



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

July 21, 2016

# 2016 AML Reclamation Grading Costs

- 1 reclamation project with 379,269 total cubic yards
- Cost per cubic yard ranged from \$0.77 to \$0.96
- 3 low bid averages at \$0.81, \$0.90, and \$0.94 for a weighted average of \$0.88
- Current 2014 – 2016 weighted average at \$0.93 for 500 ft. or less
- 2 more reclamation projects open for bid with total grading of 288,000 cubic yards

# 2016 AML Reclamation Revegetation Costs

- 4 reclamation projects with 197.2 acres revegetation
- Cost per acre of the 3 lowest bids ranged from \$808.63 to \$3,312.26
- Weighted average of 3 lowest bids was \$1,680.34

# 2016 AML Reclamation Mulch, Seed Bed Preparation and Seed Costs

- Mulch cost per acre of 3 lowest bids was \$918.32
- 3 year weighted average of Mulch cost is \$872.79
  
- Seed Bed Prep cost per acre of 3 lowest bids at \$308.92
- 3 year weighted average of Seed Bed Prep is \$269.10
  
- Seed cost per acre of 3 lowest bids at \$288.57
- 3 year weighted average of Seed is \$294.90

# 2014-2016 Bond Rate Data 2017 Projected with Current Data

|                | Unit | 2014 wgt<br>ave | 2014 amt  | 2015 wgt<br>ave | 2015 amt  | 2016 wgt<br>ave | 2016 amt | 14-16<br>Weighted | 2015       | 2016       | 2017       |
|----------------|------|-----------------|-----------|-----------------|-----------|-----------------|----------|-------------------|------------|------------|------------|
| Grading1       | Yd   | \$0.93          | 4,986,857 | \$0.95          | 3,047,579 | \$0.88          | 379,269  | \$0.93            | \$0.95     | \$0.90     | \$0.90     |
| Grading2       | Yd   |                 |           | \$3.17          | 913,610   |                 |          |                   | \$1.20     | \$1.50     | \$1.55     |
| Select Grading | Acre | \$1,780.00      | 23.0      |                 |           |                 |          |                   | \$1,250.00 | \$1,700.00 |            |
| Reveg          | Acre | \$1,844.99      | 540.0     | \$1,977.18      | 223.3     | \$1,680.34      | 197.2    | \$1,841.91        | \$1,900.00 | \$1,900.00 | \$1,850.00 |
| Mulch          | Acre | \$865.31        | 442.8     | \$853.13        | 288.0     | \$918.32        | 197.0    | \$872.79          |            |            |            |
| Seed Bed Prep  | Acre | \$304.43        | 408.8     | \$179.94        | 250.1     | \$308.92        | 197.2    | \$269.10          |            |            |            |
| Seed           | Acre | \$326.15        | 656.3     | \$256.74        | 476.6     | \$288.57        | 366.2    | \$294.90          |            |            |            |

# 2014-2016 Bond Rate Data 2017 Projected with Current Data

|                 | 2015           | 2015          | 2016           | 2016          | 2017           | 2017          |
|-----------------|----------------|---------------|----------------|---------------|----------------|---------------|
| <b>Reveg</b>    | \$1,900.00     | \$1,900.00    | \$1,900.00     | \$1,900.00    | \$1,850.00     | \$1,850.00    |
| <b>Mulch</b>    | \$800.00       | \$800.00      | \$850.00       | \$850.00      | \$870.00       | \$870.00      |
| <b>Seed Bed</b> | \$250.00       | \$250.00      | \$250.00       | \$250.00      | \$270.00       | \$270.00      |
| <b>Seed</b>     | \$300.00       |               | \$300.00       |               | \$300.00       |               |
|                 | \$550.00       | \$850.00      | \$500.00       | \$800.00      | \$410.00       | \$710.00      |
|                 | <b>Pasture</b> | <b>w/seed</b> | <b>Pasture</b> | <b>w/seed</b> | <b>Pasture</b> | <b>w/seed</b> |



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