

December 16, 2014

Attn: Document Control Desk
Director
Office of Federal and State Materials and
Environmental Management Programs
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

Attn: Document Control Desk
U.S. Nuclear Regulatory Commission
Deputy Director
Decommissioning and Uranium Recovery Licensing Directorate
Division of Waste Management and Environmental Protection
Office of Federal and State Materials and Environmental Management Protection
Mail Stop T-8F5
11545 Rockville Pike
Two White Flint North
Rockville, MD 20852-2738

RE: Uranerz Energy Corporation, Nichols Ranch Project, Source Materials License SUA-1597,
License Condition 9.5 Financial Assurance Annual Update, Docket No. 40-9067

Dear Director and Deputy Director,

Pursuant to License Condition 9.5 Uranerz Energy Corporation (Uranerz) proposed annual updates to the financial assurance shall be provided annually to the NRC by December 29. Uranerz currently holds a Six Million, Eight Hundred Thousand Dollar (\$6,800,000) financial assurance bond that was accepted by the Wyoming Department of Environmental Quality Land Quality Division (WDEQ-LQD) with the issuance of the Permit to Mine No. 778.

Uranerz recently completed the annual surety review, as required by the WDEQ-LQD, concluding the surety amount remains sufficient for the activities engaged. Through the review adjustments have been made; however, the total estimate remains less than the surety bond amount. A copy of the Surety Estimate document is enclosed along with a CD containing the spreadsheets. Additionally, a summary of the adjustment, by worksheet has been included to facilitate the NRC review.

Of note, a courtesy copy of the entire WDEQ-LQD Annual Report 2013-2014, which contains the surety review was sent to the NRC on December 4, 2014.

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FSME20

If you should have any questions regarding this matter or this proposed plan, please contact me by phone at 307-265-8900 or by email at mthomas@uranerz.com.

Sincerely,



Mike Thomas
Vice President Regulatory and Public Affairs
Uranerz Energy Corporation

MT/dk

Attachments:

Surety Estimate (w/CD)
Surety Estimate Adjustment Summary

Cc: WDEQ/LQD Dorran Larner, Project Manager

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Surety Estimate Adjustment Summary 2013-2014

According to WDEQ-LQD Permit to Mine No. 778 and NRC License SUA-1597, Uranerz is required to submit an updated Annual Surety Estimate Revision each year to adjust the bond amount to reflect existing operations and those planned for construction or operation in the following year. The following is a discussion, by worksheet, of adjustments made to the bond estimate.

The current performance bond accounts for construction and start-up of the Nichols Unit CPP, associated facilities, PA#1, restoration of PA#1, monitor wells for PA# 2, various activities for the 2015 year, and reclamation of the Nichols Ranch Unit operation. The amount of \$6.8 million for Bond No. 1057688 was approved by the WDEQ-LQD with the issuance of Permit to Mine No. 778. Uranerz estimates the cost of decommissioning of the project at \$6,690,834. This constitutes an increase of \$454,878 from the previous year's estimate of \$6,235,956. Uranerz review of the current approved bond finds that overall it remains sufficient to cover all costs of reclamation and restoration for the level of activity and planned activity for the coming year. At this time, Uranerz respectfully requests that no changes be made to the bond.

Significant changes to the surety estimate include:

- The consumer price index (CPI) was updated to 2013 values.
- The thickness of the ore zone was increased from 7.25 ft. to 10 ft. given the recompletions discussed in Section II (G) of this Annual Report.
- Cost for propane was adjusted to current costs.
- Costs for delineation drilling was added to this surety.

Worksheet 1, No.1

- The thickness of the ore zone was increased from 7.25 ft. to 10 ft. given the recompletions discussed in Section II (G) of this Annual Report.
- Power costs were evaluated and adjusted to represent current cost.

Worksheet 1, No. II

- Power costs were evaluated and adjusted to represent current cost.

Worksheet 1, No III

- No Changes.

Worksheet 1, No IV – VI

- No Changes.

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Worksheet 1, Nos. VII, VIII & Summary

- No changes

Worksheet 2a

- The License Site cost for Disposal Cost (\$/ton) and Unloading Cost (per shipment) were adjusted to remove the inflation factor and reflect actual contract pricing with 11e2 disposal contractor.

Worksheet 2b

- The License Site cost for Unloading Cost (per shipment) were adjusted to remove the inflation factor and reflect actual contract pricing with 11e2 disposal contractor.

Worksheet 3

- No Changes

Worksheet 4

- The cost of bentonite chips was updated to reflect actual cost.
- The number of monitor wells in Production Area #2, planned now for 2015 was reduced to 48 monitor wells to more accurately reflect the number planned for installation in the coming year. The number accounts for monitoring ring, overlying, underlying, and production zone monitoring wells.
- Costs for delineation drilling were added to this sheet. Uranerz will utilize a rolling surety with the delineation drilling.

Worksheet 5, No. I

- Last year Uranerz adjusted the number of wells to reflect the number of wells for eight header houses. Monitor wells were included in that cost. Monitor wells are free standing wells that are not piped in like the injection and recovery wells. Therefore, the monitor wells were removed reducing the total number of wells to 437.
- The reduction in wells resulted in a reduction in the quantity of the feeder lines from HH to injection wells. Pregnant solution feeder lines from production wells were also reduced.
- The total length of feeder line trench (Ft) was adjusted to account for eight header houses versus twelve as was initially planned.

Worksheet 5, No. II

- No changes.

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Worksheet 5, No. III

- No changes.

Worksheet 5, No. IV

- No changes.

Worksheets 6, No. I and Nos. II & III

- No. I. no changes.
- No. II
 - Affected Area (Acres) was adjusted for eight header houses instead of twelve.
 - The cost of spill cleanup was updated to include and account for acreage that may need to be cleaned during decommissioning.
- No III, no changes.

Worksheet 6, Nos IV & V

- No. IV – added area for 11e2 Byproduct storage area at a thickness of six inches.

Worksheet 7, Nos. I-VII

- Nos. I-IV no changes.
- No. V – 50 feet of culvert was added.
- Nos. VI-VII no changes.

