per WDEQ Guideline No. 12, App.E (\$/cy)   \$0.42   Total Topsoil Replacement Costs   \$5,957   Total Topsoil	MISC	<u> S</u>	URFACE	RECLAN	IATION	ļ		ļ	<u> </u>
A. Gravel Removal   Assumptions: Surface Grade = 0%; Avg. haul distance = 500 ft.   Volume (cy)   1500   Removal Unit Cost per WDEQ Guideline 12, App. C (\$/cy)   \$0.66   Total Gravel Removal Costs   \$900   B. Ripping   Area (acres)   Ripping Unit Cost per WDEQ Guideline 12, App. I (\$/acre)   \$474.9;   Total Ripping Costs   \$955   C. Replacement of Topsoil   Assumptions: Surface grade = 0%; Avg. haul distance = 400 ft.   Volume of Topsoil (cy)   2071   Application Unit Cost per WDEQ Guideline No. 12, App.E (\$/cy)   \$0.41   Total Topsoil Replacement Costs   \$972   D. Seeding/Revegetation   Area (acres)   \$1.00   Area (acres)   \$255   Mulching (\$acre)   \$255   Mulching (\$acre)   \$288   Removal Unit Cost per WDEQ Guideline 12, App. H (\$/ft)   \$0.66   Total Fence Removal Costs   \$1,957   Total Topsoil Replacement Costs   \$1,957   Total Topsoil Replacement Costs   \$1,957   Total Topsoil Cost per WDEQ Guideline 12, App. H (\$/ft)   \$0.66   Total Fence Removal Costs   \$1,957   Total Topsoil Cost per WDEQ Guideline 12, App. H (\$/ft)   \$0.66   Total Fence Removal Costs   \$1,957   Total Topsoil Cost per WDEQ Guideline 12, App. H (\$/ft)   \$0.66   Total Fence Removal Cost   \$1,957   Total Topsoil Cost per WDEQ Guideline No. 12, App.E (\$/cy)   \$0.42   Total Topsoil Replacement Costs   \$5,957   Total Topsoil	I.	Bui	ldings, Roa	ads, and	Parking A	reas			<del></del>
Assumptions: Surface Grade = 0%; Avg. haul distance = 500 ft.     Volume (cy)	<del></del>							<del></del>	<del></del>
Volume (cy)				<del> </del>					
Removal Unit Cost per WDEQ Guideline 12, App. C (\$/cy)						1			1500
Total Gravel Removal Costs   S900	<del> </del>				st per WD	EO Guidel	ine 12. Ap	p. C (\$/cv)	\$0.60
B. Ripping									\$900
Area (acres)		<u>В.</u>							
Ripping Unit Cost per WDEQ Guideline 12, App. I (S/acre)   \$474.9:   Total Ripping Costs   \$956     C. Replacement of Topsoil   2076     Assumptions: Surface grade = 0%; Avg. haul distance = 400 ft.     Volume of Topsoil (cy)   2076     Application Unit Cost per WDEQ Guideline No.12, App.E (S/cy)   \$0.4*     Total Topsoil Replacement Costs   \$970     D. Seeding/Revegetation   2076     Area (acres)   2076     Mulching (Sacre)   3256     Mulching (Sacre)   3256     Total Seeding/Revegetation Costs   \$1,100     E. Fence Removal   2888     Removal Unit Cost per WDEQ Guideline 12, App. H (S/ft)   \$0.66     Total Fence Removal Costs   \$1,950     Total Bldgs, Roads, and Parking Area Surface Reclamation Costs   \$5,88     II. R&D Wellfield Area   A Replacement of Topsoil   Assumptions: Surface grade = 0%; Avg. haul distance = 350 ft.     Volume of Topsoil (cy)   1180     Application Unit Cost per WDEQ Guideline No.12, App.E (S/cy)   \$0.42     Total Topsoil Replacement Costs   \$500     B. Seeding/Revegetation   \$250     Area (acres)   0.500     Disking/Seeding (S/acre)   \$250     Mulching (Sacre)   \$250     Mulching (Sacre)   \$250     Total R&D Wellfield Area Surface Reclamation Costs   \$300     Total R&D Wellfield Area Surface				cres)					2
Total Ripping Costs   S956					st per WDI	Q Guideli	ne 12, App	. I (\$/acre)	\$474.92
C. Replacement of Topsoil								1	\$950
Assumptions: Surface grade = 0%; Avg. haul distance = 400 ft.		C.							
Volume of Topsoil (cy)   2076   Application Unit Cost per WDEQ Guideline No.12, App.E (S/cy)   \$0.47   Total Topsoil Replacement Costs   \$977   D. Seeding/Revegetation     2550   Disking/Seeding (S/acre)   \$250   Mulching (Sacre)   \$300   Total Seeding/Revegetation Costs   \$1,100   E. Fence Removal   2880   Removal Unit Cost per WDEQ Guideline 12, App. H (S/ft)   \$0.60   Total Fence Removal Costs   \$1,950   Total Bidgs, Roads, and Parking Area Surface Reclamation Costs   \$5,88   II. R&D Wellfield Area   A. Replacement of Topsoil   Assumptions: Surface grade = 0%; Avg. haul distance = 350 ft.   Volume of Topsoil (cy)   1180   Application Unit Cost per WDEQ Guideline No.12, App.E (S/cy)   \$0.420   Total Topsoil Replacement Costs   \$550   B. Seeding/Revegetation   \$250   Disking/Seeding (S/acre)   \$250   Mulching (Sacre)   \$250   Total R&D Wellfield Area Surface Reclamation Costs   \$300   Total Seeding/Revegetation Costs   \$300   Total Seeding/Revegetation Costs   \$300   Total R&D Wellfield Area Surface Reclamation Costs   \$3440						= 0%; Av	g. haul dist	ance = 400 ft.	
Application Unit Cost per WDEQ Guideline No.12, App.E (S/cy)   \$0.4						· · · · · ·		1	2070
Total Topsoil Replacement Costs   \$970						VDEQ Gui	deline No.	12, App.E (\$/cy)	\$0.47
D.   Seeding/Revegetation   Area (acres)   S25    Disking/Seeding (\$/acre)   \$25    Mulching (\$acre)   \$300    Total Seeding/Revegetation Costs   \$1,100    E.   Fence Removal								1	\$973
Area (acres)   Disking/Seeding (\$/acre)   \$250     Mulching (\$acre)   \$300     Total Seeding/Revegetation Costs   \$1,100     E. Fence Removal     2880     Removal Unit Cost per WDEQ Guideline 12, App. H (\$/ft)   \$0.60     Total Fence Removal Costs   \$1,950     Total Bldgs, Roads, and Parking Area Surface Reclamation Costs   \$5,88     II. R&D Wellfield Area   A. Replacement of Topsoil   Assumptions: Surface grade = 0%; Avg. haul distance = 350 ft.   Volume of Topsoil (cy)   1180     Application Unit Cost per WDEQ Guideline No.12, App.E (\$/cy)   \$0.420     Total Topsoil Replacement Costs   \$500     B. Seeding/Revegetation   \$250     Mulching (\$acre)   \$250     Total Seeding/Revegetation Costs   \$300     Total Seeding/Revegetation Costs   \$300     Total R&D Wellfield Area Surface Reclamation Costs   \$340     Total R&D Wellfield Area Surface Reclamation Cost	I	D.					·········		
