LOST CREEK ISR, LLC SUMMARY OF RECL	AMATION/RESTO	RATION BONI	DESTIMATE
I GROUNDWATER RESTORATION - Workshe	et 1	] [	\$3,274,790
II DECOMMISSIONING AND SURFACE RECLA	MATION	] [	\$1,493,958
A. Plant Equipment Removal and Disposal -	Worksheet 2		\$73,724
B. Plant Building Demolition and Disposal -	Worksheet 3		\$601,999
C. Storage Pond Sludge and Liner Handling	- Worksheet 4		\$271,003
D. Well Abandonment - Worksheet 5			\$185,408
E. Wellfield Equipment Removal and Dispos	al - Worksheet 6		\$182,997
F. Topsoil Replacement and Revegetation -	Worksheet 7		\$108,166
G. Miscellaneous Reclamation Activities - W	orksheet 8		\$70,662
	1	<b>] [</b> 1 [	<b>\$4,768,748</b> \$1,382,937
		J L	¢1,002,001
Miscellaneous Items (Footnote 1)	25%	=	\$1,192,187
Project Design			
Contractor Profit & Mobilization			
Pre-Construction Investigation			
Project Management			
On-Site Monitoring			
Site Security & Liability Assurance			
Longterm Administration			
Contingency (Footnote 2)	4%	=	\$190,750
TOTAL REGTORATION AND REGULARATION		1 г	¢6 151 695
TOTAL RESTORATION AND RECLAMATION		JL	φ0,101,060

Footnote 1: In accordance with WDEQ-LQD Guideline 12, Section II, B, 12. Footnote 2: In accordance with WDEQ-LQD Guideline 12, Section II, B, 13.

# Table RP-4Reclamation/Restoration Bond Estimate (Page 2 of 37)

Assumptions/Items	Mine Unit No. 1	Explanation	Source
Technical Assumptions:			
Wellfield Area (Square Feet)	1,057,797	Proposed area	Data
Wellfield Area (Acres)	24.28		Calculated
Affected Ore Zone Area (Square Feet)	1,057,797	Proposed area affected	Data
Average Completed Thickness (Feet)	12.0	Proposed thickness	Data
Affected Volume:			
Factor For Vertical Flare	20%	Vertical flare estimate	Estimated
Factor For Horizontal Flare	20%	Horizontal flare estimate	Estimated
Total Volume (Cubic Feet)	18,278,732	= Area * Thickness * Vertical flare * Horizontal flare	Calculated
Porosity	26.0%	Typical value for host sand	Data
Gallons Per Cubic Foot	7.48	Conversion factor	Constant
Gallons Per Pore Volume	35,548,478	= Volume * Porosity * gal/ft <sup>3</sup>	Calculated
Number of Wells in Unit(s)		-	
Production Wells	120	Proposed well count	Data
Injection Wells	208	Proposed well count	Data
Average Well Spacing (Feet)	95	Proposed well spacing	Data
Average Well Depth (Feet)	425	Proposed well depth	Data

# Table RP-4Reclamation/Restoration Bond Estimate (Page 3 of 37)

Ass	sumptions/Items	Mine Unit No. 1	Explanation	Source
I	GROUNDWATER SWEEP			
	A. PLANT & OFFICE			
	Operating Assumptions:			
	Flow Rate (Gallons per Minute)	120	Planned flow	Data
	Pore Volumes Required	0.3	Required value	Data
	Total Gallons For Treatment	10,664,543	= Gallons per Pore Volume * Number of Pore Volumes	Calculated
	Total Kilogallons for Treatment	10,665		Calculated
	Cost Assumptions:			
	Power			
	Average Connected Horsepower	20	Proposed pump horsepower	Data
	Kilowatt-hours per Horsepower	0.746		Conversion Factor
	Cost per Kilowatt-hour	\$0.060	Estimate based on supplier	Unit Rate
	Gallons per Minute	120	Planned rate	Data
	Gallons per Hour	7200		Calculated
	Cost per Hour	\$0.90		Calculated
	Cost per Gallon	\$0.00012		Calculated
	Cost per Kilogallon	\$0.124		Calculated
	Chemicals			
	Antiscalent (Cost per Kilogallon)	\$0.120	Based on required dosage/estimated cost	Unit Rate
	Repair & Maintenance (Cost per Kilogallon)	\$0.035	Estimate	Unit Rate
	Analysis (Cost per Kilogallon)	\$0.745	From Table RP-5	Unit Rate

# Table RP-4Reclamation/Restoration Bond Estimate (Page 4 of 37)

Ass	umptions/Items	Mine Unit No. 1	Explanation	Source
Ι	GROUNDWATER SWEEP (continued)			
	A. PLANT & OFFICE (continued)		_	
	Total Cost per Kilogallon	\$1.025		Calculated
	Total Treatment Cost	\$10,928		Calculated
	Utilities			
	Power (Cost per Month)	\$225	Estimate	Unit Rate
	Propane (Cost per Month)	\$225	Estimate	Unit Rate
	Time for Treatment			
	Minutes for Treatment	88,871	=Total Gallons for Treatment Divided by Flow Rate (gpm)	Calculated
	Hours for Treatment	1,481		Calculated
	Days for Treatment	62		Calculated
	Average Days per Month	30.4		Calculated
	Months for Treatment	2.0		Calculated
	Utilities Cost	\$913		Calculated
	TOTAL PLANT & OFFICE COST	\$11,841		

# Table RP-4Reclamation/Restoration Bond Estimate (Page 5 of 37)

Assumptions/Items		Mine Unit No. 1	Explanation	Source
I GROUNDWATER SWEEP (c	ontinued)			
B. WELLFIELD				
Cost Assumptions:				
Power				
Avera	age Flow per Pump (Gallons per Minute)	32	Estimate from pumping	Data
Avera	age Horsepower per Pump	7.50	Estimate from pumping	Data
Avera	age Number of Pumps Required	3.8	Estimate from pumping	Data
Avera	age Connected Horsepower	33.1	Pumps plus 5 horsepower for HH	Data
Kilowa	att-hours per Horsepower	0.746		Conversion Factor
Cost	per Kilowatt-hour	\$0.060	Estimate based on supplier	Unit Rate
Gallor	ns per Minute	120	Planned flow	Data
Gallor	ns per Hour	7200		Calculated
Cost	per Hour	\$1.48		Calculated
Cost	per Gallon	\$0.0002		Calculated
Cost	per Kilogallon	0.206		Calculated
Repair & Main	tenance (Cost per Kilogallon)	\$0.115	Estimate	Unit Rate
Total Cost per Kilogallon		\$0.321		Calculated
TOTAL WELLFIELD CO	ST	\$3,423		Calculated
TOTAL GROUNDWATER SW	VEEP COST	\$15,264		Calculated

