In Reply Refer to:
3809 (OR936) P

EMS TRANSMISSION 04/12/2012
Instruction Memorandum No. OR-2012-043
Expires: 9/30/2013

To: District and Field Office Managers

From: State Director, Oregon/Washington


Program Area: This instruction memorandum (IM) transmits general policy and guidelines for preparation and requirements for Mining Notices and Mining Plans, Use and Occupancy, and Reclamation Cost Estimates for 43 CFR 3809 mining operations and activities on lands administered by the Oregon/Washington Bureau of Land Management (BLM).

Purpose: The intent of this policy is to provide a framework for claimants and/or operators preparing §3809 Notices, Plans, §3715 Use and Occupancy, and associated Reclamation Cost Estimates to be provided to the local BLM district offices for review.

Policy/Action: Effective immediately this guidance should be used in coordination with all applicable Federal and State regulations. It is intended to provide consistency in the development of Mining Notices and Plans, Use and Occupancy proposals, Reclamation Cost Estimate determinations, and the evaluation and authorization of said documents.

Timeframe: The attached general policy and guidelines are for immediate implementation.

Budget Impact: There are no anticipated budgetary impacts.

Background: This mining operations guidance was developed as the result of regulations and a growing need for consistency of program application across Oregon and Washington.

Manual/Handbook Sections Affected: None
Coordination: Prior to issuance, comments were requested from the Oregon/Washington Bureau of Land Management mineral staff.

Contact: Bob Harrison, Geologist, (503) 808-6040.

Districts with Unions are reminded to notify their unions of this IM and satisfy any bargaining obligations before implementation. Your servicing Human Resources Office or Labor Relations Specialist can provide you with assistance in this matter.

Signed by
Andrew M. Smith
Acting Associate State Director

Authenticated by
Paj Shua Cha
Records Section

Attachment

Distribution:
W0320 (5626, MIB)
GENERAL INFORMATION

The following are general guidelines for the preparation of Notices (Notice) and Plans (Plan), Use and Occupancy, and Reclamation cost estimates for Notice- and Plan-level operations on lands administered by the Oregon/Washington (OR/WA) Bureau of Land Management (BLM). Any of the following topics may be modified, based on site-specific circumstances, with approval by the BLM. The intent of this policy is to provide a framework for claimants and/or operators in preparing Notice and Plan application documents and the related reclamation cost estimates to be provided to the local BLM field offices for review. This guidance should be used in coordination with all applicable Federal and State regulations.

The following documents have been attached to assist operators in developing reclamation cost estimates:

Attachment 1: Examples of Earthwork Production and Scarification Estimation

1. NOTICE- AND PLAN-LEVEL APPLICATION REQUIREMENTS

A complete Mining Notice must be submitted 15 calendar days before commencement of exploration causing surface disturbance of 5 acres or less of public lands on which reclamation has not been completed (§3809.21(a)). Exploration means creating a surface disturbance greater than casual use that includes sampling, drilling, or developing surface or underground workings to evaluate the type, extent, quantity, or quality of mineral values present. Exploration does not include activities where material is extracted for commercial use or sale (§3809.5).

The field office's review of a Notice is not a Federal action requiring National Environmental Policy Act (NEPA) analysis. The BLM review and acceptance of a Notice is part of its enforcement program to ensure that operators comply with their legal responsibility to prevent unnecessary or undue degradation (§3809.311(c)).

a. Notice Information

(1) If the proposed operations meet the requirements of §3809.21, a complete Notice must be filed with the local BLM office with jurisdiction over the lands involved. The BLM does not require that the Notice be on a particular form.

