



pennsylvania

DEPARTMENT OF ENVIRONMENTAL PROTECTION



Bureau of Mining Programs

2017 Bond Rate Guidelines for the Calculation of Land Reclamation Bonds on Coal Mining Operations

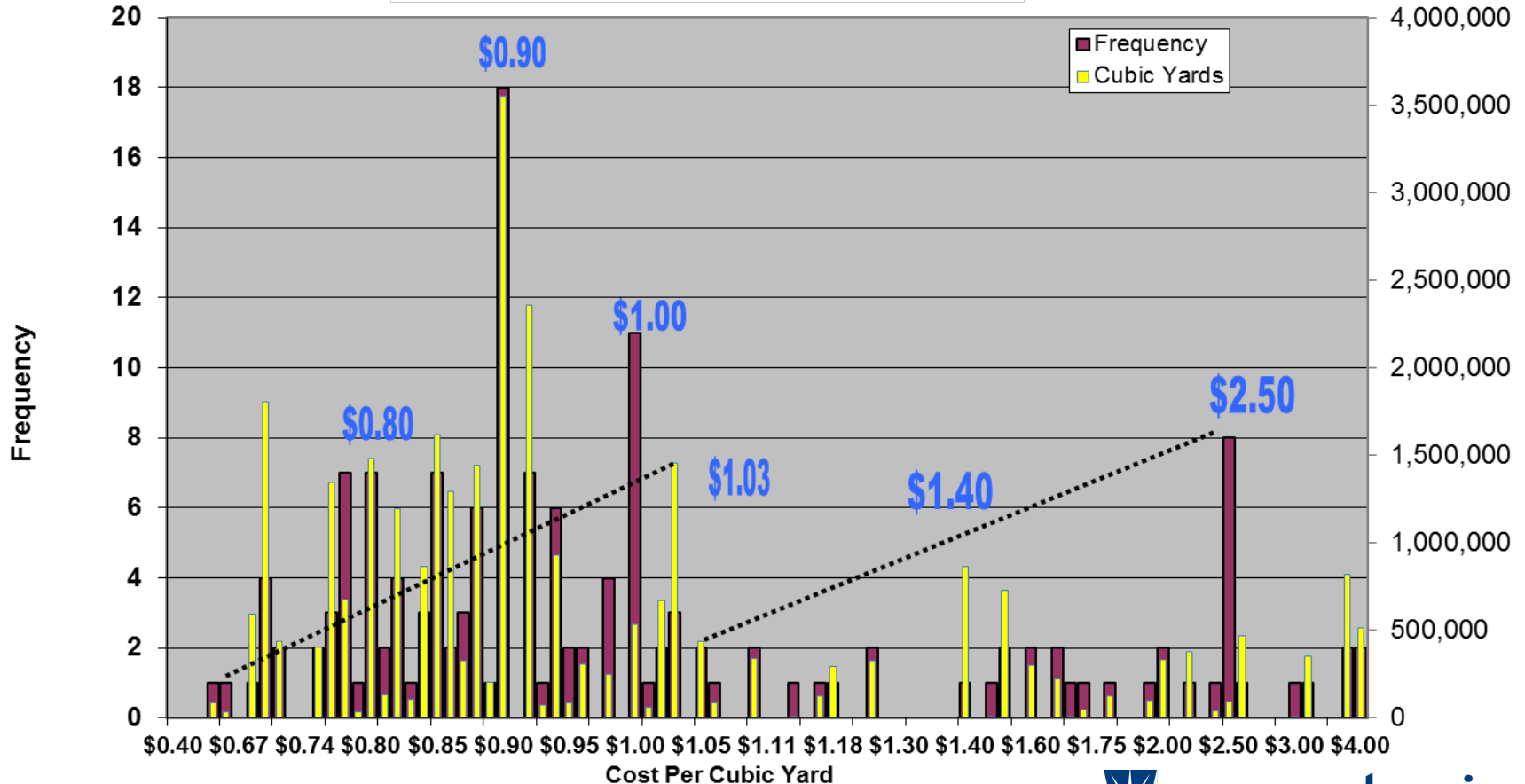
MRAB Meeting
January 19, 2017

2016 AML Reclamation Grading Costs

- 6 reclamation projects with 1,728,269 total cubic yards
- Cost per cubic yard ranged from \$0.62 to \$2.25
- 3 low bid averages at \$0.91, \$1.06, and \$1.16 for a weighted average of \$1.03
- 2014 – 2016 weighted average at \$0.95 for 500 ft. or less