Disking/Seeding (\$/acre)   \$256     Mulching (\$acre)   \$300     Total Seeding/Revegetation Costs   \$1,100     E. Fence Removal     2880     Removal Unit Cost per WDEQ Guideline 12, App. H (\$/ft)   \$0.60     Total Fence Removal Costs   \$1,950     Total Bidgs, Roads, and Parking Area Surface Reclamation Costs   \$5,88     II. R&D Wellfield Area   A. Replacement of Topsoil   Assumptions: Surface grade = 0%; Avg. haul distance = 350 ft.     Volume of Topsoil (cy)   1180     Application Unit Cost per WDEQ Guideline No.12, App.E (\$/cy)   \$0.420     Total Topsoil Replacement Costs   \$500     B. Seeding/Revegetation   \$250     Mulching (\$acre)   \$250     Mulching (\$acre)   \$250     Total Seeding/Revegetation Costs   \$300     Total Seeding/Revegetation Costs   \$300     Total R&D Wellfield Area Surface Reclamation Costs   \$940     Total R&D Wellfield Area Surface R									2
Mulching (Sacre)   \$300   Total Seeding/Revegetation Costs   \$1,100   E. Fence Removal					(\$/acre)		· · · · · · · · · · · · · · · · · · ·		\$250
Total Seeding/Revegetation Costs \$1,10  E. Fence Removal					<del></del>				\$300
E.   Fence Removal									
Removal Unit Cost per WDEQ Guideline 12, App. H (\$/ft)  Total Fence Removal Costs  Total Bldgs, Roads, and Parking Area Surface Reclamation Costs  \$1,95  Total Bldgs, Roads, and Parking Area Surface Reclamation Costs  \$5,88  II. R&D Wellfield Area  A. Replacement of Topsoil  Assumptions: Surface grade = 0%; Avg. haul distance = 350 ft.  Volume of Topsoil (cy)  118  Application Unit Cost per WDEQ Guideline No.12, App.E (\$/cy)  50.42  Total Topsoil Replacement Costs  \$50  B. Seeding/Revegetation  Area (acres)  Disking/Seeding (\$/acre)  Area (sacre)  Total Seeding/Revegetation Costs  \$30  Total Seeding/Revegetation Costs  \$44  Total R&D Wellfield Area Surface Reclamation Costs  \$94	1	Ē.			[	{			
Removal Unit Cost per WDEQ Guideline 12, App. H (\$/ft)   \$0.60     Total Fence Removal Costs   \$1,950     Total Bldgs, Roads, and Parking Area Surface Reclamation Costs   \$5,88     II. R&D Wellfield Area			Length	(ft)					2880
Total Fence Removal Costs  Total Bldgs, Roads, and Parking Area Surface Reclamation Costs  S5,88  II. R&D Wellfield Area  A. Replacement of Topsoil  Assumptions: Surface grade = 0%; Avg. haul distance = 350 ft.  Volume of Topsoil (cy)  Total Topsoil Replacement Costs  B. Seeding/Revegetation  Area (acres)  Disking/Seeding (\$/acre)  Total Seeding/Revegetation Costs  Total Seeding/Revegetation Costs  Total Seeding/Revegetation Costs  Total Seeding/Revegetation Costs  \$300  Total Seeding/Revegetation Costs  \$440  Total R&D Wellfield Area Surface Reclamation Costs  \$940					st per WD	EQ Guidel	ine 12, Ap	p. H (\$/ft)	\$0.68
II. R&D Wellfield Area  A. Replacement of Topsoil  Assumptions: Surface grade = 0%; Avg. haul distance = 350 ft.  Volume of Topsoil (cy)  Application Unit Cost per WDEQ Guideline No.12, App.E (\$/cy)  Total Topsoil Replacement Costs  B. Seeding/Revegetation  Area (acres)  Disking/Seeding (\$/acre)  Mulching (\$acre)  Total Seeding/Revegetation Costs  \$300  Total Seeding/Revegetation Costs  \$440  Total R&D Wellfield Area Surface Reclamation Costs						[			\$1,958
II. R&D Wellfield Area  A. Replacement of Topsoil  Assumptions: Surface grade = 0%; Avg. haul distance = 350 ft.  Volume of Topsoil (cy)  Application Unit Cost per WDEQ Guideline No.12, App.E (\$/cy)  Total Topsoil Replacement Costs  B. Seeding/Revegetation  Area (acres)  Disking/Seeding (\$/acre)  Mulching (\$acre)  Total Seeding/Revegetation Costs  \$300  Total Seeding/Revegetation Costs  \$440  Total R&D Wellfield Area Surface Reclamation Costs  \$940									\$5,881
A. Replacement of Topsoil  Assumptions: Surface grade = 0%; Avg. haul distance = 350 ft.  Volume of Topsoil (cy)  Application Unit Cost per WDEQ Guideline No.12, App.E (\$/cy)  Total Topsoil Replacement Costs  Seeding/Revegetation  Area (acres)  Disking/Seeding (\$/acre)  Mulching (\$acre)  Total Seeding/Revegetation Costs  \$300  Total Seeding/Revegetation Costs  \$440  Total R&D Wellfield Area Surface Reclamation Costs		n 0	DW-RC-	J A				<b></b>	
Assumptions: Surface grade = 0%; Avg. haul distance = 350 ft.     Volume of Topsoil (cy)	J+					<del> </del>	<del></del>	ļ	<del></del>
Volume of Topsoil (cy)	<del> </del>	Α.				00/a An	a houl dist	250 A	<del> </del>
Application Unit Cost per WDEQ Guideline No.12, App.E (\$/cy)   \$0.42-2-2-2-2-2-2-2-2-2-2-2-2-2-2-2-2-2-2-						: - 0%; AV	g. naui disi	ance – 330 It.	1100
Total Topsoil Replacement Costs   \$500	<b>├</b>					UDEO C.:	dalina Na	12 A E (\$/m)	
B.   Seeding/Revegetation	<del>-</del>						dethie ivo.	12, App.E (\$/cy)	
Area (acres)   0.     Disking/Seeding (\$/acre)   , \$25     Mulching (\$acre)   , \$30     Total Seeding/Revegetation Costs   \$44     Total R&D Wellfield Area Surface Reclamation Costs   \$94	} <del> </del> ,	<u> </u>				SIS		ļ	\$300
Disking/Seeding (\$/acre)	} <del> </del> '	ь.			n 	<del> </del>	ļ		00
Mulching (Sacre)	<del> </del>				(\$/para)	<b></b>	<del> </del>	<del> </del>	<del></del>
Total Seeding/Revegetation Costs \$44  Total R&D Wellfield Area Surface Reclamation Costs \$94	<del> </del> -					<del> </del>	<del></del>	<del>  '                                   </del>	
Total R&D Wellfield Area Surface Reclamation Costs \$94	}}					L	<del> </del>	<del> </del>	
	<del> </del>	T					tion Co-t	<u> </u>	<del></del>
TO THE DESIGN OF THE COUNTY OF	<b>├</b> ── <del></del>	Total K&D Wellfield Area Surface Reclamation Costs							3940
TOTAL MISC. SURFACE RECLAMATION COSTS \$6,82	TOTA	AL	MISC. SU	RFACE !	RECLAM	ATION C	OSTS		\$6,821