(2) To be considered complete, a Notice must contain all information required by 43 CFR §3809.301 as follows:

(a) Operator Information. The name, mailing address, phone number, and taxpayer identification number of the operator(s) and the BLM serial number(s) of any unpatented mining claim(s) where the disturbance would occur. If the operator is a corporation, one individual must be designated as the point of contact. The BLM must be notified in writing within 30 calendar days of any change of operator or corporate point of contact or change of mailing address of the operator or corporate point of contact. If a third party is designated to act as the agent for a mining claimant or operator operating on Federal lands under BLM-administered Plans or Notices, a notarized, written designation of the agent must be filed with the appropriate BLM office. The designation must include the Notice and/or Plan number that the agent is authorized to work on, the period that the authorization covers, and a full description of the agent’s responsibilities. A separate designation for each Notice and/or Plan must be filed with the BLM field office responsible for handling matters related to the subject mining claim(s). Designating an agent does not relieve the mining claimant or operator of any responsibility or accountability on his or her mining claim with regard to liability for compliance with all Federal, State, and local laws and regulations.

(b) Activity Description, Map, and Schedule of Activities. The description must include the proposed activity with a level of detail appropriate to the type, size, and location of the activity. The description must include the following:

(i) The measures that will be taken to prevent unnecessary or undue degradation during operations;
(ii) A map, preferably at least 1:24,000 or smaller scale, showing the location of the project area in sufficient detail for the BLM to be able to find it and the location of access routes intended for use, improvement, or construction on the ground;

(iii) A description of the type of equipment intended for use; and

(iv) A schedule of activities, including the date when operations are expected to begin, periods of operation if intermittent, and the date expected for the completion of reclamation.

Project-specific activities include, but are not limited to: existing and/or proposed excavation sites, adits, shafts, trenches, settling ponds, pipelines, equipment pad locations, drill hole locations, water wells/monitor wells, equipment storage areas, tailings disposal sites, stockpile locations, access routes, and any other information to provide an accurate description of the operations.

(c) Reclamation Plan. A description of how reclamation will be completed to the standards described in §3809.420.

(d) Reclamation Cost Estimate. An estimate of the cost to fully reclaim disturbances created during the proposed operations as required by §3809.552. The reclamation cost estimate must be developed as if the BLM were to contract with a third party to reclaim the operations according to the reclamation plan. A Mining Notice will not be considered complete until a reasonable reclamation cost estimate and acceptable financial guarantee is received and reviewed by the BLM.

The BLM may require that the claimant/operator provide additional information, if necessary, to ensure that proposed operations will comply with this subpart. In general, providing the more detailed information about the proposed operation and any existing land disturbance will minimize the need for requests for additional information from the BLM.

The claimant/operator must notify the BLM in writing within 30 calendar days of any change of operator or corporate point of contact or change of the mailing address of the operator or corporate point of contact.

An operator cannot have overlapping, adjacent, or series of associated notices or segmented notices (§3809.21(b)). Two different operators may each have separate notices on the same area. If any or all of the project area described in each notice overlaps, both operators will be required to post financial guarantees covering the reclamation costs associated with the activities described in that notice. For areas of disturbance that overlap, neither financial guarantee will be refunded until all reclamation is completed and approved by the BLM.

For Notices where the operator is not the claimant, the BLM must receive written notification that the claim holder is aware of and agrees with the proposed Notice-level operation. The claimant, by agreeing with the Notice-level operation, accepts equal and full financial liability for the reclamation of disturbances created by the operator.
If BLM reviews the notice and, within 15 calendar days, Then-