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Surety Estimate 2014 Review

Nichols Ranch In-Situ Recovery Project Uranerz Energy Corporation

Total Restoration and Reclamation Cost Estimates

No.	Cost Item	Cost
1	GROUNDWATER RESTORATION COST	\$3,080,631
2a	PLANT EQUIPMENT REMOVAL AND DISPOSAL COST	\$269,591
2b	BUILDING DEMOLITION AND DISPOSAL COST	\$994,401
3	SOIL REMOVAL & DISPOSAL COST	\$119,145
4	TOTAL WELL ABANDONMENT COST	\$483,014
5	WELLFIELD EQUIPMENT REMOVAL & DISPOSAL COST	\$268,504
6	TOPSOIL REPLACEMENT & REVEGETATION COST	\$133,028
7	MISCELLANEOUS RECLAMATION COST	\$4,470
	Subtotal Restoration and Reclamation Cost Estimate	\$5,352,784
	CONTINGENCY (Miscellaneous & Unknown) (25%)	\$1,338,196
	Project Design	
	Contractor Profit, Overhead and Mobilization	
	Pre-Construction Investigation	
	Project Management	
	On-Site Monitoring	
	Longterm Administration & Licenses/Permits	
	Site Security & Liability Assurance	
	TOTAL CALCULATED IN 2014 DOLLARS	\$6,690,980

US DEPT. of CONSUMER PRICE INDEX ADJUSMENT 2007 to 2013

12.35%

US DEPT. of CONSUMER PRICE INDEX ADJUSMENT 2009 to 2013

8.59%

Surety Estimate
First Year of Operation
Nichols Ranch ISR Project
Uranerz Energy Corporation

Worksheet 1, No. I --
GROUNDWATER RESTORATION

Cost Item	Mining Unit Nichols#1	Notes
Technical Assumptions		
Wellfield Area (Ft ²)	1,034,433	
Wellfield Area (Acres)	23.75	44.14 Ac at Nichols Ranch Unit Production Area #1 (8 HH)
Affected Ore Zone Area (Ft ²)	1,034,433	
Avg Completed Thickness (Ft)	10	
Factor for Flare	1.45	
Affected Volume:	14,999,282	
Porosity	0.3	
Gallons per Cubic Foot	7.48	
Gallon per Pore Volume	33,658,389	
Number of Wells in Unit(s)		
Recovery Wells	207	Recovery Wells for 8 Header Houses
Injection Wells	230	Injection Wells for 8 Header Houses
Monitor Wells	68	Monitoring Ring, Overlying, Underlying & Production Wells
Average Well Spacing (Ft)	100	
Average Well Depth (Ft)	550	
I Groundwater Sweep		
A. Plant & Office		
Operating Assumptions:		
Flowrate (gpm)	50	
PV's Required	1.00	
Total Gallons for Treatment	33,658,389	
Total Kgals for Treatment	33,658	
Cost Assumptions:		
Power		
Avg Connected Hp	15	
Kwh's/Hp	0.93	
\$/Kwh	0.06	\$.02 plus demand charges per quote
Gallons per Minute	50	
Gallons per Hour	3000	
Cost per Hour	\$0.79	
Cost per Kgal (\$)	\$0.26	
Chemicals		
Barium Chloride (\$/Kgals)	\$0.000	
Antiscalant (\$/Kgals)	\$0.000	
Elution (\$/Kgals)	\$0.000	
Repair & Maintenance (\$/Kgals)	\$0.069	Costs from operating ISR facility experience (Cogema Permit No 478, Annual Report 2002-2003), plus cpi
Analysis (\$/Kgals)	\$0.184	Costs from operating ISR facility experience (Cogema Permit No 478, Annual Report 2002-2003), plus cpi
Total Cost per Kgal	\$0.51	
Total Treatment Cost	\$17,324	
Utilities		
Power (\$/Month)	1,800	Adjusted to actual cost
Propane (\$/Month)	330	Adjusted to actual cost
Time for Treatment		
Minutes for Treatment	673,168	
Hours for Treatment	11,219	
Days for Treatment	467	
Average Days per Month	30	
Months for Treatment	15.6	
Years for Treatment	1.30	
Utilities Cost (\$)	\$33,191	
TOTAL PLANT & OFFICE COST	\$50,515	
B. WELLFIELD		
Cost Assumptions:		
Power		
Avg Flow/Pump (gpm)	1	
Avg Hp/Pump	1.5	
Avg # of Pumps Required	50	
Avg Connected Hp	75	
Kwh's/Hp	0.93	
\$/Kwh	0.06	
Gallons per Minute	50	
Gallons per Hour	3000	
Costs per Hour (\$)	\$3.93	
Costs per Gallon (\$)	\$0.0013	
Costs per Kgal (\$)	\$1.31	
Repair & Maintenance (\$/Kgals)	\$0.02	
Total Cost per Kgal	\$1.33	
TOTAL WELLFIELD COST	\$44,683	
TOTAL GROUNDWATER SWEEP COST	\$95,198	

**Surety Estimate
First Year of Operation
Nichols Ranch ISR Project
Uranerz Energy Corporation**

**Worksheet 1, No. II
GROUNDWATER RESTORATION**

Cost Item	Mining Unit Nichols #1	Notes
II REVERSE OSMOSIS (RO)		
A. PLANT & OFFICE		
Operating Assumptions:		
Flowrate (gpm)	50	
PV's Required	6	
Total Gallons for Treatment	201,950,336	
Total Kgals for Treatment	201,950	
Feed to RO (gpm)	50	
Permeate Flow (gpm)	40	
Brine Flow (gpm)	10	
Average RO Recovery	80%	
Cost Assumptions:		
Power		
Avg Connected Hp	15	
kWh/Hp	0.93	
\$/Kwh	0.06	\$.02 plus demand charges per quote
Gallons per Minute	50	
Gallons per Hour	3000	
Cost per Hour (\$)	\$0.79	
Cost per Gallon (\$)	\$0.0003	
Cost per Kgal (\$)	\$0.26	
Chemicals		
RO Antiscalant (\$/Kgallons)	\$0.180	Costs from GE Water & Process Technologies - Uranerz Cost
Hydrochloric Acid (\$/Kgals)	\$0.01	Uranerz cost
Reductant Sulfide (\$Kgals)	\$0.330	Costs from operating ISR facility experience (Cogema Permit No 478, Annual Report 2002-2003), plus cpi
Repair & Maintenance (\$/Kgals)	\$0.313	Costs from operating ISR facility experience (Cogema Permit No 478, Annual Report 2002-2003), plus cpi
Sampling & Analysis (\$/Kgals)	\$0.184	Costs from operating ISR facility experience (Cogema Permit No 478, Annual Report 2002-2003), plus cpi
Total Cost per Kgal (\$)	\$1.28	
Total Pumping Cost (\$)	\$258,242	
Utilities		
Power (\$/Month)	1,800	Adjusted to actual cost
Propane (\$/Month)	330	Uranerz actual cost
Time for Treatment	0	
Minutes for Treatment	4,039,007	
Hours for Treatment	67,317	
Days for Treatment	2,805	
Average Days per Month	30	
Months for Treatment	92	
Utilities Cost (\$)	\$196,525	
TOTAL PLANT & OFFICE COST	\$454,767	
B. WELLFIELD		
Cost Assumptions:		
Power		
Avg Flow/Pump (gpm)	1	
Avg Hp/Pump	1.5	
Avg # of Pumps Required	50	
Avg Connected Hp	75	
Kwh's/Hp	0.93	
\$/Kwh	0.06	
Gallons per Minute	51	
Gallons per Hour	3060	
Costs per Hour (\$)	\$3.93	
Costs per Gallon (\$)	\$0.0013	
Costs per Kgal (\$)	\$1.28	
Repair & Maintenance (\$/Kgals)	\$0.02	
Total Cost per Kgal	\$1.30	
TOTAL WELLFIELD COST	\$262,915	
TOTAL REVERSE OSMOSIS COST	\$717,682	

