(f) Reclamation. Requirements for reclamation of areas disturbed by mineral material operations must be included in contracts and permits, except for disposals from community sites and common-use areas.

§228.48 Appraisal and measurement.

- (a) Appraisal. All mineral materials for sale must be appraised to determine fair market value. Appraisals must be based on knowledge of the extent of the deposit, quality of material, and economic value. A sale must not be made at less than the appraised value which may be expressed as either price per cubic yard or weight equivalent. In all cases the units of measurement must correspond to the units used in the appraisal. The authorized officer must estimate and record the amount and value of minerals to be disposed of by free-use permit.
- (b) Measurement. The amount of mineral material actually removed may be measured by volume, weight, truck tally, by combination of these methods, or by such other form of measurement as the authorized officer determines to be appropriate and in the public interest.

§ 228.49 Reappraisal.

If an extension of time is granted as provided in §228.53(b), the authorized officer must reappraise or reestimate the mineral materials covered by the contract or permit and which remain unexcavated at the time of extension. The recalculated unit value becomes the new unit value for the remaining unexcavated material; excavated and stockpiled material is not subject to reappraisal.

§ 228.50 Production records.

At least annually, the purchaser or permittee must furnish a record of the volume extracted, in cubic yards or weight equivalent, to the authorized officer. The units of measurement must correspond to the units used in the appraisal or estimate.

§ 228.51 Bonding.

(a) Bond requirements. Before operations may begin under any contract or permit, a bond must be furnished to the authorized officer to ensure per-

formance of payment (as necessary), reclamation, and other conditions of the contract or permit, except as noted in paragraphs (a) (1) and (3) of this section, where the authorized officer may waive such bonding. If an extension of time is granted as provided in §228.53(b), the bond requirements must be recalculated and changed accordingly.

- (1) For advance payment contracts for 10,000 cubic yards or more in volume (or weight equivalent), a bond of not less than 10 percent of the total contract price or the value of the estimated annual production (whichever is less), plus the reclamation cost for the area covered by annual mining, is required. When the total volume is less than 10,000 cubic yards, bond requirements, if any, are at the discretion of the authorized officer.
- (2) For any deferred payment contract, a bond equaling the value of the estimated annual production plus the reclamation cost for the area covered by annual mining is required.
- (3) For *free use*, the authorized officer may require a reclamation bond which must be sufficient to cover the cost of reclamation of the anticipated annual work
- (b) *Types of bonding*. A bond must be one of the following:
- (1) A bond of a corporate surety shown on the latest approved list issued by the U.S. Treasury Department and executed on an approved standard form:
 - (2) A cash bond:
- (3) Negotiable securities of the United States;
- (4) An irrevocable letter of credit acceptable to the Forest Service;
- (5) A performance bond required by other Forest Service contracts or permits, provided the bond covers the performance and reclamation requirements related to the removal of mineral material from a designated pit or area for use in the performance of the contract or permit; or
- (6) Any other types of bond specified in the Forest Service Manual.

§ 228.52 Assignments.

(a) Limitations. A purchaser or permittee may not assign the contract or