	Τ	i I	<u> </u>	<u> </u>						
WE	LLI	LUGGI	NG AND AB	ANDONMI	ENT					
Ī.	Plu	gging								
	+		ions: Based o	n actual wel	l abandonme	nt costs incurre	d			
	$\top$					ip., and material				
		Well Cas	ing Diameter				_ 3 5			
		# Wells					3			
	1		Well Depth				550			
			sing Length (		<u> </u>		1650			
		Plugging	Unit Cost <sup>1</sup> (	\$/ft of casing	;)		\$1.05			
				on2 (Decemb nit Cost (\$/ft		December 2001)	1.5%			
		\$1.07								
	To	tal Pluggi	ng Costs			ļ <u> </u>	\$1,766			
II.	Sec	Seeding/Revegetation .								
		# Sites			•		3			
		Seeding Unit Cost per WDEQ Guideline 12, App. L (\$/site) <sup>3</sup>								
	To	\$15								
TO	ral.	WELL P	LUGGING	AND ABAN	DONMEN'	r costs	\$1,781			
	T					1				
Note	es:	Include	s well pluggi	ng, removing	top of casin	g, installing cer	nent plug, etc.			
		<sup>2</sup> Based on Urban Consumer Price Index, U.S. Department of Labor,								
	1	Labor St		]						
		3 Seeding	of abandone	ed well locati	ons to be co	mpleted in conj	unction with			
	1		of other recla			1	•			