#### Reclamation/Restoration Bond Estimate (Page 6 of 37) Table RP-4

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	-	_	
Assumptions/Items	Mine Unit No. 1	Explanation	Source
II REVERSE OSMOSIS			
A. PLANT & OFFICE			
Operating Assumptions:			
Flow Rate (Gallons per Minute)	760	Estimate from pumping	Data
Pore Volumes Required	6.0	Required value	Data
Total Gallons for Treatment	213,290,870	= Gallons per Pore Volume * Number of Pore Volumes	Calculated
Total Kilogallons for Treatment	213,291		Calculated
Feed to Reverse Osmosis Unit (Gallons per Minute)	760	Planned flow	Data
Permeate Flow (Gallons per Minute)	570	= Planned Flow * Average Reverse Osmosis Recovery	Calculated
Brine Flow (Gallons per Minute)	190	= Planned Flow - Permeate Flow	Calculated
Average Reverse Osmosis Recovery	75.0%	Reverse Osmosis Design	Data
Cost Assumptions:		_	
Power			
Average Connected Horsepower	300.00	Average value for each area	Data
Kilowatt-hours per Horsepower	0.746		Conversion Factor
Cost per Kilowatt-hour	\$0.060	Estimate based on supplier	Unit Rate
Gallons per Minute	760	Planned flow	Data
Gallons per Hour	45600		Calculated
Cost per Hour	\$13.43		Calculated
Cost per Gallon	\$0.00029		Calculated
Cost per Kilogallon	\$0.294		Calculated
Chemicals			
Sulfuric Acid (Cost per Kilogallon)	\$0.090	Estimate	Unit Rate
Caustic Soda (Cost per Kilogallon)	\$0.023	Estimate	Unit Rate
Reductant (Cost per Kilogallon)	\$0.113	Estimate	Unit Rate
Antiscalent (Cost per Kilogallon)	\$0.124	Based on required dosage/estimated cost	Unit Rate
Repair & Maintenance (Cost per Kilogallon)	\$0.068	Estimate	Unit Rate
Sampling & Analysis (Cost per Kilogallon)	\$0.198	From Table RP-5	Unit Rate

# Table RP-4Reclamation/Restoration Bond Estimate (Page 7 of 37)

Assumptions/Items	Mine Unit No. 1	Explanation	Source
II REVERSE OSMOSIS (continued)			
A. PLANT & OFFICE (continued)			
Total Cost per Kilogallon	\$0.910		Calculated
Total Pumping Cost	\$194,183		Calculated
Utilities			
Power (Cost per Month)	\$560	Estimate	Unit Rate
Propane (Cost per Month)	\$225	Estimate	Unit Rate
Time for Treatment			
Minutes for Treatment	280,646		Calculated
Hours for Treatment	4,677		Calculated
Days for Treatment	195		Calculated
Average Days per Month	30.4		Calculated
Months for Treatment	6.4		Calculated
Utilities Cost	\$5,024		Calculated
TOTAL PLANT & OFFICE COST	\$199,207		Calculated

# Table RP-4Reclamation/Restoration Bond Estimate (Page 8 of 37)

Assu	nptions/Items	Mine Unit No. 1	Explanation	Source
II R	EVERSE OSMOSIS (continued)			
	3. WELLFIELD			
	Cost Assumptions:			
	Power			
	Average Flow per Pump (Gallons per Minute	32.00	Average value for each area	Data
	Average Horsepower per Pump	7.50	Average value for each area	Data
	Average Number of Pumps Required	23.8	Average value for each area	Data
	Average Connected Horsepower	188.1	Pump horsepower plus 10 horsepower	Calculated
	Kilowatt-hours per Horsepower	0.746		Conversion Factor
	Cost per Kilowatt-hour	\$0.060	Estimate based on supplier	Unit Rate
	Gallons per Minute	760	Planned flow	Data
	Gallons per Hour	45,600		Calculated
	Cost per Hour	\$8.42		Calculated
	Cost per Gallon	\$0.0002		Calculated
	Cost per Kilogallon	\$0.185		Calculated
	Repair & Maintenance (Cost per Kilogallon)	\$0.115	Estimate	Unit Rate
	Total Cost per Kilogallon	\$0.300		Calculated
	TOTAL WELLFIELD COST	\$63,915		Calculated
Т	OTAL REVERSE OSMOSIS COST	\$263,121		Calculated

# Table RP-4Reclamation/Restoration Bond Estimate (Page 9 of 37)

Ass	Assumptions/Items			Explanation	Source
III	RECIRCULATION				
	A. WELLFIELD				
	Cost Assumptions	8:			
	Power				
		Average Flow per Pump (Gallons per Minute	32	Estimate from pumping	Data
		Average Horsepower per Pump	7.50	Estimate from pumping	Data
		Average Number of Pumps Required	120.0	Estimate from pumping	Data
		Average Connected Horsepower	905.0	Pumps plus 5 horsepower for HH	Data
		Kilowatt-hours per Horsepower	0.746		Conversion Factor
		Cost per Kilowatt-hour	0.060	Estimate based on supplier	Unit Rate
		Gallons per Minute	3840	Planned flow	Data
		Gallons per Hour	230400		Calculated
		Cost per Hour	\$40.51		Calculated
		Cost per Gallon	\$0.0002		Calculated
		Cost per Kilogallon	0.176		Calculated
	Repair	& Maintenance (Cost per Kilogallon)	\$0.115	Estimate	Unit Rate
	Analysi	s (Cost per Kilogallon)	\$0.131	From Table RP-5	Unit Rate
	Total Cost per Kild	ogallon	\$0.421		Calculated
	TOTAL WELLFIELD R	ECIRCULATION COST	\$14,980		Calculated

# Table RP-4Reclamation/Restoration Bond Estimate (Page 10 of 37)

Assur	Assumptions/Items		Explanation	Source
IV W	ASTE DISPOSAL WELL			
	Operating Assumptions:			
	Annual Evaporation Capacity (Gallons)	0		Data
	Average Monthly Evaporation Capacity (Gallons)	0		Calculated
	Total Disposal Requirement			
	RO Brine and GWS (Total Gallons)	63,987,261	=Treatment Gallons * (1- Reverse Osmosis Recovery) + GWS	Calculated
	RO Brine and GWS (Total Kilogallons)	63,987		Calculated
	Brine Concentration Factor	50%	Reverse Osmosis Design	Data
	Total Concentrated Brine (Gallons)	31,993,630	= Reverse Osmosis Brine Gallons * Brine Concentration Factor	Calculated
	Months of RO and GWS Operation	8.4		Calculated
	Average Monthly Requirement (Gallons)	3,795,651	=Total Concentrated Brine / Months of Reverse Osmosis Operation	Calculated
	Monthly Balance for DDW (Gallons)	3,795,651	=Average Monthly Requirement - Average Monthly Evaporation	Calculated
	Total WDW Disposal (Gallons)	31,993,630		Calculated
	Total WDW Disposal (Kilogallons)	31,994		Calculated
	Cost Assumptions:			
	Power			
	Average Connected Horsepower	100.0	Estimate	Data
	WDW Average Connected Horsepower	300.0	Estimate	Data
	Kilowatt-hours per Horsepower	0.746		Conversion Factor
	Cost per Kilowatt-hour	\$0.060	Estimate based on supplier	Unit Rate
	Gallons per Minute	115.0	Planned flow	Data
	Gallons per Hour	6900		Calculated
	Cost per Hour	\$17.90		Calculated
	Cost per Gallon	\$0.0026		Calculated
	Cost per Kilogallon	\$2.595		Calculated

## Table RP-4 Reclamation/Restoration Bond Estimate (Page 11 of 37)

LOST CREEK ISR, LLC GROU	LOST CREEK ISR, LLC GROUNDWATER RESTORATION - WORKSHEET 1				
Assumptions/Items	Mine Unit No. 1	Explanation	Source		
IV WASTE DISPOSAL WELL (continued)	-				
Chemicals					
Reverse Osmosis Antiscalent (Cost per Kilogallon)	\$0.225	Based on required dosage and cost	Unit Rate		
WDW Antiscalent (Cost per Kilogallon)	\$0.254	Based on required dosage and cost	Unit Rate		
Sulfuric Acid (Cost per Kilogallon)	\$0.315	Estimate	Unit Rate		
Corrosion Inhibitor	\$0.244	Estimate	Unit Rate		
Repair & Maintenance (Cost per Kilogallon)	\$0.130	Estimate	Unit Rate		
Total Cost per Kilogallon	\$3.762		Calculated		
TOTAL WASTE DISPOSAL WELL COST	\$120,369		Calculated		
V STABILIZATION MONITORING					
Operating Assumptions:		_			
Time of Stabilization (Months)	9	Time frame required	Data		
Frequency of Analysis (Months)	3	Required sampling	Data		
Total Sets of Analysis	5	Required sampling	Data		
Cost Assumptions:		-			
Power (Cost per Month)	\$1,125	Estimate	Unit Rate		
Total Power Cost	\$10,125		Calculated		
Sampling & Analysis (Cost per Set)	\$8,178	From Table RP-5	Unit Rate		
Total Sampling & Analysis Cost	\$40,891	From Table RP-5	Calculated		
Utilities (Cost per Month)	\$2,250	Estimate	Unit Rate		
Total Utilities Cost	\$20,250		Calculated		
TOTAL STABILIZATION COST	\$71,266		Calculated		