**Surety Estimate
First Year of Operation
Nichols Ranch ISR Project
Uranerz Energy Corporation**

**Worksheet 1, No III --
GROUNDWATER RESTORATION**

Cost Item	Mining Unit Nichols #1	Notes
III Deep Disposal Well (DDW)		
Operating Assumptions:		
Total Disposal Requirement		
RO Brine Total Gallons	40,390,067	
RO Brine Total Kgallons	40,390	
Brine Concentration Factor	1	
Total Concentrated Brine (gallons)	40,390,067	
Months of RO Operation	16	
Average Monthly Req'm't (Gallons)	2,592,000	
Average Brine Flow (gpm)	60	
Total DDW Disposal (gallons)	40,390,067	
Total DDW Disposal (Kgallons)	40,390	
Cost Assumptions:		
Avg Connected Hp	15	
Kwh's/Hp	0.93	
\$/Kwh	0.06	Cost plus cpi
Gallons per Minute	60	
Gallons per Hour	3600	
Cost per Hour (\$)	\$0.79	
Cost per Gallon (\$)	\$0.0002	
Cost per Kgal (\$)	\$0.22	
Chemicals		
RO Antiscalent (\$/Kgallons)	\$0.180	Costs from GE Water & Process Technologies - Uranerz Cost
DDW Antiscalent (\$/Kgallons)	\$0.160	Costs from GE Water & Process Technologies - Uranerz Cost
		Costs from operating ISR facility experience (Cogema Permit No 478, Annual Report 2002-2003), plus cpi
Repair & Maint. (\$/Kgallons)	\$0.258	
Total Cost per Kgallon	\$0.817	
TOTAL DEEP DISPOSAL WELL COST	\$32,985	

**Surety Estimate
First Year of Operation
Nichols Ranch ISR Project
Uranerz Energy Corporation**

**Worksheet 1, Nos. IV & VI --
GROUNDWATER RESTORATION**

Cost Item	Mining Unit	Labor Cost Factors			Notes
	Nichols #1				
IV RESTORATION MONITORING					
Operating Assumptions:					
Time of Restoration (months)	24				Monitoring Ring, Overlaying & Underlying Wells Only
Frequency of Analysis (months)	2				
Quantity of Monitoring Wells	55				Quote from Energy Laboratories
Total Sets of Analysis	12				
Cost per Event	\$30				
Total Sampling & Analysis Cost (\$)	\$19,800				
V STABILIZATION MONITORING					
Operating Assumptions:					
Time of Stabilization (months)	12				Monitoring Ring Wells Only
Frequency of Analysis (months)	2				Monitoring Ring Wells Only
Total Sets of Analysis	6				Production Monitoring Wells Only
Frequency of Analysis (months)	4				Production Monitoring Wells Only
Total Sets of Analysis	3				
Cost Assumptions:					
Power (\$/Month)	\$0				No add'l power required to sample
Total Power Cost	\$0				
Quantity of Monitoring Ring Wells	32				Monitoring Ring Wells Only
Quantity of Production Monitoring Wells	13				Production Monitoring Wells Only
Cost per Event	\$371				Quote from Energy Laboratories
Sampling & Analysis (each set)	\$16,684				
Total Sampling & Analysis Cost (\$)	\$150,156				
Utilities (\$/Month)	\$0				No add'l utilities required to sample
Total Utilities Cost (\$)	\$0				
TOTAL STABILIZATION COST	\$150,156				
VI LABOR					
Cost Assumptions:	No.	Cost/Hour	Hours/Year	Cost	Prices based on 2013 Building Construction Prevailing Wages, WDEQ-LQD Guideline 12 (updated 3/25/14)
Crew:					
1. Supervisor	1	29	2080	\$60,320	
2. Operators	4	22	2080	\$183,040	
3. Maintenance	2	20	2080	\$83,200	
4. Vehicles	2	10	2080	\$41,600	
Cost per Year				\$368,160	
Time Required - Years	5.02				
TOTAL RESTORATION LABOR COST	\$1,848,163				

**Surety Estimate
First Year of Operation
Nichols Ranch ISR Project
Uranerz Energy Corporation**

**Worksheet 1, Nos. VII, VIII & Summary --
GROUNDWATER RESTORATION**

Cost Item	Mining Unit	Notes
	Nichols #1	
VII RESTORATION CAPITAL REQUIREMENTS		
I Deep Disposal Well(s)	2	\$96,416 price required by UIC 10-392 Permit, plus cpi Already in Processing Plant
II Plug and Abandon DDW	\$108,323	
III Reverse Osmosis Unit	\$0	
TOTAL RESTORATION CAPITAL REQUIREMENTS	\$216,646.75	
VIII RESTORATION OF EXCURSION WELLS		
I Shallow Sand Well(s)		
Total Wells in Excursion	0	Assume no excursions
Cost of Clean-Up	\$0	
Total Shallow Sand Cleanup	\$0	
II Ore Zone Wells		
Total Wells in Excursion	0	
Cost of Clean-Up	\$0	
Total Ore Zone Cleanup	\$0	
III Deep Zone Wells		
Total Wells in Excursion	0	
Cost of Clean-Up	\$0	
Total Deep Zone Cleanup	\$0	
TOTAL WELLFIELD COST		
TOTAL EXCURSION CLEANUP COST	\$0	
SUMMARY:		
I GROUNDWATER SWEEP	\$95,198	
II REVERSE OSMOSIS (RO)	\$717,682	
III DEEP DISPOSAL WELL	\$32,985	
IV RESTORATION MONITORING	\$19,800	
V STABILIZATION MONITORING	\$150,156	
SUB TOTAL	\$1,015,821	
VI LABOR	\$1,848,163	
VII RESTORATION CAPITAL REQUIREMENTS	\$216,647	
VIII RESTORATION OF EXCURSION WELLS	\$0	
TOTAL GROUNDWATER RESTORATION COST	\$3,080,631	

