



DEAN || DORTON || ALLEN || FORD
PLLC

Market Changes Enhancing Mining Engineer's Role in Accounting

William J. Kohm, Audit Director
(bkohm@ddafcpa.com)

Justin Hubbard, Audit Manager
(jhubbard@ddafcpa.com)

August 17, 2012

DEAN
DORTON
ALLEN
FORD
PLLC

*Natural Resources
and Energy Team
Powering Your Success*

Bill Kohm & Justin Hubbard collectively have over 20 years of financial mining experience in the following areas:

- accounting
- tax
- financial statement audit
- public company reporting
- internal controls
- acquisition accounting
- litigation support

Agenda

- Q2 Mining Company Financial Results
- An Engineer's Impact on Accounting
- Reclamation Accounting
- New Accounting Standards
- Questions



Q2 Mining Company Financial Results

Q2 Mining Company Financial Results

- Patriot Coal filed for Chapter 11 Bankruptcy Protection.
- Arch Coal recorded Q2 goodwill, mine closure and asset impairment charges of **\$642 million**, reflects idling 5 operations in App and weak coal market conditions.
- Alpha recorded Q2 impairment charges of **\$2.5 billion**, reflecting write-down of goodwill relating to Massey acquisition and impaired mineral reserves and PPE in Eastern Coal Operations.
- Consol took a **\$32 million** Q2 reclamation and selenium charge at the Fola Complex which has been idled due to increased costs and uncertainty over Central App coal.
- Alliance Resources posted record EBITDA, sales volumes and revenue during Q2 enhanced by its Illinois Basin and Northern App operations.

Q2 Mining Company Results

| In '000s | Alpha Natural Resources | | James River Coal | | Arch Coal | | Rhino | | Average change from Q2 2011 |
|-------------------|-------------------------|---|------------------|--|------------|----|----------|--|--------------------------------|
| Net income (loss) | \$-2,263,422 | * | \$-220 | | \$-434,283 | ** | \$21,970 | | -3,960% (-351% w/o impairment) |
| EBITDA | \$396,904 | | \$52,082 | | \$360,748 | | \$47,200 | | -25% |
| Return on sales | -71% | | -8% | | -21% | | 15% | | -32% |
| Current ratio | 1.34 | | 2.73 | | 1.97 | | 1.48 | | 24% |

- Includes \$2.5 billion impairment
- ** Includes \$642 million impairment



Engineer's Impact on Accounting

Engineers' Impact on Accounting

1. **Mine Plan**
2. **Reclamation Liability Inputs**
3. **Mineral Reserve Estimates**
4. **Coal Inventory Surveys (quantity and quality)**
5. **Long-term Asset Impairment Model**

Mine Plan

Estimated Production by Year

| Mine | Status | 2013 | 2014 | 2015 |
|---------|--------|---------|---------|---------|
| Mine #1 | Closed | 0 | 0 | 0 |
| Mine #2 | Active | 500,000 | 400,000 | 0 |
| Mine #3 | Idle | 0 | 0 | 500,000 |

Mine Plan

Mineral Reserve Estimates

| Mine | Mineral (Tons) | Book Mineral Costs | Depletion Rate | Impairment |
|-------------|----------------|--------------------|----------------|------------|
| Mine #1 {C} | 0 | \$500,000 | 0 | \$500,000 |
| Mine #2 {A} | 900,000 | \$1,800,000 | \$2/ton | 0 |
| Mine #3 {I} | 1,000,000 | \$500,000 | \$0.50 | ???? |



Reclamation Accounting

Reclamation Terms

- **End of Mine** - disturbed area at completion of mining
- **Point in Time** - disturbed area at current date; what it would cost to reclaim current conditions
- **Contemporaneous** - reclamation completed as part of normal mining activity
- **Water treatment obligations** - perpetual costs to treat water areas

Reclamation Accounting

- Discounted Cash Flow Valuation Technique
- Engineering Valuation Inputs
 - End of mine reclamation cost estimate by permit (based on industry and company cost standards and estimate of area disturbed and completion of 3 bond phases)
 - Timing of end of mine reclamation payments

End of Mine Reclamation Model

Engineering Inputs

| Mine | Estimated Reclamation Costs | 2013 | 2014 | 2015 to 2020 |
|-------------|-----------------------------|-------------|-------------|--------------|
| Mine #1 {C} | \$5,000,000 | \$3,000,000 | \$1,000,000 | \$1,000,000 |
| Mine #2 {A} | \$2,500,000 | \$0 | \$0 | \$2,500,000 |
| Mine #3 {I} | \$1,000,000 | \$500,000 | \$250,000 | \$250,000 |

Reclamation Accounting

7 Best Practices

1. End of Mine Valuation model properly established and maintained
2. Management approves key inputs into model
3. Third party engineering reports used on a periodic basis (at least every third year)
4. Accounting provided listing of all new disturbances by engineering on a regular basis (cross check that all disturbed permits are included)

Reclamation Accounting Best Practices (cont.)

5. Interim EOM Studies
6. Timing of expected future EOM payments should be consistent with mine plan
7. Status of job as active/closed/idle (may start back up) very important

New Accounting Standards

International Accounting Changes

- *IFRIC 20 Stripping Costs in the Production Phase of a Surface Mine (January 1, 2013)*

IFRIC 20 Stripping Costs in the Production Phase of a Surface Mine

- Accounting issues regarding waste removal costs incurred in surface mining activities during the production phase of a mine, referred to as production stripping costs.
- **Engineers need to work with Accounting in 2012 to collect data to allow for retrospective accounting treatment to January 1, 2012**
- US GAAP- costs are part of coal inventory and are expensed upon sale of coal

Accounting & Market Changes Impacting Mining Companies

DEAN
DORTON
ALLEN
FORD
PLLC

*Natural Resources
and Energy Team
Powering Your Success*

Questions?

William J. Kohm, Audit Director
(bkohm@ddafcpa.com)

Justin Hubbard, Audit Manager
(jhubbard@ddafcpa.com)