

2013 Bond Rate Guidelines for the Calculation of Land Reclamation Bonds on Coal Mining Operations

MRAB July 12, 2012

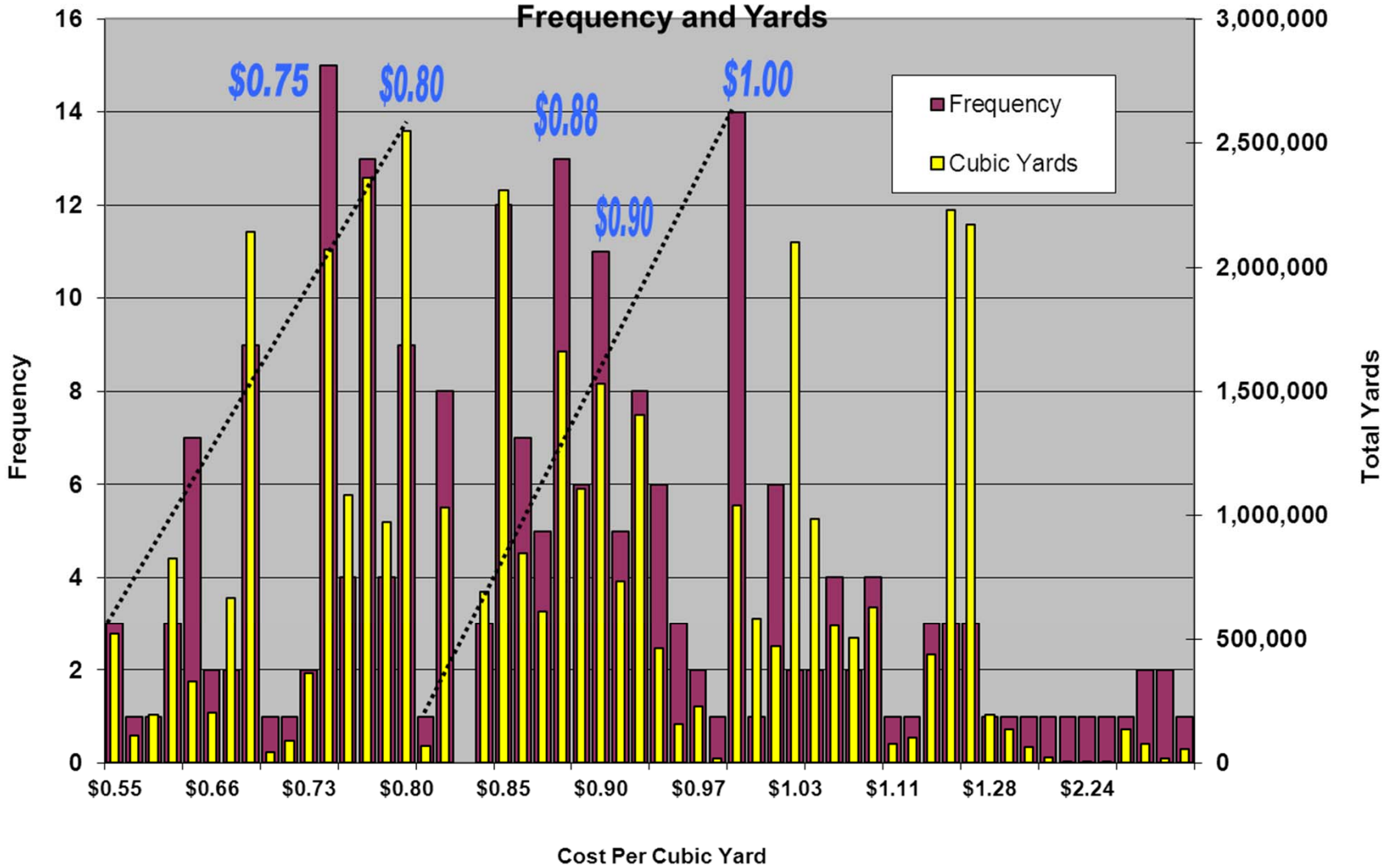
2012 AML Reclamation Grading Costs - 3 Lowest Project Bids