#### TOTAL DECOMMISSIONING AND RECLAMATION COST ESTIMATE

I.	BUILDING DEMOLITION AND DISPOSAL COSTS	\$40,055
II.	EVAPORATION POND DECOMMISSIONING COSTS	\$21,274
III.	MISC. SURFACE RECLAMATION COSTS	\$6,821
IV.	WELL PLUGGING AND ABANDONMENT	\$1,781
v.	FINAL STATUS SURVEY REPORT	\$10,000
	SUBTOTAL	\$79,931
	PROJECT MANAGEMENT AND MISCELLANEOUS COSTS (15%) <sup>1</sup>	\$11,990
	CONTRACTOR PROFIT, OVERHEAD, AND MOBILIZATION COSTS (10%) <sup>2</sup>	\$7,993
	TOTAL	\$99,914
	CPI ESCALATOR - DECEMBER 2001 TO DECEMBER 2003 (4.7%)	\$4,696
	TOTAL CALCULATED SURETY (IN 2003 DOLLARS)	\$104,600

<sup>&</sup>lt;sup>1</sup> Based on WDEQ-LQD Guideline No. 12 (1/2001), Section II(B)(12)(except b) and (13). <sup>2</sup> Based on WDEQ-LQD Guideline No. 12 (1/2001), Section II(B)(12)(b).

				L	i	<u> </u>		Process	Warehouse	Generator
UILD	INC	DEMO	LITI	ON AND DI	SPOSAL			Building	Building	Building
De	mal	ition Cos	te	<del></del>			<del></del>			
		uipment	<u> </u>	<del> </del>		<del> </del>	<u> </u>			
<del>- ^</del> :	+-		ent rai	maining on s	ite includes 6	anke/veccel	a and			
	+				sume \$2000 f					
	- C.,			ent Dismantl		or dismantin	ilg.	\$2,000	\$0	60
В.		ilding	utpin	I Dismann	ling Costs	<del> </del>	<del></del>	\$2,000	20	\$0
→  <del>D</del> .	DI			of Building	(A <sup>3</sup> )	<del> </del>	<del> </del>	80000	6000	1500
					WDEQ Guidel	ing 12 Apr	V (C/Q3)	\$0.165		1500
	-			Demolition		ine 12, App	. K (3/11)			\$0.165
c.		ncrete Fl		Demonition	Costs	<del> </del>	<del> </del>	\$13,200	<b>\$</b> 990	\$248
<u> </u>	100				ļ	<u> </u>		4000	500	1.50
	- -			rete Floor (fi		<u> </u>	15 (0)(0)	4000		150
	- _				WDEQ Guidel	ine 12, App	). K. (\$/It <sup>-</sup> )	\$3.05		\$3.05
				e Floor Demo	olition Costs	ļ		\$12,200	\$1,830	\$458
<u>D.</u>		ncrete Fo			L	<u> </u>	<del>- </del>			
_ _	- -			crete Footin				280	0	0
_ _	1_				WDEQ Guidel		. K (\$/lin. ft)	\$11.15		\$11.15
					molition Cost	<u> </u>	<del> </del>	\$3,122		
				Costs per Bui	lding	ļ		\$30,522	<del></del>	\$706
To	tal l	Demolitic	n Co	sts		<u> </u>		\$34,048		
I. Di	SD0S	al Costs			ļ. <del></del>	<del> </del> -	<del>- </del>	<del> </del>	<del> </del>	
A.		uipment				<del> </del> -	<del>- </del>	<del></del>		
-\ <del>\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\</del>			c. Da	r Pumroduct	Material Dispo	scal A green	ent hetween	<del> </del>		<del></del>
$\dashv$	123				85 cy disposed			<del></del>	<del></del>	
							at Highland.			
	┽╴			ment volume		T COSES	I riiginand.	<del>                                     </del>		
			equip	l volume	01 13 Cy.	<del> </del>	<del> </del>	<del>                                     </del>	0	
		# Trips		Timit Cost (	C(ris)	<del>                                     </del>	<del> </del>	\$700		\$700
	- -			n Unit Cost (		<del> </del>	<del></del>	\$700		
	+-			Cost (\$/ton)		<del> </del>	<del> </del>	\$700		\$0 \$0
				ent Disposal	Costs	ļ <u> </u>	<del></del>	\$700	20	350
B.		ildings (			<u> </u>	1(0)	<del> </del>	0.75	0.5	0.5
_ _	-A:				ilding materia	u (n)		0.75	0.5	0.5
-	_	Building				<del> </del>	-	100		15
	4	Building			<u></u>	ļ		40		10
_ _	- -	Building	Heig	tht (ft)	<u></u>	<u> </u>	ļ	20		10
_ _	4_	Volume	of Bu	ilding Mater	ials (cy)	<u> </u>	Ļ	267		12
_ _					ming 25% sw			334		
					DEQ Guidelin	2 12, App. I	(\$/cy)	\$5.44		
				g Disposal Co	osts	<u> </u>		\$1,817	\$207	\$82
C.		ncrete Fl		<u> </u>			<u> </u>	<u> </u>		
	A				Material Dispo			<u> </u>		
$\neg \neg$	П						y Basin at no		L	
					on 2001 oper	ating costs	at Highland.	<u> </u>		
$\neg \vdash$		Area of	Conc	rete Floor (ft	2)			4000	600	150
	$\top$	Average	Thic	kness of Con	crete Floor (ft	<u> </u>		0.5	0.5	0.5
$\neg \vdash$	$\top$			oncrete Floor			1	74	11	
o	i.	On-Site		T						
$\neg$	+			e (%) <sup>2</sup>				90%	100%	100%
$\dashv$	$\dashv -$			or Disposal (	~v)	<del>                                     </del>	1	66.6		3