# Table RP-4Reclamation/Restoration Bond Estimate (Page 12 of 37)

Assumptions/Items				Mine Unit No. 1	Explanation	Source	
VI LABOR							
Cos	st Assumptio	ons					
	Crew	Cost					
	Numbers	per	Hours	Crew	Cost		
		Hour	00.40		<b>*</b> 242.222		
	1	\$50.00	6240	Project Manager	\$312,000	Anticipated operations crew	Data
	1	\$40.00	6240	Supervisor/RSO	\$249,600	Anticipated operations crew	Data
	1	\$30.00	6240	EHS Tech	\$187,200	Anticipated operations crew	Data
	1	\$30.00	3120	Sampler	\$93,600	Anticipated operations crew	Data
	8	\$30.00	1560	Plant and Field Operators	\$374,400	Anticipated operations crew	Data
	1	\$30.00	6240	Maintenance	\$187,200	Anticipated operations crew	Data
	1	\$30.00	6240	Office Support	\$187,200	Anticipated operations crew	Data
	1	\$30.00	6240	Equipment Operator	\$187,200	Anticipated operations crew	Data
	4	\$30.00	2080	Reclamation Laborer	\$249,600	Anticipated operations crew	Data
	1	\$35.00	6240	Foreman	\$218,400	Anticipated operations crew	Data
	1	\$40.00	3120	Lab Chemist	\$124,800	Anticipated operations crew	Data
	4	\$13.50	2080	Vehicles	\$112,320		Data
TO	TAL RESTO	RATION	I LABO	R COST	\$2,483,520		

VII	RESTORATION CAPITAL REQUIREMENTS			
	I Plug and Abandon DDW (3)	\$306,270	\$104,090 for well 1 and \$101,090 for wells 2/3	Data
	TOTAL	\$306,270		

# Table RP-4Reclamation/Restoration Bond Estimate (Page 13 of 37)

Ass	sumptions/Items	Mine Unit No. 1	Explanation	Source
SU	IMMARY:			
	I GROUNDWATER SWEEP	\$15,264		
	II REVERSE OSMOSIS	\$263,121		
	III RECIRCULATION	\$14,980		
	IV WASTE DISPOSAL WELL	\$120,369		
	V STABILIZATION	\$71,266		
	VI LABOR	\$2,483,520		
	VII CAPITAL	\$306,270		
то	TAL GROUNDWATER RESTORATION COST	\$3,274,790		

### Table RP-4Reclamation/Restoration Bond Estimate (Page 14 of 37)

## LOST CREEK ISR, LLC DECOMMISSIONING AND SURFACE RECLAMATION: A. Plant Equipment Removal and Disposal - WORKSHEET 2

Assumptions/Items	Shop / Lab / Office	Precipitation Section	Chemical Section	Ion Exchange Section	Restoration Section	Total	Explanation	Source
Volume (Cubic Yards)	68	46	17	111	96	338	Estimate of equipment to be removed	Data
Volume per Truck Load (Cubic Yards)	20	20	20	20	20		Typical load for shipping	Data
Number of Truck Loads	3.4	2.3	0.8	5.6	4.8	16.9		Calculated
I DECONTAMINATION								
Decontamination Cost per Truck Load	\$620	\$620	\$620	\$620	\$620		Estimated average decontaminate	Unit Rate
Percent Requiring Decontamination	50.0%	100.0%	0.0%	100.0%	100.0%		Percent expected	Data
TOTAL DECONTAMINATION COST	\$1,060	\$1,428	\$0	\$3,443	\$2,963	\$8,894		Calculated
II DISMANTLING & LOADING								
Cost per Truck Load	\$805	\$805	\$805	\$805	\$805		Estimated average dismantle cost	Unit Rate
TOTAL DISMANTLING & LOADING COST	\$2,753	\$1,854	\$676	\$4,470	\$3,847	\$13,600		Calculated
III OVERSIZE								
Percent Requiring Permits	0.0%	10.0%	10.0%	10.0%	10.0%			Data
Cost per Truck Load	\$367	\$367	\$367	\$367	\$367			Unit Rate
TOTAL OVERSIZE COST	\$0	\$85	\$31	\$204	\$175	\$495		Calculated
IV TRANSPORTATION & DISPOSAL		· · · · · ·			· · · · · ·			
A. Landfill								
Percent to be Shipped	90.0%	50.0%	100.0%	50.0%	50.0%		Percent acceptable at landfill	Data
Distance (Miles)	48	48	48	48	48		Distance to landfill	Data
Cost per Mile	\$2.90	\$2.90	\$2.90	\$2.90	\$2.90		Current transport rate	Unit Rate
Transportation Cost	\$429	\$160	\$117	\$386	\$333			Calculated
Disposal Fee per Cubic Yard	\$13.50	\$13.50	\$13.50	\$13.50	\$13.50		Landfill fee	Unit Rate
Disposal Cost	\$831	\$311	\$227	\$750	\$645			Calculated
Total Cost	\$1,260	\$471	\$344	\$1,136	\$978			Calculated
B. Licensed Site					· · · · ·			
Percent to be Shipped	10.0%	50.0%	0.0%	50.0%	50.0%		Percent requiring disposal at licensed site	Calculated
Distance (Miles)	105	105	105	105	105		Distance to Shirley Basin	Data
Cost per Mile	\$2.90	\$2.90	\$2.90	\$2.90	\$2.90		Current transport rate	Unit Rate
Transportation Cost	\$104	\$351	\$0	\$845	\$728		· · · · · · · · · · · · · · · · · · ·	Calculated
Disposal Cost per Cubic Foot	\$12.38	\$12.38	\$12.38	\$12.38	\$12.38		Licensed site fee	Unit Rate
Volume per Truck Load (Cubic Yards)	20.0	20.0	20.0	20.0	20.0		Typical load for shipping	Data
Volume per Truck Load (Cubic Feet)	540	540	540	540	540			Calculated
Disposal Cost	\$2,287	\$7,697	\$0	\$18,562	\$15,975			Calculated
Total Cost Licensed Site	\$2,391	\$8,047	\$0	\$19,407	\$16,702			Calculated
TOTAL TRANSPORTATION & DISPOSAL COST	\$3,650	\$8,518	\$344	\$20,544	\$17,680	\$50,736		Calculated
	_							
TOTAL PLANT EQUIPMENT REMOVAL AND DISPOSAL COST	\$7,464	\$11,884	\$1,050	\$28,661	\$24,666	\$73,724		Calculated

Lost Creek Project WDEQ-LQD Permit to Mine Application Original Dec07; Rev10 Nov10