2014-2016 AML Reclamation Grading Costs

2014 - 2016 Grading Frequency and Yards



2016 AML Reclamation Revegetation Costs

- 9 reclamation projects with 284.8 acres revegetation
- Cost per acre of the 3 lowest bids ranged from \$808.63 to \$2,838.65
- Weighted average of 3 lowest bids was \$2,129.80

2016 AML Reclamation Mulch, Seed Bed Preparation and Seed Costs

- Mulch cost per acre of 3 lowest bids was \$886.72
- 3 year weighted average of Mulch cost is \$868.05
- Seed Bed Prep cost per acre of 3 lowest bids at \$329.10
- 3 year weighted average of Seed Bed Prep is \$279.57
- Seed cost per acre of 3 lowest bids at \$250.95
- 3 year weighted average of Seed is \$281.85

2014-2016 Bond Rate Data

2017 Bond Rates

	Unit	2014 wgt ave	2014 amt	2015 wgt ave	2015 amt	2016 wgt ave	2016 amt	14-16 Weighted	2014	2015	2016	2017
Grading1	Yd	\$0.93	4,986,857	\$0.95	3,047,579	\$1.03	1,728,269	\$0.95	\$0.90	\$0.95	\$0.90	\$0.90
Grading2	Yd			\$3.17	913,610				\$1.20	\$1.20	\$1.50	\$1.55
Select Grading	Acre	\$1,780.00	23.0						\$1,075.00	\$1,250.00	\$1,700.00	\$1,700.00
Reveg	Acre	\$1,844.99	540.0	\$1,977.18	223.3	\$2,129.84	284.8	\$1,950.55	\$1,800.00	\$1,900.00	\$1,900.00	\$1,950.00
Trees	each	\$2.08	110,576.0	\$2.41	124,450.0	\$3.60	38,581.0	\$2.44	\$0.15	\$0.75	\$0.75	\$0.75
Ditch Ex	Yd	\$6.24	12,474	\$6.59	11,318	\$6.88	33,075	\$6.68	\$7.00	\$7.00	\$6.25	\$6.70
Jute	sq yd	\$3.96	31,750	\$2.58	3,195	\$1.24	3,890	\$3.58	\$3.80	\$4.00	\$3.80	\$3.50
HV Erosion	sq yd			\$2.97	3,875	\$3.03	2,315	\$2.99	\$3.80	\$3.80	\$3.00	\$3.00
AASHTO No. 1	Ton	\$24.70	933	\$22.22	1,665	\$32.81	175	\$23.73	\$29.00	\$29.00	\$29.00	\$23.00
AASHTO No. 57	Ton	\$39.35	43	\$26.52	\$28.67	\$33.88	228	\$33.95	\$30.00	\$30.00	\$33.00	\$32.00
R3	Ton	\$36.00	1					\$36.00	\$33.00	\$33.00	\$37.00	\$36.00
R4	Ton	\$23.96	41.2	\$32.16	65.0	\$40.95	56.0	\$33.11	\$25.00	\$25.00	\$28.00	\$30.00
R5	Ton	\$26.15	2,955	\$32.20	32	\$41.67	32	\$26.37	\$25.00	\$27.00	\$27.00	\$27.00
Geotex	sq yd	\$4.68	280	\$2.24	4,415	\$2.77	400	\$2.42	\$2.80	\$2.80	\$2.50	\$2.50
PVC lining	sq yd								\$12.00	\$12.00	\$12.00	\$12.00
Lime	Ton	\$44.75	1,639	\$50.75	1,000	\$52.08	946	\$48.36				
Subdrain	foot	\$20.52	13,456	\$23.15	2,065	\$23.15	2,725	\$21.21	\$19.00	\$19.00	\$20.00	\$20.00

2014-2016 Bond Rate Data

2017 Bond Rates (continued)

Mulch	Acre	\$865.31	442.8	\$853.13	288.0	\$886.72	295.1	\$868.05
Seed Bed Prep	Acre	\$304.43	408.8	\$179.94	250.1	\$329.10	297.8	\$279.57
Seed	Acre	\$326.15	656.3	\$256.74	476.6	\$250.95	553.4	\$281.85

	2015	2015	2016	2016	2017	2017
Reveg Tot	\$1,900.00	\$1,900.00	\$1,900.00	\$1,900.00	\$1,950.00	\$1,950.00
Mulch	\$800.00	\$800.00	\$850.00	\$850.00	\$870.00	\$870.00
Seed Bed	\$250.00	\$250.00	\$250.00	\$250.00	\$280.00	\$280.00
Seed	\$300.00		\$300.00		\$280.00	
	\$550.00	\$850.00	\$500.00	\$800.00	\$520.00	\$800.00
	Pasture	w/seed	Pasture	w/seed	Pasture	w/seed



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