<u> </u>	T-1-1	Process	Warehouse	Generator
BUILDING I	DEMOLITION AND DISPOSAL	Building	Building	Building
	Disposal Unit Cost per WDEQ Guideline 12, App. K		\$4.13	\$4.13
	ubtotal On-Site Disposal Costs	\$275	\$45	\$12
2.  N	RC-Licensed Facility			
	Percentage (%) <sup>2</sup>	10%	0%	0%
	Volume for Disposal (cy)	7.4	0	0
	Volume for Disposal (assuming 50% swell factor) (cy)	) 11	0	0
	# Trips	1	0	0
	Transportation Unit Cost (\$/trip)	\$700	\$0	- \$0
<u> </u>	Disposal Unit Cost (\$/cy)	\$0	\$0	\$0
	ubtotal NRC-Licensed Facility Disposal Costs	\$700	\$0	
	otal Concrete Floor Disposal Costs	\$975	\$45	\$12
	crete Footing (On-Site)			
	ength of Concrete Footing (ft)	280	0	0
	verage Depth of Concrete Footing (ft)	4	4	4
	verage Width of Concrete Footing (ft)	<u> </u>	1	1
	olume of Concrete Footing (cy)	41	0	0
	isposal Unit Cost per WDEQ Guideline 12, App. K (\$/cy		\$4.13	\$4.13
	otal Concrete Footing Disposal Costs	\$169	\$0	\$0
	Disposal Costs per Building	\$3,661	\$252	
Total Dis	sposal Costs	\$4,007		
III Padiatio	n Surveys and Soil Sampling			
	ons: Based on NRC regulations and ambient levels of ra	distion		
	te, environmental and personnel monitoring (TLD) not re			
	pment (Alpha/Gamma Surveys and Smear Samples)	equired.		
	Weeks	2	0	0
	ental Rate (\$/week)	\$250	\$250	\$250
	l Equipment Costs	\$500	\$250 \$0	\$250
	or (Surveys and Soil Sampling)	\$300		- 40
	Hours Hours	80	0	
	abor Cost (\$/hr)	\$15	\$15	\$15
	Labor Costs	\$1,200	\$0	\$0
	ytical Costs	. 41,200	- 50	
	Samples	5	0	0
	a-226 Analytical Cost (\$/sample)	\$60	\$60	\$60
	Analytical Costs	\$300	\$0	\$0
Subtotal	Radiation Survey and Soil Sampling Costs	\$2,000		\$0
	diation Survey and Soil Sampling Costs	\$2,000	00	30
<del></del>				·····
SUBTOTAL	BUILDING DEMOLITION AND DISPOSAL COSTS	\$36,183	\$3,072	\$800
TOTAL BUI	LDING DEMOLITION AND DISPOSAL COSTS	\$40,055		
Notes: Bas	sed on radiation surveys conducted by Pathfinder Mines	Co. during October and N	lovember, 200	l (see
	ransfer letter dated November 2, 2001).			: 6

EVAP	ORA	ATION POND DECOMMISSIONING	Pond No. 1	Pond No. 2
I. I	Bypr	oduct Material Removal and Loading	1.	
		olume of Byproduct Material		
		Area of Pond Bottom (ft <sup>2</sup> )	22,138	21,947
	1.	. Area with Fill (ft²)	2,813	0
		Average Thickness of Fill (in)	3.5	0
		Volume of Fill (cy)	30	0
	2.	Remaining Area with Pond Residue (ft²)	19,325	21,947
	_	Average Thickness of Pond Residue (in)	1	0.5
		Volume of Pond Residue (cy)	60	34
	3.	. Area of Liner (ft²)	22,138	21,947
	_	Thickness of Liner (in)	0.036	0.036
		Volume of Liner (cy)	2.5	2.4
		Volume of Liner Assuming 25% Void Space (cy)	3	3
<del></del>	4	. Area of Contaminated Sump and Drain (ft²)	0	1
$\rightarrow$	$\perp$	Length of Sump and Drain (ft)	0	240
		Volume of Sump and Drain (cy)	0	- 9
	15	. Diameter of Contaminated Soil (ft)	0	10
		Depth of Contaminated Soil (in)	0	6
	-	Volume of Contaminated Soil (cy)	0	l
<u> </u>		ubtotal Volume of Byproduct Material (cy)	93	47
	3.  E	quipment (Front End Loader)	40	
<del></del>		# Hours	40	20 \$60
	-	Operating Cost (\$/hr)	\$60	
		ubtotal Equipment Costs	\$2,400	\$1,200
	<u> </u>	abor	40	20
		# Hours # Laborers	40	20
$\dashv$		Labor Cost (\$/hr)	\$15	
	-	Subtotal Labor Costs	\$1,800	\$900
		otal Byproduct Material Removal and Loading Costs	\$4,200	\$2,100
		Byproduct Material Removal and Loading Costs	\$6,300	\$2,100
			30,000	
II.		sportation and Disposal		
		otal Volume of Byproduct Material (cy)	93	47
	Α	Assumptions: Per Byproduct Material Disposal Agreement between		
		PRI and Pathfinder, first 185 cy disposed of at Shirley Basin at no		
		cost. Transportation based on 2001 operating costs at Highland.		
	<u> 4. T</u>	ransportation		
		Volume of Soil per Trip (cy/trip)	30	30
	_	# Trips	3	2
		Cost per Trip (\$/trip)	\$700	\$700
		Subtotal Transportation Costs	\$2,100	\$1,400
!	B.   D	Disposal		
		Disposal Unit Cost (\$/cy)	\$0 \$0	\$0 \$0
		Subtotal Disposal Costs		
		otal Transportation and Disposal Costs	\$2,100	\$1,400
	I ota	l Transportation and Disposal Costs	\$3,500	
III.	Ripp	ing		
	A	Area (acres)	0.5	0.5
	R	Ripping Unit Cost per WDEQ Guideline 12, App. I (\$/acre)	\$474.92	\$474.92
		otal Ripping Costs	\$237	\$237
	Tota	l Ripping Costs	\$474	