## Table RP-4 Reclamation/Restoration Bond Estimate (Page 15 of 37)

### LOST CREEK ISR, LLC DECOMMISSIONING AND SURFACE RECLAMATION: B. Plant Building Demolition and Disposal - WORKSHEET 3

Ass	sumptions/Items			Plant	Header Houses	Drill Shed	Total	Explanation	Source				
Ι	STRUCTURE DEMOLITION & DISPOSAL												
	Structural Chara	acter						2-Story Steel Frame	1-Story Pre-Fab. (6)	1-Story Pole Barn			
	Demolition Volu	me (Cubic	Feet)					1,248,000	19,620	22,400		Estimated volume of structures	Data
	Demolition Cost	per Cubic	Foot					\$0.2500	\$0.2500	\$0.2500			Unit Rate
	Demolition Cost	•						\$312,000	\$4,905	\$5,600	\$322,505		Calculation
	Factor For Gutti	ng						20.0%	10.0%	10.0%			Data
	Gutting Cost							\$62,400	\$491	\$560	\$63,451		Calculation
	Weight (Pounds	)						196,750	99,000	15,000		Estimated weight of building components	Data
		Quantity	Height (Feet)	Length (Feet)	Area (Square Feet)	Density (Pounds per Square Foot)	Building Weight (Pounds)	_					
	Ends	2	1	4800	9600	2.5	24000	_					
	Roof	2	82.5	260	42900	2.5	107250						
	Sidewall	2	20	260	10400	2.5	26000						
	Internal Wall	1	20	460	9200	2.5	23000						
	Internal Wall	1	30	220	6600	2.5	16500	-					
	Total 2-Story	V Steel Fram	e Weight				196750						
	Weight per Truc	k Load						40,000	40,000	40,000		Typical load for shipping	Data
	Number of Truck	k Loads						4.9	2.5	0.4			Calculation
	Distance to Lane	dfill						48	48	48		Distance to landfill	Data
	Cost per Mile							\$2.90	\$2.90	\$2.90		Current transport rate	Unit Rate
	Transportation C	Cost						\$685	\$345	\$52	\$1,081		
	Disposal Cost p	er Ton						\$40.20	\$40.20	\$40.20		Landfill fee	Unit Rate
	Disposal Cost							\$3,955	\$1,990	\$302	\$6,246		Calculation
	TOTAL STRUCTUR	RE DEMOL	ITION &	DISPOS	AL COST			\$379,039	\$7,730	\$6,514	\$393,283		Calculation

## Table RP-4 Reclamation/Restoration Bond Estimate (Page 16 of 37)

### LOST CREEK ISR, LLC DECOMMISSIONING AND SURFACE RECLAMATION: B. Plant Building Demolition and Disposal - WORKSHEET 3

Assumptions/Items	Plant	Header Houses	Drill Shed	Total	Explanation	Source
II CONCRETE DECONTAMINATION, DEMOLITION & DISPOSAL						
Area (Square Feet)	30,050	283	565		Building concrete area	Data
Average Thickness (Feet)	1	1.0	0.3			Data
Volume (Cubic Feet)	30,050	283	141			Calculation
Percent Requiring Decontamination	75.0%	50.0%	0.0%			Data
Percent Decontaminated	75.0%	75.0%	0.0%			Data
Decontamination (Cost per Square Foot)	\$0.191	\$0.191	\$0.191			Unit Rate
Decontamination Cost	\$4,305	\$41	\$0	\$4,345		Calculation
Demolition (Cost per Square Foot)	\$2.124	\$2.124	\$0.100			Unit Rate
Demolition Cost	\$63,826	\$601	\$57	\$64,484		Calculation
Transportation & Disposal					-	
A. Landfill Disposal						
Percent to be Disposed at Landfill	90%	90%	100%			Data
Concrete Weight (Pounds per Cubic Foot)	150	150	150			Data
Concrete Weight (Pounds)	4,056,750	38,205	21,188			
Weight per Truck Load (Pounds)	40,000	40,000	40,000			
Number of Truck Loads	101.4	1.0	0.5			
Distance to Landfill (Miles)	48	48	48			
Cost per Mile	\$2.90	\$2.90	\$2.90		Current transport rate	
Transportation Cost	\$14,117	\$133	\$74	\$14,324		Data
Disposal Cost per Ton	\$40.20	\$40.20	\$40.20			Unit Rate
Disposal Cost	\$81,541	\$10,239	\$5,678	\$97,458		Calculation
B. Licensed Site						
Percent to be Shipped	10%	10%	0%			Calculation
Distance (Miles)	105	105	105			Data
Cost per Mile	\$2.90	\$2.90	\$2.90		Current transport rate	Unit Rate
Transportation Cost	\$1,694	\$16	\$0	\$1,710		Calculation
Disposal Cost per Cubic Foot	\$4.16	\$4.16	\$4.16			Unit Rate
Volume per Truck Load (Cubic Yards)	20	20	20			Data
Volume per Truck Load (Cubic Feet)	540	540	540			Calculation
Disposal Cost	\$12,501	\$118	\$0	\$12,619		Calculation
TOTAL CONCRETE DECONTAMINATION, DEMOLITION & DISPOSAL COST	\$177,984	\$11,147	\$5,808	\$194,940		Calculation

## Table RP-4 Reclamation/Restoration Bond Estimate (Page 17 of 37)

### LOST CREEK ISR, LLC DECOMMISSIONING AND SURFACE RECLAMATION: B. Plant Building Demolition and Disposal - WORKSHEET 3

Assumptions/Items		Header Houses	Drill Shed	Total	Explanation	Source
III SOIL REMOVAL & DISPOSAL						
Front End Loader Cost per Hour	\$50	\$50	\$50	\$50		
Time with Front End Loader (Hours)	16	6	1	23		
Cost of Front End Loader	\$800	\$300	\$50	\$1,150	Assume removal of 3" of Contaminated	Data
Volume to be Shipped (Cubic Feet)	2504	71	0		Soil Under Headers, 1" under Plant,	Data
Distance (Miles)	105	105	105		Disposal at a Licensed Facility	Data
Cost per Mile	\$2.90	\$2.90	\$2.90			Unit Rate
Transportation Cost	\$1,412	\$40	\$0	\$1,452		Calculation
Disposal Fee per Cubic Foot	\$4.16	\$4.16	\$4.16			Unit Rate
Quantity per Truck Load (Cubic Feet)	540	540	540			Data
Disposal Cost	\$10,417	\$294	\$0	\$10,712		Calculation
TOTAL SOIL REMOVAL & DISPOSAL COST	\$12,629	\$634	\$50	\$13,314		Calculation
IV RADIATION SURVEY					-	
Area Required (Acres)	0.69	0.01	0.01			Data
Survey Cost per Acre	\$653.00	\$653.00	\$653.00			Unit Rate
TOTAL RADIATION SURVEY COST	\$450	\$4	\$8	\$462		Calculation
TOTAL PLANT BUILDING DEMOLITION AND DISPOSAL COST	\$570,103	\$19,515	\$12,380	\$601,999		Calculation

