## Performance and Reclamation Bonds

Carbon Dioxide Geologic Sequestration Exploration and Site Characterization Permit

The Bureau of Land Management (BLM) will require a performance and reclamation bond for all carbon dioxide ( $CO_2$ ) geologic sequestration (GS) exploration and site characterization permits to ensure compliance with the terms and conditions of the permit as provided by the regulations at 43 CFR 2920.7(g).

Acceptable bond instruments include:

- Cash
- Cashier's or Certified Checks
- Certificate or Book Entry Deposits
- Negotiable U.S. Treasury Securities Equal in value to the bond amount.
- Surety Bonds From the approved list of sureties (U.S. Treasury Circular 570; http://www.fms.treas.gov/c570/c570. html), payable to the BLM.
- Irrevocable Letters of Credit Payable to the BLM, issued by financial institutions that have the authority to issue letters of credit and whose operations are regulated and examined by a Federal agency.
- Policy of Insurance Provides the BLM with acceptable rights as a beneficiary and is issued by an insurance carrier that has the authority to issue insurance policies in the applicable jurisdiction and whose insurance operations are regulated and examined by a Federal or state agency.

The BLM will not accept a corporate guarantee as an acceptable form of bond. If a state regulatory authority requires a bond to cover some portion of environmental liabilities, such as hazardous material damages or releases, reclamation, or other requirements for the permit area, the BLM must be listed as an additionally named insured on the bond instrument. This inclusion would suffice to cover the BLM's exposure should a permittee default in any environmental liability listed in the respective state bond.

The BLM authorized officer will review all bonds on an annual basis to ensure adequacy of the bond amount. The bond will also be reviewed at the time of any permit transfer, or renewal. The BLM authorized officer may increase or decrease the bond amount with documented cause at any time during the term of the permit.

The BLM authorized officer will identify the total amount of the performance and reclamation bond in the decision that supports issuance of the permit. The performance and reclamation bond will consist of three components for purposes of determining its amount. The first component will address environmental liabilities including hazardous materials liabilities, such as risks associated with hazardous waste and hazardous substances. This component may also account for herbicide use, petroleum-based fluids, and dust control or soil stabilization materials. The second component will address the decommissioning, removal, and proper disposal, as appropriate, of improvements and facilities. Exploration and site characterization studies for CO<sub>2</sub> GS may involve drilling wells and constructing roads/facilities, so the bond amount for this component could be substantial. The third component will address reclamation, revegetation, restoration, and soil stabilization. This component will be determined based on the amount of vegetation retained onsite and the potential for offsite impacts, including Clean Water Act violations or other violations of law. The permittee can potentially reduce the bond amount for this component by limiting the amount of vegetation removal and surface disturbance as part of the  $CO_2$  GS exploration and site characterization activities.

Ultimately, the performance and reclamation bond will be a single instrument to cover all potential liabilities. The entire bond amount could be used to address a single risk event such as hazardous materials release or groundwater contamination regardless of the fact that in calculating the total bond amount other risks were also considered. If the bond is used to address a particular risk, the permittee would then be required to increase the bond amount to compensate for this use. This approach to establishing a bond is preferable to one allowing permittees to maintain separate bonds for each contingency. If separate bonds are held, an underestimation of one type of liability may leave the BLM responsible for making up the difference, as the funds associated with one bond may not be applicable for the purposes of another. Requiring a single, larger bond will ensure that the permittees are bonded with a surety that has the capacity to underwrite the entire amount associated with the permit.

A reclamation plan will be required, that defines the reclamation, revegetation, restoration, and soil stabilization requirements for the  $CO_2$  GS exploration and site characterization permit area, as a component of the Plan of Development (POD) submitted with the permit application. The reclamation plan will require expeditious reclamation of construction and use areas, and the revegetation of disturbed areas to reduce invasive weed infestation and erosion and must be approved by the BLM authorized officer prior to permit approval. The approved reclamation plan will be used as the basis for determining the standard for reclamation, revegetation, restoration, and soil stabilization of the permit area and, ultimately, in determining the full bond amount.

The BLM has issued policy guidance for determining bonding requirements for 43 CFR 3809 mining operations on the public lands (Instruction Memorandum (IM) 2009-153, dated June 19, 2009) which provides detailed information about the process for determining the appropriate financial guarantees for intensive land uses on the public lands. This guidance can also be used to assist in calculating the bond amount for CO<sub>2</sub> GS exploration and site characterization studies on public lands. The guidance requires that mining operators submit a Reclamation Cost Estimate (RCE) to the BLM authorized officer for review to assist in determining the bond amount. Although the permit regulations do not specifically require that a permittee submit a RCE to the BLM, the BLM can require a permit applicant to submit a Plan of Development (POD) in accordance with 43 CFR 2920.5. Because an RCE is key to determining the bond amount, a figure that is set forth in any decision authorizing CO<sub>2</sub> GS exploration and site characterization studies on the public lands, BLM policy is to require all CO<sub>2</sub> GS exploration and site characterization permit applicants to submit an RCE as part of the reclamation plan and the overall POD. Attachment 1 to IM 2009-153 provides Guidelines for Reviewing RCEs and can be used as a guideline to assist in reviewing RCEs submitted for CO<sub>2</sub> GS exploration and site characterization studies.

Assistance in reviewing RCEs for  $CO_2$  GS exploration and site characterization permits and determining performance and reclamation bond amounts may be requested as described in the technical assistance section of the IM.