**Surety Estimate
First Year of Operation
Nichols Ranch ISR Project
Uranerz Energy Corporation**

**Worksheet 2 a
PLANT EQUIPMENT REMOVAL AND DISPOSAL**

Cost Item	Nichols Mine Unit							Sub Total	Notes
	Office & Laboratory	Main Process Building	Maintenance Building	Resin + Sand Filter Media	External Tanks	Header Houses, Manifold	Deep Well Bldgs		
Volume (Yds ³)	40	200	45	110	109	170	10		
Quantity per Truck Load (Yds ³)	20	20	20	20	20	20	20		
Number of Truck Loads	2	10	2.25	5.5	5.45	8.5	0.5		
I Decontamination Cost									
Decontamination Cost (\$/Load)	674.1	674.1	674.1	674.1	674.1	674.1	674.1		
Percent Requiring Decontamination	20%	100%	20%	0%	50%	100%	100%		
Total Cost	\$270	\$6,741	\$303	\$0	\$1,837	\$5,730	\$337		
II Dismantle and Loading Cost									
Cost per Truck Load (\$)	\$899	\$899	\$899	\$899	\$899	\$899	\$899		
Total Cost	\$1,798	\$8,988	\$2,022	\$4,943	\$4,898	\$7,640	\$449		
III Oversize Charges									
Percent Requiring Permits	40%	40%	40%	0%	50%	40%	40%		
Cost per Truck Load (\$)	\$449	\$449	\$449	\$449	\$449	\$449	\$449		
Total Cost	\$360	\$1,798	\$404	\$0	\$1,225	\$1,528	\$90		
IV Transportation & Disposal									
A. Landfill									
Percent to be Shipped	90%	80%	90%	0%	100%	80%	80%		
Distance (Miles)	75	75	75	75	75	75	75		
Transport Cost (\$/Ton-Mile)	\$0.17	\$0.17	\$0.17	\$0.17	\$0.17	\$0.17	\$0.17		
Transportation Cost	\$491	\$2,184	\$553	\$0	\$1,488	\$1,856	\$109		
Disposal Fee per Cubic Yard	\$69	\$69	\$69	\$69	\$69	\$69	\$69		
Disposal Cost	\$2,467	\$10,965	\$2,776	\$0	\$7,470	\$9,321	\$548		
Total Cost	\$2,959	\$13,149	\$3,328	\$0	\$8,958	\$11,177	\$657		
B. Licensed Site									
Percent to be Shipped	10%	20%	10%	100%	0%	20%	20%		
Distance (Miles)	646	646	646	646	646	646	646		
Transport Cost (\$/Ton-Mile)	\$0.17	\$0.17	\$0.17	\$0.17	\$0.17	\$0.17	\$0.17		
Transport Cost	\$2,791	\$27,907	\$3,140	\$76,745	\$0	\$23,721	\$1,395		
Disposal Cost (\$/Ton)	\$135	\$150	\$150	\$180	\$150	\$150	\$150		Based on Contract Prices
Quantity per Truck Load (Yds ³)	20	20	20	20	20	20	20		
Quantity per Truck Load (Tons)	21.6	21.6	21.6	21.6	21.6	21.6	21.6		Based on avg 80lbs per cf
Unloading Cost (per Shipment)	\$750	\$750	\$750	\$750	\$750	\$750	\$750		Based on Contract Prices
Unloading Cost	\$150	\$1,500	\$169	\$4,125	\$0	\$1,275	\$75		
Disposal Cost	\$733.20	7,980	898	25,509	0	6,783	399		
Total Cost	\$3,524	\$35,887	\$4,037	\$102,254	\$0	\$30,504	\$1,794		
Total Cost	\$6,483	\$49,037	\$7,366	\$102,254	\$8,958	\$41,681	\$2,452		
TOTAL COST NICHOLS RANCH MINE	\$8,909	\$66,563	\$10,096	\$107,197	\$16,918	\$56,579	\$3,328	\$269,591	

Surety Estimate
First Year of Operation
Nichols Ranch ISR Project
Uranerz Energy Corporation