# Table RP-4Reclamation/Restoration Bond Estimate (Page 18 of 37)

# LOST CREEK ISR, LLC DECOMMISSIONING AND SURFACE RECLAMATION: C. Storage Pond Sludge and Liner Handling - WORKSHEET 4

Assumptions/Items	Pond 1 Storage	Pond 2 Storage	Total	Explanation	Source
I POND SLUDGE					
Average Sludge Depth (Feet)	0.125	0.125			Data
Average Sludge Area (Square Feet)	40,300	40,300			Data
Sludge Volume (Cubic Feet)	5,038	5,038			Calculated
Sludge Volume (Cubic Yards)	187	187			Calculated
Sludge Volume per Truck Load (Cubic Yards)	20.0	20.0			Data
Number of Sludge Truck Loads	9.4	9.4			Calculated
Sludge Handling Cost Per Load	\$268.00	\$268.00			Unit Rate
Total Sludge Handling Cost	\$2,519	\$2,519	\$5,038		Calculated
Transportation & Disposal					
Percent to be Shipped	100.0%	100.0%			Data
Distance (Miles)	105	105			Data
Cost per Mile	\$2.90	\$2.90			Unit Rate
Transportation Cost	\$2,862	\$2,862			Calculated
Disposal Cost per Cubic Foot	\$12.38	\$12.38			Unit Rate
Volume per Truck Load (Cubic Yards)	20.0	20.0			Data
Volume per Truck Load (Cubic Feet)	540	540			Calculated
Disposal Cost	\$62,841	\$62,841			Calculated
Total Transportation & Disposal Cost	\$65,703	\$65,703	\$131,406		Calculated
TOTAL POND SLUDGE COST	\$68,222	\$68,222	\$136,444		Calculated

# Table RP-4Reclamation/Restoration Bond Estimate (Page 19 of 37)

# LOST CREEK ISR, LLC DECOMMISSIONING AND SURFACE RECLAMATION: C. Storage Pond Sludge and Liner Handling - WORKSHEET 4

Assumptions/Items	Pond 1 Storage	Pond 2 Storage	Total	Explanation	Source
II POND LINER					
Total Pond Area (Acres)	0.93	0.93			Data
Total Pond Area (Square Feet)	40,300	40,300			Calculated
Factor For Sloping Sides	20.0%	20.0%			Data
Total Liner Area (Square Feet)	48360	48360			Calculated
Liner Thickness (Mils)	30	30			Data
Liner Thickness (Inches)	0.0300	0.0300			Calculated
Liner Thickness (Feet)	0.0025	0.0025			Calculated
"Swell" Factor	25.0%	25.0%			Data
Liner Volume (Cubic Feet)	151	151			Calculated
Truck Loads of Liner	0.3	0.3			Calculated
Liner Handling Cost					
Labor Crew Cost per Hour	\$135	\$135			Unit Rate
Hours per Load	2.0	2.0			Unit Rate
Liner Handling Cost per Load	\$270.00	\$270.00			Calculated
Total Liner Handling Cost	\$81	\$81	\$162		Calculated
Transportation & Disposal					
Percent to be Shipped	100.0%	100.0%			Data
Distance (Miles)	105	105			Data
Cost per Mile	\$2.90	\$2.90			Unit Rate
Transportation Cost	\$91	\$91			Calculated
Disposal Cost per Cubic Foot	\$12.38	\$12.38			Unit Rate
Volume per Truck Load (Cubic Feet)	540	540			Data
Disposal Cost	\$2,006	\$2,006			Calculated
Total Transportation & Disposal	\$2,097	\$2,097	\$4,194		Calculated
TOTAL POND LINER COST	\$2,178	\$2,178	\$4,356		Calculated

Lost Creek Project WDEQ-LQD Permit to Mine Application Original Dec07; Rev10 Nov10

# Table RP-4Reclamation/Restoration Bond Estimate (Page 20 of 37)

# LOST CREEK ISR, LLC DECOMMISSIONING AND SURFACE RECLAMATION: C. Storage Pond Sludge and Liner Handling - WORKSHEET 4

Assumptions/Items	Pond 1 Storage	Pond 2 Storage	Total	Explanation	Source
III POND BACKFILL					
Backfill Required (Cubic Yards)	10,448	10,448			Data
Backfill Cost per Cubic Yard	\$1.13	\$1.13			Unit Rate
TOTAL POND BACKFILL COST	\$11,806	\$11,806	\$23,612		Calculated
IV RADIATION SURVEY					
Areal required (Acres)	1.02	1.02			Data
Survey Cost per Acre	\$653.00	\$653.00			Unit Rate
TOTAL RADIATION SURVEY COST	\$665	\$665	\$1,330		Calculated
V LEAK DETECTION SYSTEM REMOVAL					
Gravel and Piping Volume (Cubic Feet)	10075	10075		Assume 3 inches	Data
Volume per Truck Load (Cubic Feet)	540	540			Data
Loads to be Shipped	18.7	18.7			Calculated
Distance (Miles)	105	105			Data
Cost per Mile	\$2.90	\$2.90			Unit Rate
Transportation Cost	\$5,681	\$5,681			Calculated
Handling Cost	\$5,038	\$5,038			Unit Rate (Imbedded)
Disposal Fee per Cubic Foot	\$4.16	\$4.16			Unit Rate
Disposal Cost	\$41,912	\$41,912			Calculated
TOTAL LEAK DETECTION SYSTEM REMOVAL COST	\$52,631	\$52,631	\$105,261		Calculated

TOTAL POND RECLAMATION COST \$135,502 \$135,50	<b>,502 \$271,003</b> Calculated	

# Table RP-4Reclamation/Restoration Bond Estimate (Page 21 of 37)

# LOST CREEK ISR, LLC DECOMMISSIONING AND SURFACE RECLAMATION: D. Well Abandonment - WORKSHEET 5

Assumptions/Items	Mine Unit No. 1	Explanation	Source
Number of Wells	328		Data
Average Depth (Feet)	425		Data
Average Diameter (Inches)	4.328		Data

I	MATERIALS			
	Class G Neat Cement Required (Cubic Feet per Well)	43.4		Data
	Cement Sacks Required per Well	33.9	15 ppg Class G cement requires 6 gallons water per sack cement and 1-1/2% bentonite by weight	Data
	Cement Sack Cost	\$14.43		Unit Rate
	Cement Cost per Well	\$489.49		Calculated
	Bentonite Sacks Required per Well	1.0		Data
	Bentonite Bag Cost	\$2.90		Unit Rate
	Bentonite Cost per Well	\$2.77		Calculated
	TOTAL MATERIALS COST PER WELL	\$492.27		Calculated
	LABOR (INCLUDED IN WORKSHEET 1)			
	Hours Required per Well	0.0		Data
	Labor Cost per Hour	\$0.00		Unit Rate
	TOTAL LABOR COST PER WELL	\$0.00		Calculated
	EQUIPMENT RENTAL			
	Hours Required per Well	1.0		Data
	Backhoe with Operator Cost per Hour	\$48.00		Unit Rate
	Cementer Cost per Hour	\$25.00		Unit Rate
	Total Equipment Cost per Well	\$73.00		Calculated
ΤO	TAL ABANDONMENT COST PER WELL	\$565.27		Calculated

TOTAL WELL ABANDONMENT COST	\$185,408	Calculated

Lost Creek Project WDEQ-LQD Permit to Mine Application Original Dec07; Rev10 Nov10

# Table RP-4Reclamation/Restoration Bond Estimate (Page 22 of 37)

ssumptions/Items	MU-1	Source
WELLFIELD PIPING		
A. Removal		
Surface Length per Well (Feet)	250	
Downhole Length per Well (Feet)	350	
Total Number of Wells	328	
Total Length (Feet)	196,800	Calculated
Cost of Removal per Foot	\$0.109	Unit Rate
Cost of Removal	\$21,353	Calculated
Chipping Rate (feet per hour)	1500	Estimate
Chipper Cost per Hour	\$30	Unit Rate
Chipping Cost	\$3,936	Calculated
Average OD (Inches)	1.6	
Chipped Volume Reduction (Cubic Feet per Foot)	0.008	Unit Rate
Chipped Volume (Cubic Feet)	1,574	Calculated
Volume per Truck Load (Cubic Feet)	540	
Total Number of Truck Loads	2.9	Calculate
B. Survey & Decontamination		
Percent Requiring Decontamination	0%	
Number of Decontamination Loads	0.0	Calculated
Decontamination Cost per Load	\$620.00	Unit Rate
Decontamination Cost	\$0	Calculated
C. Transport & Disposal		-
Landfill Transportation		
Percent to be Shipped	0.0%	
Loads to be Shipped	0.0	Calculated
Distance (Miles)	48	
Transportation Cost per Mile	\$2.90	Unit Rate
Transportation Cost	\$0	Calculated
Landfill Disposal		
Disposal Fee per Cubic Yard	\$13.50	Unit Rate
Load Volume (Cubic Yards)	20	
Disposal Cost	\$0	Calculated
Total Landfill Cost	\$0	Calculate