EVAPORATION POND DECOMMISSIONING	Pond No. 1	Pond No. 2
Assumptions: Surface grade = 0%; Avg. haul distance = 100 ft.	<del></del>	
Volume of Soil (cy)	5400	5400
Backfilling Unit Cost per WDEQ Guideline 12, App. E (\$/cy)	\$0.145	\$0.145
Subtotal Backfilling Costs	\$783	\$783
Total Backfilling Costs	\$1,566	
		<u> </u>
V. Grading		
Area (acres)	1.5	1.5
Rough Grading Unit Cost per WDEQ Guideline 12, App. M (\$/acre		\$50.35
Final Grading Unit Cost per WDEQ Guideline 12, App. G (\$/acre)	\$38.35	\$38.35
Subtotal Grading Costs	\$133	\$133
Total Grading Costs	\$266	<del></del>
VI. Replacement of Topsoil		
Assumptions: Surface grade = 0%; Avg. haul distance = 400 ft.		
Volume of Topsoil (cy)	3756	3756
Application Unit Cost per WDEQ Guideline No.12, App.E (\$/cy)	\$0.47	\$0.47
Subtotal Topsoil Replacement Costs	\$1,765	\$1,765
Total Topsoil Replacement Costs	\$3,530	
VII. Seeding/Revegetation		
Area (acres)	1.5	1.5
Disking/Seeding (\$/acre)	\$250	· \$250
Mulching (Sacre)	\$300	\$300
Subtotal Seeding/Revegetation Costs	\$825	\$825
Total Seeding/Revegetation Costs	\$1,650	
VIII Fence Removal		
Length (ft)	800	800
Removal Unit Cost per WDEQ Guideline 12, App. H (\$/ft)	\$0.68	\$0.68
Subtotal Fence Removal Costs	\$544	\$544
Total Fence Removal Costs	\$1,088	
IX. Radiation Surveys and Soil Sampling		<del> </del>
Assumptions: Based on NRC regulations and ambient levels of radiation		
on-site, environmental and personnel monitoring (TLD) not required	<u>d.</u>	
A. Equipment (Alpha/Gamma Surveys and Smear Samples)		
# Weeks	1	l
Rental Rate (\$/week)	\$250	\$250
Total Equipment Costs	\$250	\$250
B. Labor (Surveys and Soil Sampling)		
# Hours	40	40
Labor Cost (\$/hr)	\$15	\$15
Total Labor Costs	\$600	\$600
C. Analytical Costs		
# Samples	10	10
Ra-226 Analytical Cost (\$/sample)	\$60	\$60
Total Analytical Costs	\$600	\$600
Subtotal Radiation Survey and Soil Sampling Costs	\$1,450	\$1,450
Total Radiation Survey and Soil Sampling Costs	\$2,900	
SUBTOTAL EVAPORATION POND DECOMMISSIONING COSTS	\$12,037	\$9,237
TOTAL EVAPORATION POND DECOMMISSIONING COSTS	\$21,274	<u> </u>