Worksheet 2 b --
BUILDING DEMOLITION AND DISPOSAL

Cost Item	Nichols Mine Unit							Notes
	Office & Laboratory	Main Process Building	Maintenance Building	Header Houses, Manifold & Fuel Island Pad	Personnel Interim Lodging	Deep Disposal Well Bldgs.	Sub Total	
STRUCTURE DEMOLITION & DISPOSAL								
Structural Character								
Demolition Volume (Ft³)	90,000	1,188,000	144,000	2,585	800	2,302		
Unit Cost of Demolition (\$/ Ft³)	\$0.302	\$0.302	\$0.302	\$0.302	\$0.302	\$0.302		Demolition Unit Cost per WDEQ Guideline No.12, App. K (\$/R3) 2013
Total Demolition Cost	\$27,169	\$358,634	\$43,471	\$780	\$242	\$695		
Weight of Disposal Material in Tons	41	535	65	1	0.36	1		
Factor for Gutting	0.1	0.3	0.2	0.25	0.2	0.25		
Cost for Gutting (\$)	\$2,717	\$107,590	\$8,694	\$195	\$48	\$174		
Quantity per Truck Load (Ton)	21.6	21.6	21.6	21.6	21.6	21.6		
Number of Truckloads	1.9	24.8	3.0	0.1	0.02	0.0		
Distance to Landfill	75	75	75	75	75	75		
Unit Cost (Ton-Mile)	\$0.17	\$0.17	\$0.17	\$0.17	\$0.17	\$0.17		
Transportation Cost	\$511.89	\$6,757.01	\$819.03	\$14.70	\$4.55	\$13.09		
Disposal Cost (\$/ton)	\$76.98	\$76.98	\$76.98	\$76.98	\$76.98	\$76.98		Demolition Unit Cost per WDEQ Guideline No.12, App. K, Adjusted Cost per Unit 2013
Disposal Cost (\$)	\$3,117.67	\$41,153.21	\$4,988.27	\$89.55	\$27.71	\$79.74		
TOTAL STRUCTURE DEMO & DISPOSAL	\$33,516	\$514,134	\$57,972	\$1,080	\$322	\$961	\$607,985	
CONCRETE DECONTAMINATION, DEMO & DISPOSAL								
Area	9000	29700	8000	2517	0	408		8 header houses @250 sq ft each, manifold is 357 sq ft., fuel island is 160 sq ft
Average Thickness (Ft)	0.5	0.5	0.5	0.5	0.5	1		
Volume (Ft³)	4500	14850	4000	1258.5	0	408		
Weight of Disposal Concrete Assuming 145lbs/cubic foot	652,500	2,153,250	580,000	182,483	0	59,160		
Weight of Disposal in Tons	326	1077	290	91	0	30		
Percent Requiring Decontamination	0%	100%	0%	10%	0%	100%		
Volume Decontaminated (Ft²)	0	14,850	0	126	0	408		
Decontamination (\$/Ft²)	\$0.320	\$0.320	\$0.320	\$0.320	\$0.320	\$0.320		Decontamination by Steam Cleaning (137.5 R2/hr) ECHOS Unit Cost Book
Decontamination Cost	\$0	\$4,747	\$0	\$40	\$0	\$130		Demolition Unit Cost per WDEQ Guideline No.12, App. K, Adjusted Cost per Unit 2013
Demolition (\$/Ft²)	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95		
Demolition Cost	\$53,557	\$176,737	\$47,606	\$14,978	\$0	\$2,428		
Transportation & Disposal								
A. Onsite Disposal								
Percent to be Disposed Onsite	100%	75%	100%	75%	0%	75%		
Transportation Cost	\$0	\$0	\$0	\$0	\$0	\$0		Demolition Unit Cost per WDEQ Guideline No.12, App. K, Adjusted Cost per Unit, 2013
Disposal Cost per Cubic Yard (\$)	\$9.00	\$9.00	\$9.00	\$9.00	\$9.00	\$9.00		
Disposal Cost (\$)	\$1,500	\$4,951	\$1,334	\$420	\$0	\$136		
B. Licensed Site								
Percent to be Shipped	0%	25%	0%	25%	0%	25%		
Distance (Miles)	646	646	646	646	646	646		
Unit Cost (Ton-Mile)	\$0.17	\$0.17	\$0.17	\$0.17	\$0.17	\$0.17		
Transportation Cost (\$)	\$0	\$29,302	\$0	\$2,483	\$0	\$805		
Disposal Cost (\$/Ton)	\$135	\$135	\$135	\$135	\$135	\$135		Based on Contract Prices
Unloading Cost (per Shipment)	\$750	\$750	\$750	\$750	\$750	\$750		Based on Contract Prices
Unloading Cost	\$0	\$9,346	\$0	\$10,924	\$0	\$3,542		
Disposal Cost (\$)	\$0	\$45,681.80	\$0	\$3,079	\$0	\$998		
TOTAL TRANSPORT & DISPOSAL COST	\$55,057	\$261,419	\$48,940	\$21,001	\$0	\$4,498	\$386,416	
TOTAL BUILDING DEMO & DISPOSAL COST	\$88,573	\$775,553	\$106,912	\$22,080	\$322	\$5,459	\$994,401	

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**Worksheet 3
SOIL REMOVAL & DISPOSAL**

Cost Item	Nichols Mine Unit						Notes
	Office & Laboratory	Main Process Building	Maintenance Building	Header Houses, Manifold & Fuel Island Pad	Deep Disposal Well Bldgs.	Sub Total	
SOIL EXCAVATION, TRANSPORT & DISPOSAL							
Removal Under Building Footprints							
Excavation, Front End Loader	\$54	\$177	\$48	\$15	\$2		\$89.04/hr per WDEQ Guideline 12 and 150 cy/hr
Quantity to be Shipped (Ft ³)	2,250	7,425	2,000	629	102		Assume removal of 3" of Contaminated Soil under Primary Areas, Disposal at a Licensed facility (ft3)
Weight in Tons	112.5	371.25	100	31.46	5.1		
Quantity per Truck Load (Ton)	21.6	21.6	21.6	21.6	21.6		
Number of Truckloads	5.2	17.2	4.6	1.5	0.2		
Distance (Miles)	646	646	646	646	646		
Transportation Unit Cost (Ton/Mile)	\$0.17	\$0.17	\$0.17	\$0.17	\$0.17		
Transportation Cost	\$12,248	\$40,417	\$10,887	\$3,425	\$555		
Disposal Fee (\$/Ton)	\$150	\$150	\$150	\$150	\$150		Based on Contract Prices
Disposal Cost (\$)	\$16,875	\$55,688	\$15,000	\$4,719	\$765	\$93,047	
Unloading Cost (per Shipment)	\$750	\$750	\$750	\$750	\$750		Based on Contract Prices
Unloading Cost	\$3,906	\$12,891	\$3,472	\$1,092	\$177	\$21,539	
Removal NPDES Pts.							
Quantity to be Shipped (Ft ³)	0	0	0	0	0		Zero discharge facility
Weight in Tons	0	0	0	0	0		
Distance (Miles)	160	160	160	160	160		
Transportation Cost Ton/Mile	\$0.17	\$0.17	\$0.17	\$0.17	\$0.17		
Transportation Cost	\$0	\$0	\$0	\$0	\$0		
Disposal Fee (\$/Ton)	\$350	\$350	\$350	\$350	\$350		Based on Contract Prices
Disposal Cost	\$0	\$0	\$0	\$0	\$0		
Total NPDES Removal Cost	\$0	\$0	\$0	\$0	\$0	\$0	
TOTAL SOILS EXC., TRANSPORT & DISPOSAL	\$20,781	\$68,578	\$18,472	\$5,812	\$942	\$114,586	
RADIATION SURVEY							
Area Required (Acres)	0.21	0.68	0.18	0.06	0.01		
Survey Cost (\$/Acre)	\$674	\$674	\$674	\$674	\$674		
Number of Structures	1	1	1	8	4		
Cost per Structure (\$)	\$253	\$253	\$253	\$253	\$253		
TOTAL RAD SURVEY COST	\$392	\$712	\$377	\$2,061	\$1,017	\$3,542	
TOTAL SOIL REMOVAL & DISPOSAL COST	\$21,173	\$69,291	\$18,849	\$7,873	\$1,960	\$119,145	

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**Worksheet 4 --
Well and Delineation Hole Abandonment**