#### Reclamation/Restoration Bond Estimate (Page 23 of 37) Table RP-4

# LOST CREEK ISR, LLC DECOMMISSIONING AND SURFACE RECLAMATION: E. Wellfield Equipment Removal and Disposal - WORKSHEET 6

Assump	tions/Items	MU-1	Source
I WE	LLFIELD PIPING (continued)	-	
C.	Transport & Disposal (continued)		
	Licensed Site		
	Transportation		
	Percent to be Shipped	100.0%	Calculated
	Loads to be Shipped	2.9	Calculated
	Distance (Miles)	105	
	Transportation Cost per Mile	\$2.90	Unit Rate
	Transportation Cost	\$883	Calculated
	Disposal		
	Disposal Fee per Cubic Foot	\$12.38	Unit Rate
	Disposal Fee per Cubic Yard	\$334.26	Calculated
	Load Volume (Cubic Yards)	20	
	Disposal Cost	\$19,387	Calculated
	Total Licensed Site Cost	\$20,270	Calculated
	Total Transport & Disposal Cost	\$20,270	Calculated
TO	TAL WELLFIELD PIPING REMOVAL & DISPOSAL COST	\$45,559	Calculated
II PRO	ODUCTION WELL PUMPS		
Α.	Pump and Tubing Removal		
	Number of Production Wells	120	
	Removal Cost per Well	\$12.07	Unit Rate
	Removal Cost	\$1,448	Calculated
	Number of Pumps per Truck Load	180	
	Number of Truck Loads (Pumps)	0.7	Calculated
В.	Survey & Decontamination (Pumps)		
	Percent Requiring Decontamination	0.0%	
	Number of Decontamination Truck Loads	0.0	Calculated
	Decontamination Cost per Load	\$0.00	Unit Rate
	Decontamination Cost	\$0	Calculated

# Table RP-4Reclamation/Restoration Bond Estimate (Page 24 of 37)

sumptions/Items	MU-1	Source
PRODUCTION WELL PUMPS (continued)	•	
C. Tubing Volume Reduction & Loading		
Length per Well (Feet)	375	
Total Length (Feet)	45,000	Calculated
Removal Cost per Foot	\$0.014	Unit Rate
Removal Cost	\$608	Calculated
Average OD (Inches)	2.0	
Chipped Volume Reduction (Cubic Feet per Foot)	0.012	
Chipped Volume (Cubic Feet)	540	Calculated
Volume per Truck Load (Cubic Feet)	540	
Number of Truck Loads	1.0	Calculated
D. Transport & Disposal		
Landfill		
Transportation		
Percent to be Shipped (Pumps)	100.0%	
Loads to be Shipped	0.7	Calculated
Distance (Miles)	48	
Cost per Mile	\$2.90	Unit Rate
Transportation Cost	\$97	Calculated
Disposal		
Disposal Fee per Cubic Yard	\$13.50	Unit Rate
Load Volume (Cubic Yards)	20	
Disposal Cost	\$189	Calculate
Total Landfill Cost	\$286	Calculate
Licensed Site		
Transportation		
Percent to be Shipped (Pumps)	0.0%	
Percent to be Shipped (Tubing)	100.0%	
Loads to be Shipped	1.0	Calculated
Distance (Miles)	105	
Cost per Mile	\$2.90	Unit Rate
Transportation Cost	\$305	Calculate

# Table RP-4 Reclamation/Restoration Bond Estimate (Page 25 of 37)

Ass	umptions/Items	MU-1	Source
Ш	PRODUCTION WELL PUMPS (continued)		
	D. Transport & Disposal (continued)		
	Licensed Site (continued)		
	Disposal		
	Disposal Cost per Cubic Foot	\$12.38	Unit Rate
	Disposal Fee per Cubic Yard	\$334.26	Calculated
	Load Volume (Cubic Yards)	20	
	Disposal Cost	\$6,685	Calculated
	Total Licensed Site Cost	\$6,990	Calculated
	Total Transport & Disposal Cost	\$7,276	Calculated
	TOTAL PRODUCTION WELL PUMP REMOVAL & DISPOSAL COST	\$9,331	Calculated
Ш	SURFACE TRUNKLINE PIPING		
-	A. Removal		
	Total Length (Feet)	0	
	Removal Cost per Foot	\$0.081	Unit Rate
	Removal Cost	\$0	Calculated
	Average OD (Inches)	8.750	
	Chipped Volume Reduction (Cubic Feet per Foot)	0.088	Unit Rate
	Chipped Volume (Cubic Feet)	0	Calculated
	Volume per Truck Load (Cubic Feet)	540	
	Total Number of Truck Loads	0.0	Calculated
	B. Survey & Decontamination		
	Percent Requiring Decontamination	0.0%	
	Number of Decontamination Truck Loads	0.0	Calculated
	Decontamination Cost per Load	\$0.00	Unit Rate
	Decontamination Cost	\$0	Calculated

# Table RP-4Reclamation/Restoration Bond Estimate (Page 26 of 37)

Assumptions/Items	MU-1	Source
III SURFACE TRUNKLINE PIPING (continued)		
C. Transport & Disposal		
Landfill		
Transportation		
Percent to be Shipped	0.0%	
Loads to be Shipped	0.0	Calculated
Distance (Miles)	48	
Cost per Mile	\$2.90	Unit Rate
Transportation Cost	\$0	Calculated
Disposal		
Disposal Fee per Cubic Yard	\$13.50	Unit Rate
Load Volume (Cubic Yards)	20	
Disposal Cost	\$0	Calculated
Total Landfill Cost	\$0	Calculated
Licensed Site		
Transportation		
Percent to be Shipped	100.0%	Calculated
Loads to be Shipped	0.0	Calculated
Distance (Miles)	105	
Cost per Mile	\$2.90	Unit Rate
Transportation Cost	\$0	Calculated
Disposal		
Disposal Cost per Cubic Foot	\$12.38	Unit Rate
Disposal Fee per Cubic Yard	\$334.26	Calculated
Load Volume (Cubic Yards)	20	
Disposal Cost	\$0	Calculated
Total Licensed Site Cost	\$0	Calculated
Total Transport & Disposal Cost	\$0	Calculated
TOTAL SURFACE TRUNKLINE PIPING REMOVAL & DISPOSAL COST	\$0	Calculated

