OSM Bonding Program

This is very timely discussion on an important part of OSM's surface coal mining program.

This presentation is about OSM's bonding program as it works under the Surface Mining Control and Reclamation Act. Most of the focus will be on bond adequacy, and it also will touch on a couple of aspects of the bond administration side of the program that addresses different types of bonds.

- First, explain the SMCRA bonding program (this part is mostly for the hardrock folks to provide a basic understanding of our program),
- Second, talk about our oversight activities in the States, and
- End with noting some of OSM's current concerns and focus.
- Will not address bond release and its associated issues.

SMCRA Bonding Program

Bonding is the backbone of the SMCRA Program. It provides the assurance that reclamation will be completed if an operator is unable to do so. On its surface, the statute is very clear and simple – have enough money on hand at any time to cover the cost of reclamation to complete the reclamation plan.

- The statute, in section 509, and the regulations, in 30 CFR Part 800, specify OSM's performance bond requirements.
- We also have two directives that apply to OSM bonding activities in Federal Programs and on Indian Lands,
    - Directive TSR-1, our Handbook for Calculation of Reclamation Bond Amounts goes into great detail and has several worksheets, and
    - Directive REG-28, Bond Forms and Procedures, provides policy and procedures for accepting, retaining, and returning performance bonds and includes illustrations of different bond forms.

In Federal Program States – Tennessee and Washington, and on Indian Lands (Arizona, Montana, and New Mexico) OSM is the regulatory authority who does the permitting, calculates bonds, and does inspections.

In primacy States – 24 States that have approved regulatory programs, OSM does oversight to ensure states are effectively implementing their approved programs.

How does OSM determine the bond amount?

After finishing the permit review process on an application, we use the application's operations and reclamation plan and do calculations to determine the total cost for a third party to reclaim the site at any time, this becomes the bond amount.

- OSM does worst case bonding: determine the point of the maximum reclamation cost liability. In surface mining – examples of this can be the longest pit or deepest pit, the largest area of prime farmland, or halfway across a mountaintop.
- Also, the bond calculation assumes compliance with all program requirements – we do not bond with an assumption of failure. However, when there is a failure – such as AMD or acid/toxic materials, an adjustment is needed – more on that later.
- We use the Bonding Handbook mentioned earlier. Much of the handbook is worksheets that we have converted into excel spreadsheets. Several States have developed electronic bond calculation programs. We believe that Montana has developed one as part of their e-permitting system that may be the current state of the art.

What do we look at in doing a bond calculation?

Direct Costs

- Structure Demolition and Disposal (wash plants, coal dumps, etc.)
- Earth Moving
    - Volumes (spoil and topsoil, one of the largest cost items)
    - Haul Distance
    - Grade Estimates
    - Equipment Selection, Equipment Productivity and Costs (CAT Handbook, Means Guide, Davis Bacon Wages, etc.)
- Revegetation (seedbed prep, fertilizing, seeding, tree planting, mulching costs)
- Other Direct Costs (Water treatment, water sampling and monitoring, plugging auger holes, sealing monitoring wells, etc.)

Inflation Adjustment – two approaches: build in an inflation factor to cover the time until a scheduled recalculation will occur: mid-term or renewal; or plan more frequent reviews and recalculation. The more frequent the bond is recalculated, the less there is a need for an inflation factor.

Indirect Costs (about 20 – 60%)

- Mob and Demob (up to 10% normal)
- Contingency (3 – 5%)
- Engineering Redesign (2.5 - 6%)
- Profit and Overhead (15 – 30%)
- Project Management Fee (2 – 7%)

Another factored to consider - What area does the bond cover - Permit Area, Incremental Area, and Phased Bonding

Bonding reviews do not stop with the issuance of the permit.

Bond adjustments

- Revisions – this would include adjustments for failures, such as the need for long term treatment
- Renewals – normally every 5 years while the permit is active
- Mid-term reviews – half way through the permit term
- Bond Release – calculate the remaining liability

What type of bond instruments do we accept?

- surety bonds,
- collateral (cash, letters of credit, property, etc.),
- self bonding
- trust funds
- alternative bonding systems (bond pools) – OSM does not have any bond pools in its Federal or Indian Lands Program, but we have approved several in States

OSM Bonding Oversight

Over the years, OSM has conducted varying levels of oversight on state bonding programs.

In 2010, we decided to do a nationwide oversight review of bond adequacy.