	DESCRIPTION	QUANTITIES	UNIT PRICE	TOTAL	UNIT PRICE	TOTAL	UNIT PRICE	TOTAL
Reclamation Project	Task	Cubic Yards	Cost per CY	Low Project Bid	Cost per CY	2nd Project Bid	Cost per CY	3rd Project Bid
OSM 16(0886,3316)101.1	A. Site "A"	63,000	\$0.91	\$57,330.00	\$0.95	\$59,850.00	\$0.90	\$56,700.00
	B. Site "B"							
	1. Standard Grading	66,000	\$1.02	\$67,320.00	\$0.95	\$62,700.00	\$1.05	\$69,300.00
OSM 24(3888)101.1	A. Area A	109,983	\$0.78	\$85,786.74	\$0.91	\$100,084.53	\$0.88	\$96,785.04
	B. Area B	58,324	\$0.79	\$46,075.96	\$0.91	\$53,074.84	\$0.87	\$50,741.88
	C. Area C	59,458	\$0.79	\$46,971.82	\$0.89	\$52,917.62	\$0.87	\$51,728.46
	D. Area D	40,596	\$0.80	\$32,476.80	\$0.88	\$35,724.48	\$0.82	\$33,288.72
	E. Area E	16,743	\$0.82	\$13,729.26	\$0.88	\$14,733.84	\$0.78	\$13,059.54
OSM 40(2138)104.1	A) Grading Area A	4,850	\$1.43	\$6,935.50	\$1.50	\$7,275.00	\$2.50	\$12,125.00
	B) Grading Area B to Grading Area A	1,400	\$3.59	\$5,026.00	\$1.70	\$2,380.00	\$6.00	\$8,400.00
	C) Grading Area C	37,800	\$1.43	\$54,054.00	\$1.50	\$56,700.00	\$3.50	\$132,300.00
	D) Grading Area C to Grading Area A	45,750	\$3.59	\$164,242.50	\$1.85	\$84,637.50	\$6.00	\$274,500.00
OSM 43(0471)101.1	Grading	47,915	\$0.85	\$40,727.75	\$1.10	\$52,706.50	\$0.70	\$33,540.50
OSM 56(4727)101.1	A. Grading Areas 1-3	218,000	\$0.73	\$159,140.00	\$1.00	\$218,000.00	\$0.88	\$191,840.00
	B. Grading Area 4	12,000	\$2.75	\$33,000.00	\$1.00	\$12,000.00	\$0.88	\$10,560.00
OSM 40(4060)101.1	A) Grading Area A	135,400	\$1.37	\$185,498.00	\$1.25	\$169,250.00	\$2.72	\$368,288.00
	B) Grading Area B	77,700	\$1.18	\$91,686.00	\$1.10	\$85,470.00	\$2.72	\$211,344.00
OSM 54(4148,4665)101.1	A) Grading Area A	2,075,600	\$1.03	\$2,137,868.00	\$1.25	\$2,594,500.00	\$1.20	\$2,490,720.00
	B) Grading Area B	89,400	\$0.70	\$62,580.00	\$1.25	\$111,750.00	\$1.19	\$106,386.00
	C) Grading Area C	6,300	\$2.75	\$17,325.00	\$1.25	\$7,875.00	\$2.24	\$14,112.00
7		3,166,219	\$1.19	\$3,781,629.31		\$4,225,719.14	\$1.19	\$3,771,707.26
		3,013,419	\$1.18	\$3,570,786.81		\$3,741,694.14	\$1.14	\$3,445,897.43

Total Grading Costs for 2010 - 2011

Unit Cost	2010 Total CY	2010 Freq	2011 Total CY	2012 Freq	2012 Total CY	2012 Freq	Combined Total CY	Combined Freq			
\$0.55	492,717	2	29,370	1			522,087	3	\$287,148		
\$0.57	108,896	1					108,896	1	\$62,071		
\$0.58			193,705	1			193,705	1	\$112,349		
\$0.60	676,866	2	152,000	1			828,866	3	\$497,320		
\$0.65			328,170	7			328,170	7	\$213,311		
\$0.66	180,131	1	23,750	1			203,881	2	\$134,561		
\$0.69	452,200	1	215,000	1			667,200	2	\$460,368		
\$0.70	1,605,960	3	400,152	4	137,317	2	2,143,429	9	\$1,500,400		
\$0.71			44,291	1			44,291	1	\$31,447		
\$0.72			91,500	1			91,500	1	\$65,880		
\$0.73			142,101	1	218,000	1	360,101	2	\$262,874		
\$0.75	856,149	4	1,216,520	11			2,072,669	15	\$1,554,502		
\$0.77	676,000	2	405,053	2			1,081,053	4	\$832,411		
\$0.78	1,892,910	6	340,335	5	126,726	2	2,359,971	13	\$1,840,777		
\$0.79	403,405	1	451,405	1	117,782	2	972,592	4	\$768,348		
\$0.80	1,936,971	4	572,260	4	40,596	1	2,549,827	9	\$2,039,862	14,528,238	\$0.73
\$0.81			70,000	1			70,000	1	\$56,700		
\$0.82			976,495	6	57,339	2	1,033,834	8	\$847,744		
\$0.83	691,650	3							\$580,986		
\$0.84			193,705	1			691,650	3	\$1,961,469		
\$0.85	1,654,339	6	608,075	5	47,915	1	2,310,329	12	\$1,961,469		
\$0.86	631,199	5	218,370	2			849,569	7	\$730,629		
\$0.87	299,000	1	195,500	2	117,782	2	612,282	5	\$532,685		
\$0.88	912,520	3	558,636	5	191,122	5	1,662,278	13	\$1,462,805		
\$0.89	892,574	4	162,000	1	54,458	1	1,109,032	6	\$987,038		
\$0.90	859,390	3	610,500	7	63,000	1	1,532,890	11	\$1,378,068		
\$0.91	505,200	2			231,307	3	736,507	5	\$670,221		
\$0.92	886,700	1	520,550	7			1,407,250	8	\$1,294,670		
\$0.95			332,010	4	129,000	2	461,010	6	\$437,960		
\$0.96			158,500	3			158,500	3	\$152,160		
\$0.97	229,000	2					229,000	2	\$222,130		
\$0.99			17,500	1			17,500	1	\$17,325		
\$1.00	114,500	1	696,070	11	230,000	2	1,040,570	14	\$1,040,570	13,922,201	\$1.03