<table>
<thead>
<tr>
<th>If BLM reviews the notice and, within 15 calendar days,</th>
<th>Then—</th>
</tr>
</thead>
<tbody>
<tr>
<td>Notifies the operator that BLM needs additional time, not to exceed 15 calendar days, to complete its review</td>
<td>Operations may not begin until the additional review time period ends.</td>
</tr>
<tr>
<td>Notifies the operator that he must modify his notice to prevent unnecessary or undue degradation</td>
<td>Operations may not begin until the notice is modified to ensure that unnecessary or undue degradation is prevented.</td>
</tr>
<tr>
<td>Requires operator to consult with BLM about the location of existing or proposed access routes</td>
<td>Operations may not begin until operator consults with BLM and satisfy BLM's concerns about access.</td>
</tr>
<tr>
<td>Determines that an on-site visit is necessary</td>
<td>Operations may not begin until BLM visits the site, and has satisfied any concerns arising from the visit. BLM will notify operator if we will not conduct the site visit within 15 calendar days of determining that a visit is necessary, including the reason(s) for the delay.</td>
</tr>
<tr>
<td>BLM determines the provided reclamation is not sufficient or the related financial guarantee is not acceptable</td>
<td>Operations may not begin until BLM notifies the operator that the reclamation estimate is complete and financial guarantee is acceptable.</td>
</tr>
<tr>
<td>BLM determines proposed operation does not qualify under §3809.11 as a notice-level activity.</td>
<td>Operator must file a plan of operations before beginning operations. See §§3809.400 through 3809.420.</td>
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</tbody>
</table>

b. Plan Information

(1) If a Mining Plan is required under §3809.11, a complete Mining Plan must be filed with the local BLM field office with jurisdiction over the lands involved. The BLM does not require that the Plan be on a particular form.

(2) The Mining Plan must contain the following information and describe the proposed operations at a level of detail sufficient for the BLM to determine that the Plan prevents unnecessary or undue degradation of public lands:

(a) Operator Information. The name, mailing address, phone number, and taxpayer identification number of the operator(s) and BLM serial number(s) of any unpatented mining...
claim(s) where disturbance would occur. If the operator is a corporation, one individual must be designated as the point of contact. The BLM must be notified in writing within 30 calendar days of any change of operator or corporate point of contact or change in the mailing address of the operator or corporate point of contact. **If a third party is designated to act as the agent for a mining claimant or operator operating on Federal lands under BLM-administered Plans or Notices, a notarized, written designation of the agent must be filed with the appropriate BLM office.** The designation must include the Notice and/or Plan number that the agent is authorized to work on, the period that the authorization covers, and a full description of the agent’s responsibilities. A separate designation for each Notice and/or Plan must be filed with the BLM field office responsible for handling matters related to the subject mining claim(s). Designating an agent does not relieve the mining claimant or operator of any responsibility or accountability on his or her mining claim with regard to liability for compliance with all Federal, State, and local laws and regulations.

(b) **Description of Operations.** A description of the equipment, devices, or practices proposed for use during operations including, where applicable:

(i) maps of the project area of at least 1:24,000 or smaller scale, showing the location of exploration activities, drill sites, mining activities, processing facilities, waste rock and tailing disposal areas, support facilities, structures, buildings, and access routes. The map must be of sufficient detail to enable the site(s) to be located on the ground;

(ii) preliminary or conceptual designs, cross sections, and operating plans for mining areas, processing facilities, and waste rock and tailing disposal facilities;

(iii) water management plans;

(iv) rock characterization and handling plans;

(v) quality assurance plans;

(vi) spill contingency plans;

(vii) a general schedule of operations from start through closure, including periods of non-operation; and

(viii) plans for all access roads, water supply pipelines, and power or utility services;

(c) **Reclamation Plan.** A plan for reclamation to meet the standards in §3809.420 with a description of the equipment, devices, or practices proposed for use including, where applicable, plans for:

(i) drill-hole plugging;

(ii) regrading and reshaping;
(iii) mine reclamation, including information on the feasibility of pit backfilling that
details economic, environmental, and safety factors;

(iv) riparian mitigation;

(v) wildlife habitat rehabilitation;

(vi) topsoil handling;

(vii) revegetation;

(viii) isolation and control of acid-forming, toxic, or deleterious materials;

(ix) removal or stabilization of buildings, structures, and support facilities; and

(x) post-closure management.