	Ī		<del></del>					
MIS	c. s	URFACE RECLAMATION						
•	Bu	Buildings, Roads, and Parking Areas						
	A.	Gravel Removal						
	<u> </u>	Assumptions: Surface Grade = 0%; Avg. haul distance = 500 ft.						
	<u> </u>	Volume (cy)	150					
		Removal Unit Cost per WDEQ Guideline 12, App. C (\$/cy)	\$0.6					
	<u> </u>	Total Gravel Removal Costs	\$90					
	B.	Ripping						
	<u> </u>	Area (acres)						
	L_	Ripping Unit Cost per WDEQ Guideline 12, App. I (\$/acre)	\$474.93					
		Total Ripping Costs	\$950					
	C.	Replacement of Topsoil						
		Assumptions: Surface grade = 0%; Avg. haul distance = 400 ft.						
		Volume of Topsoil (cy)	2070					
		Application Unit Cost per WDEQ Guideline No.12, App.E (\$/cy)	\$0.4					
		Total Topsoil Replacement Costs	\$973					
	D.	Seeding/Revegetation						
_		Area (acres)						
		Disking/Seeding (\$/acre)	\$250					
		Mulching (\$acre)	\$300					
		Total Seeding/Revegetation Costs						
	E.	Fence Removal						
		Length (ft)	288					
		Removal Unit Cost per WDEQ Guideline 12, App. H (\$/ft)						
		Total Fence Removal Costs	\$1,95					
	To	Total Bldgs, Roads, and Parking Area Surface Reclamation Costs						
II.		D Wellfield Area						
	Α.	Replacement of Topsoil						
	<u> </u>	Assumptions: Surface grade = 0%; Avg. haul distance = 350 ft.	110					
	<b>↓</b>	Volume of Topsoil (cy)	1180					
	<u> </u>	Application Unit Cost per WDEQ Guideline No.12, App.E (\$/cy)	\$0,42					
	<u> </u>	Total Topsoil Replacement Costs	\$50					
	В.	Seeding/Revegetation	<del> </del>					
		Area (acres)	0.					
		Disking/Seeding (\$/acre)	\$25					
		Mulching (Sacre)	\$30					
	Ŀ	Total Seeding/Revegetation Costs	\$44 \$94					
	To	Total R&D Wellfield Area Surface Reclamation Costs						
TOT	AL	MISC. SURFACE RECLAMATION COSTS	\$6,82					

	T	<del></del>	<del></del>			,	<del></del>
WE.	<u>LL E</u>	LUGGIN	IG AND AB	ANDONMI	ENT		
I.	Plu	gging	ļ				— <del> </del>
<del></del> -	1		ons: Based o	n actual well	l abandonme	nt costs incurred	
├──	+					p., and materials.	
├	+-		ing Diameter		s labor, equi	p., and materials.	3 5
<b> </b> -	$\vdash$	# Wells	ing Diameter	(111)	<del></del>		3
			Well Depth (	(0)	<u> </u>	· · · · · ·	550
├—	┼		sing Length (				1650
	┼						
<u> </u>			Unit Cost (			l	\$1.05
	<u> </u>					ecember 2001)	1.5% \$1.07
	1	Adjusted Plugging Unit Cost (\$/ft of casing)					
	Tot	al Pluggi	ng Costs				\$1,766
II.	Sec	ding/Rev	egetation		<del></del>		
		# Sites					3
		Seeding 1	\$5				
	To	al Seedin					\$15
TO	rat.	WELL P	LUGGING	AND ABAN	DONMEN	r costs	\$1,781
	T	T T	l logonico				
Note	_ı es:	Include	s well pluggi	ng, removing	top of casin	g, installing ceme	nt plug, etc.
	T		bor, Bureau of				
	+	Labor Sta					
		3 Seeding	of abandone	d well locati	ons to be con	mpleted in conjun	ction with
	$\top$		f other recla				

#### POWER RESOURCES, INC. NORTH BUTTE ISL PROJECT 2004-2005 SURETY ESTIMATE

#### TOTAL DECOMMISSIONING AND RECLAMATION COST ESTIMATE

I.	MISC. RECLAMATION COSTS	\$5,954
II.	WELL PLUGGING AND ABANDONMENT COSTS	\$37,215
	SUBTOTAL	\$43,169
	PROJECT MANAGEMENT AND MISCELLANEOUS COSTS (15%) <sup>1</sup>	\$6,475
	CONTRACTOR PROFIT, OVERHEAD, AND MOBILIZATION COSTS (10%) <sup>2</sup>	\$4,317
	TOTAL	\$53,961
	CPI ESCALATOR - DECEMBER 2001 TO NOVEMBER 2002 (4.7%)	\$2,536
	TOTAL CALCULATED SURETY (IN 2003 DOLLARS)	\$56,500

<sup>&</sup>lt;sup>1</sup> Based on WDEQ-LQD Guideline No. 12 (1/2001), Section II(B)(12)(except b) and (13). <sup>2</sup> Based on WDEQ-LQD Guideline No. 12 (1/2001), Section II(B)(12)(b).

MIS	SC. S	URFACE RECLAMATIO	N	
$\equiv$		ploration Camp (and Assoc		
<u>I.</u>				
	A.	Trailer Removal		
		# Trailers		4
		Removal Cost (\$/trailer)		3 \$200
		Trailer Removal Costs		\$800
	B.	Fence Removal		
		Length (ft)		300
	1		WDEQ Guideline 12, App. H (\$/ft)	\$0.68
	1	Total Fence Removal Costs		\$204
	C.	Seeding/Revegetation		
	7	Area (acres)		1
	1	Discing/Seeding (\$/acre)	)	\$250
		Mulching (\$/acre)		\$300
	1	Total Seeding/Revegetation	Costs	\$550
	To	tal Exploration Camp Recl		\$1,55
<u></u>	Tw	o-Track Roads		<del></del>
	1	Area (acres)		
	1	Discing/Seeding (\$/acre)	· · · · · · · · · · · · · · · · · · ·	\$250
	1-	Mulching (\$/acre)		\$30
	To	tal Two-Track Road Reclai	mation Costs	\$4,400
<u> </u>	TAT	MISC. RECLAMATION	COSTS	\$5,95