2010 - 2012 Frequency and Yards



Summary of Calculated Bond Rates by Task

Proposed Rates

Unit	2010 wgt ave	2010 amt	2011 wgt ave	2011 amt	2012 wgt ave	2012 amt	10-12 Weighted	2011	2012	2013
Grading1 Yd	\$0.86	7,275,224	\$0.82	3,452,835	\$1.14	3,013,419	\$0.91	\$0.80	\$0.75	
Grading2 Yd								\$1.00	\$1.00	
Select Grading Acre			\$1,545.00	11.7				\$1,050.00	\$1,075.00	
Reveg Acre	\$1,335.25	715.5	\$1,757.21	328.6	\$1,821.63	80.0	\$1,493.21	\$1,470.00	\$1,500.00	\$1,500.00
Trees each	\$2.55	18,334.0	\$2.27	55,190.0						
Ditch Ex Yd	\$4.93	17,457.0	\$6.96	6,125.0				\$4.25	\$5.00	
Jute sq yd	\$3.70	4,407.0	\$2.95	1,305.0				\$3.50	\$3.50	
HV Erosion sq yd	\$2.86	17,000.0	\$3.94	1,835.0				\$3.00	\$3.00	
AASHTO No. 1 Ton	\$17.43	200.0	\$30.18	1,470.0				\$24.00	\$30.00	
AASHTO No. 5' Ton	\$17.35	51.0	\$25.99	24.0				\$25.00	\$25.00	
R3 sq yd			\$25.83	55.0				\$26.00	\$26.00	
R4 sq yd	\$22.50	1,540.0	\$27.63	1,500.0				\$20.00	\$21.00	
R5 sq yd	\$23.17	1,980.0	\$34.33	95.0				\$20.00	\$23.00	
Geotex sq yd	\$2.59	520.0	\$3.03	2,760.0				\$1.75	\$3.00	
PVC lining sq yd			\$12.18	1,200.0				\$12.00	\$12.00	
Lime Ton	\$38.42	2,072.5	\$44.96	1,756.7						
Subdrain foot	\$15.60	12,360.0	\$22.07	1,050.0				\$16.00	\$16.00	
Mulch Acre	\$650.80	547.0	\$779.15	337.8	\$746.84	68.1	\$703.16			
Seed Bed Prep Acre	\$177.12	550.1	\$213.05	356.6	\$206.55	57.6	\$192.16			
Seed Acre	\$227.73	593.2	\$300.27	467.2	\$353.21	64.6	\$265.06			

	2011	2011	2012	2012	2013	2013
Reveg Tot	\$1,470.00	\$1,470.00	\$1,500.00	\$1,500.00	\$1,500.00	\$1,500.00
Mulch	\$625.00	\$625.00	\$665.00	\$665.00	\$700.00	\$700.00
Seed Bed	\$195.00	\$195.00	\$195.00	\$195.00	\$190.00	\$190.00
Seed	\$195.00		\$220.00		\$265.00	
	\$455.00	\$650.00	\$420.00	\$640.00	\$345.00	\$610.00
	Cropland	w/Seed	Cropland	w/seed	Cropland	w/seed