- Reviewed 23 of the 24 primacy states (Iowa – no active mines to review)
- Conducted bond calculations on a total of 76 permits (we developed work plans that stated we would review up to 5 permits in each State, smaller States only had 1 or 2 permits to review).
- Two of the States had bond pools - we did not do bond adequacy calculations.
- Each OSM region did these oversight reviews a little different, but generally we reviewed the State's calculations to determine how each State does its bond calculation, then we did an independent calculation using the OSM bonding handbook to determine if the methods had the same or different results. States are not required to use OSM's bonding handbook, the only requirement is to have a method that is as effective in calculating bonds.
- A second aspect of the review was to look at actual forfeitures to see if the forfeited bonds were sufficient to reclaim the forfeited sites – this is the real test of a bonding system.

2010 Results

Bond Adequacy

- In the majority of the States we verified that bond amounts were adequate.
- In several (10) States we were not able to make that verification, but not all were inadequate, for some we simply could not verify adequacy. One example - some permits did not contain enough detail to do a full bond calculation. Another State had changed its process to increase its bond amounts, but they were not in effect on the permits reviewed.
- However, there were some states that had inadequate bonds amounts for the reclamation plans that had been approved.

Forfeiture reclamation

- Reviewed 22 sites in six States (other States did not have any recent forfeitures).
- Found the bond was not adequate to complete the reclamation plan on half of the sites.
- Fortunately, several of these sites were successfully reclaimed to a revised plan.
- Some sites where the bond was insufficient to complete reclamation. This confirmed our other findings of inadequate bond.

Follow-up

- The most prominent action that came out of the 2010 nationwide bonding review was an action plan and subsequent 733 in Kentucky. For the non-SMCRA folks, the 733 process is named after 30 CFR Part 733 in our regulations. Under this requirement, OSM initiates a corrective action if it determines that a State is not effectively administering its approved program. Kentucky has made good progress and we are reviewing a program amendment they submitted to address its bonding issues.
- In most of the other States the concerns identified in the review have been resolved.
- There are a few States where we still plan to do some follow-up work.

2014 Oversight plans

- Reviewed the field offices performance agreements with the States to see what actions are proposed in 2014.
- Found seven State draft or final PAs that addressed bonding calculation or adequacy studies. In Mid-Continent Region, we are planning to do follow-up reviews of concerns from the 2010 reviews in Oklahoma and Texas.
- Appalachian Region has put a focus on bonding adequacy. In the east, reviews or studies are planned in almost all of the States. In Kentucky, the Lexington Field Office plans to do a review of bond forfeiture activity to determine the amount of reclamation completed or to be completed with the available bond monies. Although it's not included in the Performance agreement, OSM's Knoxville office is working with Virginia to address a concern with its bond pool.
- The Western Region does not have any bond adequacy studies proposed.

Current Issues / OSM Focus going forward

More important than ever – we need to maintain the strong backstop that a solid bonding program provides:

- Coal market is soft - Operators are going into default
- State and OSM staffing and resources dwindling and staff is less experienced

As resources become more limited and staff workloads increase, they can suffer from the static - checklist approach. Need to be proactive on bonding:

- Bond adjustments: need to reassess and update bond calculations on a regular basis
    - changes in mining or reclamation plan
    - changes in costs
        - fuel
        - equipment
- Bond should cover ALL disturbances
    - cover demolition of structures
    - some States bond on a per acre basis, these need to cover all of the disturbed area, not just footprint of coal: this is a recent issue in one State
- Water treatment costs
    - Long term discharges and trust funds, are they underfunded
    - new standards: Selenium, TDS, these weren't considered in many of the trust funds or in bond calculations; now they may need to be factored in.

Timely reclamation of Bond forfeitures

- Forfeit and reclaim the site - don't linger: time erodes the value of the money
- RA's shouldn't be relying on another operator taking over the permit, or consolidating it with another permit. If there is an operator ready to go – great, take advantage of it; but if we have to wait for a "deal" or "bargain" to do the reclamation, we are not requiring enough bond.

Bonding Instrument concerns:

- Lack of diversity in the surety industry: too few companies holding all the bonds – currently a large concern in the east

- Self bonding – How does an RA assess self-bond capacity: more than one permit; more than one state
- Trust funds – their complexity and potential for under funding

Contemporaneous Reclamation – one of the quickest ways for a bond to become insufficient is for the operator to fall behind in reclamation. Our inspection programs need to ensure reclamation remains current.

Temporary cessation – as mentioned before: time erodes the value of the money, need to adjust bond on TC sites as needed.

Last concern to mention is in regards to Bond Pools. This is a concern in the AR States

- Kentucky and Ohio are working through 733 actions
- In Virginia, contractors completed an actuarial study that included recommendations to ensure the pools ability to meet its obligations; the changes now need legislative action.
- Concerns in West Virginia because of long term treatment costs and new water quality standards.

Questions?

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