			<del></del>	<u> </u>			
WE	LL PLUGGING A	ND ABANDO	NMENT				
I.	Plugging						
		Based on actua	l well abando	nment costs incur	red		
	_ <del></del>			quip., and materi			
	Well Casing I	iameter (in)			3 5		
	# Wells				60		
		Average Well Depth (ft)					
	Total Casing 1	ength (ft)			34,500		
	Plugging Unit	Plugging Unit Cost <sup>1</sup> (\$/ft of casing)					
	Adjustment fo	Adjustment for Inflation <sup>2</sup> (December 2000 to December 2001)					
	Adjusted Plug	ging Unit Cost	(\$/ft of casing	3)	\$1.07		
	Total Plugging C	Total Plugging Costs					
II.	Seeding/Revegeta	Seeding/Revegetation					
	# Sites				60		
	Seeding Unit	Seeding Unit Cost per WDEQ Guideline 12, App. L (\$/site) <sup>3</sup>					
	Total Seeding Co	\$300					
TO	TAL WELL PLUC	GING AND A	BANDONM	ENT COSTS	\$37,215		
Not	es: Includes wel	ement plug, etc.					
	<sup>2</sup> Based on Ur	<sup>2</sup> Based on Urban Consumer Price Index, U.S. Department of Labor, E					
	Labor Statistic	s.					
	<sup>3</sup> Seeding of a	bandoned well !	locations to be	completed in co	njunction with		
	seeding of Ex	oloration Camp	and two-track	roads.			

#### POWER RESOURCES, INC. NORTH BUTTE ISL PROJECT 2004-2005 SURETY ESTIMATE

#### TOTAL DECOMMISSIONING AND RECLAMATION COST ESTIMATE

I.	MISC. RECLAMATION COSTS	\$5,954
II.	WELL PLUGGING AND ABANDONMENT COSTS	\$37,215
	SUBTOTAL	\$43,169
	PROJECT MANAGEMENT AND MISCELLANEOUS COSTS (15%)	\$6,475
	CONTRACTOR PROFIT, OVERHEAD, AND MOBILIZATION COSTS (10%) <sup>2</sup>	\$4,317
	TOTAL	\$53,961
	CPI ESCALATOR - DECEMBER 2001 TO NOVEMBER 2002 (4.7%)	\$2,536
	TOTAL CALCULATED SURETY (IN 2003 DOLLARS)	\$56,500

 $<sup>^{1}</sup>$  Based on WDEQ-LQD Guideline No. 12 (1/2001), Section II(B)(12)(except b) and (13).  $^{2}$  Based on WDEQ-LQD Guideline No. 12 (1/2001), Section II(B)(12)(b).

AVAAL	<u>sc. s</u>	URFACE RECLAMATION		
 I.	Ev	ploration Camp (and Assoc. I	Road)	
		Trailer Removal	isolu)	
	1	# Trailers		
	+-	Removal Cost (\$/trailer)	<del>                                     </del>	\$200
		Trailer Removal Costs	<del>                                     </del>	\$800
_	B	Fence Removal		\$000
	<del> </del>	Length (ft)	<del>        </del>	300
	+		DEQ Guideline 12, App. H (\$/ft)	\$0.68
		Total Fence Removal Costs		.\$204
	C.	Seeding/Revegetation		
	1	Area (acres)		1
	1	Discing/Seeding (\$/acre)		\$250
		Mulching (\$/acre)	· ·	\$300
	1	Total Seeding/Revegetation C	Costs	\$550
	To	tal Exploration Camp Reclan		\$1,554
	1		·	
<u>II.</u>	TW	o-Track Roads	4	
		Area (acres)		8050
	<del>- </del> -	Discing/Seeding (\$/acre)		\$250
		Mulching (\$/acre)	\$300	
	To	tal Two-Track Road Reclama	\$4,400	
TO	TAT.	MISC. RECLAMATION CO	OSTS	\$5,954

	<del></del>	1 1	<del> </del>		<del></del>	<del> </del>	<del></del>	<del></del>
W/E	V V 1	DI LICCU	NC AND AT	A NIDONING	ENTE			
WE		PLUGGII	NG AND A	BANDONMI	ENI			
Ī.	Pla	ugging						
	7	Assumpt	irred					
		at R	uth during 2	000. Include	s labor, equi	p., and mater	rials.	
		Well Cas	sing Diamete	r (in)				ີ 5
		# Wells						60
			Well Depth					575
		Total Ca	sing Length	(ft)	<u> </u>			34,500
		Plugging	Unit Cost <sup>1</sup>	\$/ft of casing	g)			\$1.05
		Adjustment for Inflation <sup>2</sup> (December 2000 to December 2001)						1.5%
		Adjusted Plugging Unit Cost (\$/ft of casing)						\$1.07
	Total Plugging Costs						\$36,915	
II.	Se	eding/Rev	egetation	<del></del>				
		# Sites						60
		Seeding Unit Cost per WDEQ Guideline 12, App. L (\$/site) <sup>3</sup>						\$5
	Total Seeding Costs							\$300
TO	TAL	WELL	LUGGING	AND ABAN	NDONMEN	COSTS		\$37,215
Not	es:	: Includes well plugging, removing top of casing, installing cement pl						etc.
		<sup>2</sup> Based on Urban Consumer Price Index, U.S. Department of Labor, I					of Labor, Bu	reau of
		Labor St	atistics.				•	
		<sup>3</sup> Seeding of abandoned well locations to be completed in conjunctio					onjunction wi	th
	T	seeding	of Exploration	n Camp and	two-track roa	ids.		