Cost Item	Mining Unit		Sub Total	Notes
	Nichols #1	Nichols #2		
Number of Wells	507	48		Includes injection, recovery and monitor wells. See Worksheet 1, No.1, Plus 1 Plant water well and 1 domestic well.
Average Depth (ft)	550	550		
Average Diameter (inch)	5	5		
Area of Annulus (ft ²)	0.1364	0.1364		
Materials				
Bentonite Chips Required (Ft ³ /Well)	40.9	40.9		300 feet of clay above water
Bags of Chips Required/Well	55	55		
Cost per Bag (\$)	\$5.30	\$5.30		Actual Cost
Cost/Well Bentonite Chips	\$292	\$292		
Gravel Fill Required (Ft ³ /Well)	\$34	\$34		Avg depth less 300 feet filled w/ gravel
Cost of Gravel/Yd ³	\$22	\$22		Uranerz Cost plus cpi
Cost/Well Gravel Fill	\$28	\$28		
Cement Cone/Markers Req'd/Well	1	1		
Cost of Cement Cones Markers	\$6.74	\$6.74		Actual Cost plus cpi
Total Materials Cost per Well	\$327	\$327		
Labor				
Hours Required per Well	2	2		
Labor Cost per Hour	\$79	\$79		
Total Labor Cost per Well	\$157	\$157		
Equipment Rental				
Hours Required per Well	1	1		
Backhoe w/Operator Cost/Hr	\$67	\$67		
Total Equipment Cost per Well	\$67	\$67		
Total Cost per Well	\$551	\$551		
WELL ABANDONMENT COST	\$279,514	\$26,463	\$305,977	
Number of Delineation Drill Holes	100			
Average Depth (ft)	675			
Sealing Drill Hole (ft)	\$ 3.00			Guideline 12 App. L Costs
Site Grading/Contouring (per site)	\$ 50.00			Guideline 12 App. L Costs
Capping - precast concrete cap (ea)	\$ 10.00			Guideline 12 App. L Costs
Cost Per drill hole	\$ 2,025.00			
Mobilization	\$ 1,000.00			Guideline 12 App. L Cost
Delineation Drill Hole Abandonment	\$203,500			
TOTAL WELL & DELINEATION ABANDONMENT COST	\$483,014			

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Worksheet 5, No. 1 --

WELLFIELD EQUIPMENT REMOVAL & DISPOSAL

Cost Item	Mining Unit Nichols #1	Notes
I Wellfield Piping		
A. Removal		
Total Number of Wells	437	Includes injection and recovery wells. See Worksheet 1, No.1
Feeder lines from HH to Injection wells 1" HDPE (Ft)	47,707	8 header houses
Pregnant solution feeder lines from production wells to HH 1" HDPE (Ft)	33,618	8 header houses
Total Quantity of 1" HDPE Piping (Ft)	81,325	
Plastic Volume (Ft ³)	266.70	Thickness Based on WL Plastics Corp PSI 160 (R1=.05479', R2=.04425')
Chipped Volume Assuming 30% Void Space (Ft ³)	346.71	
Disposal Weight (tons)	13.87	
Quantity per Truck Load (Tons)	21.6	Based on 20 cy per truckload and 80lbs per cf
Total Number of Truck Loads	1	
Total Length of Feeder line Trench (Ft)	27,177	Includes Shared Trenches - 8 header houses
Pipeline Removal Unit Cost (\$/ft of trench)	\$2.53	Quote - Jordan Construction, plus cpi
Total Cost for Trunkline Removal	\$68,699	
Total Cost - Removal	\$68,699	
B. Survey & Decontamination		
Percent Requiring Decontamination	0	No survey or decon needed. Total volume to disposal
Loads for Decontamination	0	
Cost for Decontamination (\$/Load)	\$674	
Cost for Decontamination	\$0	
C. Transport & Disposal		
1.) Landfill		
a. Transportation		
Percent to be Shipped	0%	
Loads to be Shipped	0	
Distance (Miles)	75	
Transportation Cost (Ton/Mile)	\$0.17	
Transportation Cost	\$0	
b. Disposal		
Disposal Fee per Yd ³	\$69	
Yds ³ per Load	20	
Disposal Cost	\$0	
Total Cost - Landfill	\$0	
2.) Licensed Site		
a. Transportation		
Percent to be Shipped	100%	
Loads to be Shipped	1	
Tons to be Shipped	13.87	
Distance (Miles)	646	
Transportation Cost Ton/Mile	\$0.17	
Transportation Cost	\$1,510	
b. Disposal		
Disposal Fee per ton	\$150	Based on Contract Prices
Disposal Cost	\$2,080	
Unloading Cost (per Shipment)	\$750	Based on Contract Prices
Unloading Cost	\$750	
Total Cost - Licensed Site	\$4,340	
Total Cost - Transport & Disposal	\$4,340	
Total Cost - WF Piping Removal & Disposal	\$73,039	

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Worksheet 5, No. II

WELLFIELD EQUIPMENT REMOVAL & DISPOSAL

Cost Item	Mining Unit	Notes
	Nichols #1	
II Production Well Pumps		
A. Pump and Tubing Removal		
Number of Production Wells	207	From Worksheet 1 No I.
Cost of Removal (\$/well)	\$45	
Cost of Removal	\$9,303	
Number of Pumps per Truck Load	180	
Number of Truck Loads (Pumps)	1.15	
Weight of Pumps	21.15	Assume 20 T per truck
B. Survey & Decontamination (Pumps)		
Percent Requiring Decontamination	50%	
Loads for Decontamination	0.58	
Cost for Decontamination (\$/Load)	\$674	
Cost for Decontamination	\$388	
C. Tubing Volume Reduction & Loading		
Length per Well (Ft)	300	
Total Quantity (Ft ³)	203.7	Thickness Based on WL Plastics Corp PSI 160 (R1=.05479', R2=.04425')
Chipped Volume Assuming 30% Void Space (Ft ³)	264.7	
Cost of Removal (\$/Ft)	\$0.03	
Cost of Removal	\$10.11	
Quantity per Truck Load (Ft ³)	540	
Number of Truck Loads	0.38	
D. Transport & Disposal		
1.) Landfill		
a. Transportation		
Percent to be Shipped (Pumps)	50%	
Loads to be Shipped	0.6	
Distance (Miles)	75	
Transportation Ton/Mile	\$0.17	
Transportation Cost	\$157	
b. Disposal		
Disposal Fee per Yd ³	\$69	
Yds ³ per Load	20	
Disposal Cost	\$788	
Total Cost - Landfill	\$945	
2.) Licensed Site		
a. Transportation		
Percent to be Shipped (Pumps)	50%	
Percent to be Shipped (Tubing)	100%	
Loads to be Shipped	0.95	
Distance (Miles)	646	
Transportation Ton/Mile	\$0.17	
Transportation Cost	\$2,239	
b. Disposal		
Disposal Fee per ton	\$150	
Disposal Cost	\$150	Based on Contract Prices
Unloading Cost (per Shipment)	\$750	Based on Contract Prices
Unloading Cost	\$714	
Disposal Cost	\$864	
Total Cost - Licensed Site	\$3,103	
Total Cost - Transport & Disposal	\$4,048	
Total Cost - Pump Removal & Disposal	\$13,748	