# Table RP-4Reclamation/Restoration Bond Estimate (Page 27 of 37)

umptions/Items	MU-1	Source
BURIED TRUNKLINE		
A. Removal		
Total Length (Feet)	24,304	
Removal Cost per Buried Foot	\$1.58	Unit Rate
Removal Cost	\$19,139	Calculated
Chipping Rate (feet per hour)	150	Estimate
Chipper Cost per Hour	\$30	Unit Rate
Chipping Cost	\$4,861	Calculated
Average OD (Inches)	9.635	
Chipped Volume Reduction (Cubic Feet per Foot)	0.309	Unit Rate
Chipped Volume (Cubic Feet)	7,510	Calculated
Volume per Truck Load (Cubic Feet)	540	
Number of Truck Loads	13.9	Calculate
B. Survey & Decontamination		
Percent Requiring Decontamination	0.0%	
Number of Decontamination Truck Loads	0.0	Calculate
Decontamination Cost per Load	\$0.00	Unit Rate
Decontamination Cost	\$0	Calculated
C. Transport & Disposal		
Landfill		
Transportation		
Percent to be Shipped	0.0%	
Loads to be Shipped	0.0	Calculate
Distance (Miles)	48	
Cost per Mile	\$2.90	Unit Rate
Transportation Cost	\$0	Calculate
Disposal		
Disposal Fee per Cubic Yard	\$13.50	Unit Rate
Load Volume (Cubic Yards)	20	
Disposal Cost	\$0	Calculate
Total Landfill Cost	\$0	Calculate

# Table RP-4Reclamation/Restoration Bond Estimate (Page 28 of 37)

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Assumptions/Items	MU-1 Source
IV BURIED TRUNKLINE (continued)	
C. Transport & Disposal (continued)	
Licensed Site	
Transportation	
Percent to be Shipped	100.0% Calculated
Loads to be Shipped	13.9 Calculated
Distance (Miles)	105
Cost per Mile	\$2.90 Unit Rate
Transportation Cost	\$4,233 Calculated
Disposal	
Disposal Cost per Cubic Foot	\$12.38 Unit Rate
Disposal Fee per Cubic Yard	\$334.26 Calculated
Load Volume (Cubic Yards)	20
Disposal Cost	\$92,924 Calculated
Total Licensed Site Cost	\$97,157 Calculated
Total Transport & Disposal Cost	\$97,157 Calculated
TOTAL BURIED TRUNKLINE REMOVAL & DISPOSAL COS	ST \$121,157 Calculated
V MANHOLES	
A. Removal	
Total Quantity	9
Removal Cost per Manhole	\$73.16 Unit Rate
Removal Cost	\$658 Calculated
Quantity per Truck Load	10
Number of Truck Loads	0.9 Calculated
B. Survey & Decontamination	
Percent Requiring Decontamination	0.0%
Number of Decontamination Truck Loads	0.0 Calculated
Decontamination Cost per Load	\$0.00 Unit Rate
Decontamination Cost	\$0 Calculated

# Table RP-4Reclamation/Restoration Bond Estimate (Page 29 of 37)

Assumptions/Items	MU-1 Source	
V MANHOLES (continued)		
C. Transport & Disposal		
Landfill		
Transportation		
Percent to be Shipped	0.0%	
Loads to be Shipped	0.0 Calculated	
Distance (Miles)	48 Unit Rate	
Cost per Mile	\$2.90 Calculated	
Transportation Cost	\$0	
Disposal		
Disposal Fee per Cubic Yard	\$13.50 Unit Rate	
Load Volume (Cubic Yards)	20	
Disposal Cost	\$0 Calculated	
Total Landfill Cost	\$0 Calculated	
Licensed Site		
Transportation		
Percent to be Shipped	100.0% Calculated	
Loads to be Shipped	0.9 Calculated	
Distance (Miles)	105	
Cost per Mile	\$2.90 Unit Rate	
Transportation Cost	\$274 Calculated	
Disposal		
Disposal Cost per Cubic Foot	\$12.38 Unit Rate	
Disposal Fee per Cubic Yard	\$334.26 Calculated	
Load Volume (Cubic Yards)	20	
Disposal Cost	\$6,017 Calculated	
Total Licensed Site Cost	\$6,291 Calculated	
Total Transport & Disposal Cost	\$6,291 Calculated	
TOTAL MANHOLE REMOVAL & DISPOSAL COST	\$6,949 Calculated	

OTAL WELLFIELD EQUIPMENT REMOVAL AND DISPOSAL COST	\$182,997	Calculated
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#### Reclamation/Restoration Bond Estimate (Page 30 of 37) Table RP-4

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As	sumptions/Items	Mine Unit No. 1	Source
Ι	PLANT		
	A. Topsoil Handling & Grading		
	Affected Area (Acres)	5.0	
	Average Affected Thickness (Inches)	16.0	
	Topsoil Volume (Cubic Yards)	10,756	Calculated
	Hauling/Placement Cost per Cubic Yard	\$1.13	Unit Cost
	Topsoil Handling Cost	\$12,154	Calculated
	Grading Cost per Acre	\$56.28	Unit Cost
	Grading Cost	\$281	Calculated
	Total Topsoil Handling & Grading Cost	\$12,435	Calculated
	B. Radiation Survey & Soil Analysis	_	-
	Survey & Analysis Cost per Acre	\$653.00	Unit Cost
	Total Survey & Analysis Cost	\$3,265	Calculated
	C. Revegetation		
	Fertilizer Cost per Acre	\$52.33	Unit Cost
	Seeding Preparation & Seeding Cost per Acre	\$189.85	Unit Cost
	Mulching & Crimping Cost per Acre	\$311.25	Unit Cost
	Total Revegetation Cost per Acre	\$553.43	Calculated
	Total Revegetation Cost	\$2,767	Calculated
	TOTAL PLANT COST	\$18,467	Calculated

## Table RP-4Reclamation/Restoration Bond Estimate (Page 31 of 37)

Ass	sumptions/Items	Mine Unit No. 1	Source
Ш	PONDS		
	A. Topsoil Handling & Grading		
	Affected Area (Acres)	5.0	
	Average Affected Thickness (Inches)	20	
	Topsoil Volume (Cubic Yards)	13,444	Calculated
	Hauling/Placement Cost per Cubic Yard	\$1.13	Unit Cost
	Topsoil Handling Cost	\$15,192	Calculated
	Grading Cost per Acre	\$56.28	Unit Cost
	Grading Cost	\$281	Calculated
	Total Topsoil Handling & Grading Cost	\$15,474	Calculated
	B. Radiation Survey & Soil Analysis		
	Survey & Analysis Cost per Acre	\$653.00	Unit Cost
	Total Survey & Analysis Cost	\$3,265	Calculated
	C. Revegetation		-
	Fertilizer Cost per Acre	\$52.33	Unit Cost
	Seeding Preparation & Seeding Cost per Acre	\$189.85	Unit Cost
	Mulching & Crimping Cost per Acre	\$311.25	Unit Cost
	Total Revegetation Cost per Acre	\$553.43	Calculated
	Total Revegetation Cost	\$2,767	Calculated
	TOTAL POND COST	\$21,506	Calculated

## Table RP-4Reclamation/Restoration Bond Estimate (Page 32 of 37)

Assumptions/Items		Mine Unit No. 1	Source
III	WELLFIELDS		
	A. Topsoil Handling & Grading		
	Affected Area (Acres)	12.1	50% of Ptn Area
	Average Affected Thickness (Inches)	0.0	
	Topsoil Volume (Cubic Yards)	0	Calculated
	Hauling/Placement Cost per Cubic Yard	\$1.13	Unit Cost
	Topsoil Handling Cost	\$0	Calculated
	Grading Cost per Acre	\$56.28	Unit Cost
	Grading Cost	\$681	Calculated
	Total Topsoil Handling & Grading Cost	\$681	Calculated
	B. Radiation Survey & Soil Analysis		
	Survey & Analysis Cost per Acre	\$653.00	Unit Cost
	Total Survey & Analysis Cost	\$7,901	Calculated
	C: Spill Cleanup		
	Affected Area (Acres)	-	Calculated
	Affected Area (Square Feet)	-	
	Average Affected Thickness (Feet)	0.25	
	Affected Volume (Cubic Feet)	-	Calculated
	Volume per Truck Load (Cubic Feet)	540	
	Number of Truck Loads	0.0	Calculated
	Distance (Miles)	105	
	Cost per Mile	\$2.90	Unit Cost
	Transportation Cost	\$0	Calculated
	Handling Cost per Truck Load	\$238	Unit Cost
	Handling Cost	\$0	Calculated
	Disposal Fee per Cubic Foot	\$4.16	Unit Cost
	Disposal Cost	\$0	Calculated
	Total Spill Cleanup Cost	\$0	Calculated