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Worksheet 5, No. III

WELLFIELD EQUIPMENT REMOVAL & DISPOSAL

Cost Item	Mining Unit Nichols #1	Notes
III Buried Trunkline		
A. Removal		
Trunk lines from Resin Plant to HH 8" HDPE Pipe (Ft)	38,473	
Pregnant solution trunk lines form HH to Resin Plant 8" HDPE Pipe (Ft)	38,473	
Total Quantity of 8" HDPE Piping (Ft)	76,946	
Plastic Volume (Ft ³)	51,906	Thickness Based on WL Plastics Corp PSI 160 (R1=.7188', R2=.5494')
Chipped Volume Assuming 30% Void Space (Ft ³)	67,478	
Disposal Tons	320	8.315lb/ft per WL Plastics
Quantity per Truck Load (Tons)	21.6	
Total Number of Truck Loads	15	
Total Length of Trunkline Trench (Ft)	38,473	
Pipeline Removal Unit Cost (\$/Ft of trench)	\$2.53	Quote Jordan Construction
Total Cost for Trunkline Removal	\$97,255	
B. Survey & Decontamination		
Percent Requiring Decontamination	0	No survey or decon needed. Total volume to low level disposal
Loads for Decontamination	0	
Cost for Decontamination (\$/Load)	\$674	
Cost for Survey & Decontamination	\$0	
C. Transportation & Disposal		
1.) Landfill		
a. Transportation		
Percent to be Shipped	0%	
Loads to be Shipped	0	
Distance (Miles)	75	
Transportation Cost per Ton/Mile	\$0.17	
Transportation Cost	\$0	
b. Disposal		
Disposal Fee per Yd ³	\$69	
Yds ³ per Load	20	
Disposal Cost	\$0	
Total Cost - Landfill	\$0	
2.) Licensed Site		
a. Transportation		
Percent to be Shipped	100%	
Loads to be Shipped	15	
Tons to be Shipped	319.90	
Distance (Miles)	646	
Transportation Ton/Mile	\$0.17	
Transportation Cost	\$34,827	
b. Disposal		
Disposal Fee per ton	\$150	Based on Contract Prices
Disposal Cost	\$47,985	
Unloading Cost (per Shipment)	\$750	Based on Contract Prices
Unloading Cost	\$11,250	
Total Cost - Licensed Site	\$82,812	
Total Cost Transportation & Disposal	\$82,812	
Total Cost - Buried Trunkline Removal & Disposal	\$180,067	

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Worksheet 5, No. IV

WELLFIELD EQUIPMENT REMOVAL & DISPOSAL

Cost Item	Mining Unit Nichols #1	Notes
IV Manholes		
A. Removal		
Total Quantity	6	
Cost of Removal (\$ Each)	\$ 139.12	
Total Cost of Removal (\$)	\$ 834.72	
Disposal Tons	3.19	
Quantity per Truck Load (Tons)	21.6	Based on 20 cy per truckload and 80lbs per cf
Total Number of Truck Loads	0.28	
B. Survey & Decontamination		No survey or decon needed. Total volume to low level disposal
Percent Requiring Decontamination	0%	
Loads for Decontamination	0	
Cost for Decontamination (\$/Load)	\$652	
Cost for Survey & Decontamination	\$0	
C. Transportation & Disposal		
1.) Landfill		
a. Transportation		
Percent to be Shipped	0%	
Loads to be Shipped	0	
Distance (Miles)	75	
Transportation Cost per Ton/Mile	\$0.16	
Transportation Cost	\$0	
b. Disposal		
Disposal Fee per Yd ³	\$66	
Yds ³ per Load	20	
Disposal Cost	\$0	
Total Cost - Landfill	\$0	
2.) Licensed Site		
a. Transportation		
Percent to be Shipped	100%	
Loads to be Shipped	0.28	
Tons to be Shipped	3.19	
Distance (Miles)	646	
Transportation Ton/Mile	\$0.16	
Transportation Cost	\$336	
b. Disposal		
Disposal Fee per ton	\$150	
Disposal Cost	\$479	
Unloading Cost (per Shipment)	\$750	
Unloading Cost	\$208	
Total Cost - Licensed Site	\$814	
Total Cost Transportation & Disposal	\$814	
Total Cost - Removal & Disposal	\$1,649	
TOTAL WELLFIELD EQUIPMENT REMOVAL & DISPOSAL COST	\$268,504	

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Worksheet 6, No. I

TOPSOIL REPLACEMENT & REVEGETATION

Cost Item	Mining Unit Nichols #1	Notes
I Process Plant and Office Building		
A. Topsoil Handling & Grading		
Affected Area (Acres)	5.2	Plant site is 475' by 475'
Average Affected Thickness (Inch)	6	
Topsoil Volume (Yds ³)	4,178	
Unit Cost (\$/Yds ³)	\$6	Price from Dragstrip Soil Cover Project MT, plus cpi
Sub Total - Topsoil	\$23,471	
B. Radiation Survey & Soil Analysis		
Unit Cost (\$/Acre)	\$674	
Sub Total - Survey & Analysis	\$3,492	
C. Revegation		
Fertilizer (\$/Arec)	\$260.65	Price from Dragstrip Soil Cover Project MT, plus cpi
Seeding Prep & Seeding (\$/Acre)	\$255.03	Price from Dragstrip Soil Cover Project MT, plus cpi
Mulching & Crimping (\$/Acre)	\$112.35	Price from Dragstrip Soil Cover Project MT, plus cpi
Sub Total Cost/Acre	\$628.04	
Sub Total Revegation	\$3,253	
TOTAL PLANT AND OFFICE BUILDING		
TOPSOIL REPLACEMENT & REVEG COST	\$30,216	

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Worksheet 6, Nos. II & III

TOPSOIL REPLACEMENT & REVEGETATION

Cost Item	Mining Unit	Notes
	Nichols #1	
II Wellfields		
A. Topsoil Handling & Grading		
Affected Area (Acres)	12	Equals trench length times 12 feet wide - 8header houses
Average Affected Thickness (Inch)	6	
Topsoil Volume (Yds ³)	9,726	
Unit Cost - Haul/Place/Grading (\$/Yds ³)	\$5.62	Price from Dragstrip Soil Cover Project MT, plus cpi
Sub Total - Topsoil	\$54,635	
B. Radiation Survey & Soil Analysis		
Unit Cost (\$/Arec)	\$674	
Sub Total - Survey & Analysis	\$8,128	
C. Spill Cleanup		
Affected Area (Acres)	0.06	calculated that 10% of the affected acreage may require cleanup
Affected Area (Ft ²)	2614	
Affected Area Thickness (Ft)	0.25	
Affected Volume (Ft ³)	653.4	
Quantity per Truckload (Ft ³)	540	
Quantity to be Shipped (Loads)	1.21	
Distance (Miles)	646	
Transportation Cost per Ton/Mile	\$0.17	
Transportation Cost	\$2,845	
Handling Cost (\$/Load)	\$200	
Handling Cost	\$242	
Disposal Fee (\$/Ton)	\$350	
Disposal Cost	\$9,148	
Sub Total - Spill Cleanup	\$12,235	
D. Revegation		
Fertilizer (\$/Acre)	\$260.65	Price from Dragstrip Soil Cover Project MT
Seeding Prep & Seeding (\$/Acre)	\$255.03	Price from Dragstrip Soil Cover Project MT
Mulching & Crimping (\$/Acre)	\$112.35	Price from Dragstrip Soil Cover Project MT
Sub Total Cost/Acre	\$628.04	
Sub Total Revegation	\$7,610	
Sub Total - Wellfields	\$82,607	
TOTAL WELLFIELDS COST	\$82,607	
III Roads		
A. Topsoil Handling & Grading		
Affected Area (Acres)	3.44	2500 feet by 60 feet wide
Average Affected Thickness (Ins)	6	
Topsoil Volume (Yds ³)	2,778	
Unit Cost - Haul/Place/Grading (\$/cy)	\$5.62	Price from Dragstrip Soil Cover Project MT
Sub Total - Topsoil	\$15,604	
B. Radiation Survey & Soil Analysis		
Unit Cost (\$/Ac)	\$674	
Sub Total - Survey & Analysis	\$2,321	
C. Revegation		
Fertilizer (\$/Ac)	\$261	Price from Dragstrip Soil Cover Project MT
Seeding Prep & Seeding (\$/Ac)	\$255	Price from Dragstrip Soil Cover Project MT
Mulching & Crimping (\$/Ac)	\$112	Price from Dragstrip Soil Cover Project MT
Sub Total Cost/Acre	\$628	
Sub Total Revegation	\$2,163	
Sub Total - Roads	\$20,088	
TOTAL ROADS COST	\$20,088.11	

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Worksheet 6, Nos IV & V

TOPSOIL REPLACEMENT & REVEGETATION

Cost Item	Mining Unit	Notes
	Nichols #1	
IV Other		
A. Topsoil Handling & Grading		
Affected Area (Acres)	0.02	11e2 Byproduct staging area
Average Affected Thickness (Inch)	6	
Topsoil Volume (Yds ³)	16	
Unit Cost - Haul/Place/Grading (\$/Acre)	\$5.62	Price from Dragstrip Soil Cover Project MT
Sub Total - Topsoil	\$91	
B. Radiation Survey & Soil Analysis		
Unit Cost (\$/Acre)	\$674	
Sub Total - Survey & Analysis	\$13	
C. Revegation		
Fertilizer (\$/Ac)	\$260.65	Price from Dragstrip Soil Cover Project MT
Seeding Prep & Seeding (\$/Acre)	\$255.03	Price from Dragstrip Soil Cover Project MT
Mulching & Crimping (\$/Acre)	\$112.35	Price from Dragstrip Soil Cover Project MT
Sub Total Cost/Acre	\$628.04	
Sub Total Revegation	\$13	
Sub Total - Other	\$117	
TOTAL OTHER COST	\$117	
V Remedial Action		
A. Topsoil Handling & Grading		
Affected Area (Acres)	0	Assume no spills
Average Affected Thickness (Inch)	3	
Topsoil Volume (Yds ³)	0	
Unit Cost - Haul/Place/Grading (\$/Yds ³)	\$5.62	Price from Dragstrip Soil Cover Project MT
Sub Total - Topsoil	\$0	
B. Radiation Survey & Soil Analysis		
Unit Cost (\$/Acre)	\$674	
Sub Total - Survey & Analysis	\$0	
C. Revegation		
Fertilizer (\$/Acre)	\$260.65	Price from Dragstrip Soil Cover Project MT
Seeding Prep & Seeding (\$/Acre)	\$255.03	Price from Dragstrip Soil Cover Project MT
Mulching & Crimping (\$/Arec)	\$112.35	Price from Dragstrip Soil Cover Project MT
Sub Total Cost/Acre	\$628.04	
Sub Total Revegation	\$0	
TOTAL REMEDIAL ACTION	\$0	
TOTAL TOPSOIL REPLACEMENT & REVEGETATION COST (Total of 7I through 7V)	\$133,028	

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Worksheet 7, Nos I - VII

MISCELLANEOUS RECLAMATION

Cost Item		Mining Unit	Notes
		Nichols #1	
I	Fence Removal & Disposal		
	Quantity (Ft)	8,558	
	Cost of Removal/Disposal (\$/Ft)	\$0.39	Demolition Unit Cost per WDEQ Guideline No.12, App. H, 2013
	Cost of Removal/Disposal (\$)	\$3,338	
II	Powerline Removal & Disposal		
	Quantity (Ft)	160,460	Power to Wells, header houses. Other power already in place by CBM companies
	Cost of Removal/Disposal (\$/Ft)	\$0	Lines buried in pipe trenches. Excavation costs covered on Sheets 6I and 6III. Assume salvage of wire at no cost.
	Cost of Removal/Disposal (\$)	\$0	
III	Powerpole Removal & Disposal		
	Quantity	0	Overhead powerpoles and lines will remain in place for future gas production
	Cost of Removal/Disposal (\$/Each)	0	
	Cost of Removal/Disposal (\$)	\$0.00	
IV	Transformer Removal & Disposal		
	Quantity	0	Tri-County Electric will remove at no cost, WDEQ Guideline No.12, App. H
	Cost of Removal/Disposal (\$/Each)	0	
	Cost of Removal/Disposal (\$)	0	
V	Culvert Removal & Disposal		
	Quantity (Ft)	150	7, 20 ft culverts, 1-10 ft. culvert (\$139.12/20') WDEQ Guideline No.12, App. J 2013
	Cost of Removal/Disposal (\$/Ft)	\$7.55	
	Cost of Removal/Disposal (\$)	\$1,132.05	
VI	Guardrail Removal		
	Quantity (Ft)	0	None
	Cost of Removal/Disposal (\$/Ft)	\$7.30	
	Cost of Removal/Disposal (\$)	\$0	
VII	Low Water Stream Crossing		
	Quantity	0	None
	Cost of Removal/Disposal (\$/Each)	\$8,988	
	Cost of Removal/Disposal (\$)	\$0	
	TOTAL MISCELLANEOUS COST	\$4,470	