## Table RP-4Reclamation/Restoration Bond Estimate (Page 33 of 37)

# LOST CREEK ISR, LLC DECOMMISSIONING AND SURFACE RECLAMATION: F. Topsoil Replacement and Revegetation - WORKSHEET 7

Ass	sumptions/Items			Mine Unit No.	Source
	WELLEIELDS (continue	I			
	D Reverentation	50)			
	Eertilizer Cost n	er Acre		\$52.33	Linit Cost
	Seeding Prenar	ation & Seedi	ng Cost per Acre	\$189.85	Unit Cost
	Mulching & Crin	nning Cost ne		\$311.25	Unit Cost
	Total Revegetat	tion Cost per	Acre	\$553.43	Calculated
	Total Revegetat	tion Cost		\$6.697	Calculated
	TOTAL WELLFIELDS (	COST		\$15.279	Calculated
IV	ROADS			· · · · ·	
	A. Topsoil Handling &	Grading			
	Affected Area (A	Acres)		11.1	
	Main Road	Secondary			
	Lengths	Road Lengths			
	(II) 1 556	(11)			
	504				
	228				
	356	966			
	362	391			
	211	276			
	2,309	291			
	1,260	311			
	244	257			
	1,029	330			
	5,049	323			
	13,198	3,145	Total Road Lengths (Feet)		
	20	12	Road Width (Feet)		
	12	8	Road Borrow (Feet)		
	32	20	Road Width and Borrow (Feet)		
	9.7	1.4	Road Area (Acres)	-	
	1	1.1	Total Road Area (Acres)	]	

Lost Creek Project WDEQ-LQD Permit to Mine Application Original Dec07; Rev10 Nov10

## Table RP-4Reclamation/Restoration Bond Estimate (Page 34 of 37)

Assumptions/Items	Mine Unit No. 1	Source
IV ROADS (continued)		
A. Topsoil Handling & Grading (continued)		
Average Affected Thickness (Inches)	15	
Topsoil Volume (Cubic Yards)	22,385	Calculated
Hauling/Placement Cost per Cubic Yard	\$1.13	Unit Cost
Topsoil Handling Cost	\$25,295	Calculated
Grading Cost per Acre	\$56.28	Unit Cost
Grading Cost	\$625	Calculated
Scarify Compacted Area per Acre	\$53.83	Unit Cost
Scarify Cost	\$598	Calculated
Total Topsoil Handling & Grading Cost	\$26,517	Calculated
B. Radiation Survey & Soil Analysis	-	-
Survey & Analysis Cost per Acre	\$653.00	Unit Cost
Total Survey & Analysis Cost	\$7,248	Calculated
C. Revegetation	•	
Fertilizer Cost per Acre	\$52.33	Unit Cost
Seeding Preparation & Seeding Cost per Acre	\$189.85	Unit Cost
Mulching & Crimping Cost per Acre	\$311.25	Unit Cost
Total Revegetation Cost per Acre	\$553.43	Calculated
Total Revegetation Cost	\$6,143	Calculated
TOTAL ROADS COST	\$39,909	Calculated

## Table RP-4Reclamation/Restoration Bond Estimate (Page 35 of 37)

As	sumptions/Items	Mine Unit No. 1	Source
V	OTHER		
	A. Topsoil Handling & Grading		
	Affected Area (Acres)	1.0	
	Average Affected Thickness (Inches)	15.0	
	Topsoil Volume (Cubic Yards)	2016.67	Calculated
	Hauling/Placement Cost per Cubic Yard	\$1.13	Unit Cost
	Topsoil Handling Cost	\$2,279	Calculated
	Grading Cost per Acre	\$56.28	Unit Cost
	Grading Cost	\$56	Calculated
	Total Topsoil Handling & Grading Cost	\$2,335	Calculated
	B. Radiation Survey & Soil Analysis	-	
	Survey & Analysis Cost per Acre	\$653.00	Unit Cost
	Total Survey & Analysis Cost	\$653	Calculated
	C. Revegetation		
	Fertilizer Cost per Acre	\$52.33	Unit Cost
	Seeding Preparation & Seeding Cost per Acre	\$189.85	Unit Cost
	Mulching & Crimping Cost per Acre	\$311.25	Unit Cost
	Total Revegetation Cost per Acre	\$553.43	Calculated
	Total Revegetation Cost	\$553	Calculated
	TOTAL OTHER COST	\$3,542	Calculated

#### Reclamation/Restoration Bond Estimate (Page 36 of 37) Table RP-4

Assumptions/Items	Mine Unit No. 1	Source
VI REMEDIAL ACTION		
A. Topsoil Handling & Grading		
Affected Area (Acres)	17.1	
Average Affected Thickness (Inches)	0.0	
Topsoil Volume (Cubic Yards)	0	Calculated
Hauling/Placement Cost per Cubic Yard	\$1.13	Unit Cost
Topsoil Handling Cost	\$0	Calculated
Grading Cost per Acre	\$0.00	Unit Cost
Grading Cost	\$0	Calculated
Total Topsoil Handling & Grading Cost	\$0	Calculated
B. Radiation Survey & Soil Analysis	_	
Survey & Analysis Cost per Acre	\$0.00	Unit Cost
Total Survey & Analysis Cost	\$0	Calculated
C. Revegetation		-
Fertilizer Cost per Acre	\$52.33	Unit Cost
Seeding Preparation & Seeding Cost per Acre	\$189.85	Unit Cost
Mulching & Crimping Cost per Acre	\$311.25	Unit Cost
Total Revegetation Cost per Acre	\$553.43	Calculated
Total Revegetation Cost	\$9,464	Calculated
TOTAL REMEDIAL ACTION COST	\$9,464	Calculated

	TOTAL TOPSOIL REPLACEMENT AND REVEGETATION COST	\$108,166	
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## Table RP-4Reclamation/Restoration Bond Estimate (Page 37 of 37)

# LOST CREEK ISR, LLC DECOMMISSIONING AND SURFACE RECLAMATION: G. Miscellaneoues Reclamation Activities - WORKSHEET 8

Assumptions/Items	Quantity	Source
I FENCE REMOVAL & DISPOSAL		
Length (Feet)	9,500	
Removal & Disposal Cost per Foot	\$0.34	Unit Cost
TOTAL FENCE REMOVAL AND DISPOSAL COST	\$3,230	Calculated
II CULVERT REMOVAL & DISPOSAL		
Length (Feet)	200	
Removal & Disposal Cost per Foot	\$1.74	Unit Cost
TOTAL CULVERT REMOVAL & DISPOSAL COST	\$348	Calculated
III UTILITIES		
Number of Months	6	
Cost per Month	\$2,380	Unit Cost
TOTAL UTILITIES COST	\$14,280	Calculated
IV DDW PIPELINE REMOVAL AND DISPOSAL		
Length (Feet)	21,730	
Removal & Disposal Cost per Foot	\$2.43	Unit Cost
TOTAL DDW PIPELINE REMOVAL & DISPOSAL COST	\$52,804	Calculated
TOTAL MISCELLANEOUS RECLAMATION ACTIVITIES COST	\$70,662	Calculated