(d) *Monitoring Plan.* A proposed plan for monitoring the effect of the subject
operations must be developed. Monitoring plans must meet the following objectives: demonstrate
compliance with the approved Mining Plan and other Federal or State environmental laws and
regulations, provide early detection of potential problems, and supply information that will assist
in directing corrective actions should they become necessary. Where applicable, monitoring plans
must include details on type and location of monitoring devices, sampling parameters and
frequency, analytical methods, reporting procedures, and procedures to respond to adverse
monitoring results. Monitoring plans may incorporate existing State or other Federal monitoring
requirements to avoid duplication. Examples of monitoring programs which may be necessary
include surface- and ground-water quality and quantity, air quality, revegetation, stability, noise
levels, and wildlife mortality.

(e) *Interim Management Plan.* A plan to manage the project area during periods of
temporary closure (including periods of seasonal closure) to prevent unnecessary or undue
degradation must be proposed. The interim management plan must include, where applicable, the
following:

(i) measures to stabilize excavations and workings;

(ii) measures to isolate or control toxic or deleterious materials, including noxious
weeds (see also the requirements in §3809.420(c)(12)(vii));

(iii) provisions for the storage or removal of equipment, supplies, and structures;

(iv) measures to maintain the project area in a safe and clean condition;

(v) plans for monitoring site conditions during periods of non-operation; and
(vi) a schedule of anticipated periods of temporary closure during which the interim management plan would be implemented, including provisions for notifying the BLM of unplanned or extended temporary closures.

(3) In addition to the requirements of paragraph (2), the BLM may require the following information:

(a) operational and baseline environmental information for the BLM to analyze potential environmental impacts as required by the National Environmental Policy Act (NEPA) and to determine if the Mining Plan will prevent unnecessary or undue degradation. This could include information on public and non-public lands needed to characterize the geology, paleontological resources, cave resources, hydrology, soils, vegetation, wildlife, air quality, cultural resources, and socioeconomic conditions in and around the project area, as well as information that may identify the need to conduct static and kinetic testing to characterize the potential for the operations to produce acid drainage or other leachate. The BLM is available to advise on the exact type of information and level of detail needed to meet these requirements; and

(b) other information, if necessary to ensure that the proposed operations will comply with this subpart.

(4) **Reclamation Cost Estimate.** An estimate of the cost to fully reclaim disturbances created by the proposed operations must be developed and submitted as required by §3809.552. The BLM will review the reclamation cost estimate and notify the claimant/operator of any deficiencies or additional information that must be submitted in order to determine a final reclamation cost. The BLM will notify the claimant/operator when the final amount, which must be provided for financial assurance, has been determined.

c. **BLM Inspections**

The BLM may inspect mining operations at any time, including all structures, equipment, workings, and uses located on the public lands. The inspection may include verification that operations comply with 43 CFR §3809 and §3715.

The BLM will inspect operations at least four times each year if cyanide or other leachate is used or where there is significant potential for acid drainage.
2. 43 CFR 3715 USE AND OCCUPANCY UNDER THE MINING LAWS

USE AND OCCUPANCY GENERAL INFORMATION

The purpose of this subpart is to manage the use and occupancy of the public lands for the development of locatable mineral deposits by limiting such use or occupancy to that which is reasonably incident. The BLM will prevent abuse of the public lands while recognizing valid rights and uses under the Mining Law of 1872 (30 U.S.C. 22 et seq.) and related laws governing the public lands, regardless of when those rights were created. The BLM will take appropriate action to eliminate invalid uses, including unauthorized residential occupancy of the public lands.

a. Activities Required for Use of Public Lands

Under §3715.2, in order to occupy the public lands under the mining laws for more than 14 calendar days in any 90-day period within a 25-mile radius of the initially occupied site, the occupant must be engaged in certain activities. These activities must:

(1) Be reasonably incident - Reasonably incident means the statutory standard “prospecting, mining, or processing operations and uses reasonably incident thereto” (30 U.S.C. 612). It is a shortened version of the statutory standard. It includes those actions or expenditures of labor and resources by a person of ordinary prudence to prospect, explore, define, develop, mine, or beneficiate a valuable mineral deposit using methods, structures, and equipment appropriate to the geological terrain, mineral deposit, and stage of development and reasonably related activities.

Unnecessary or undue degradation, as applied to unauthorized uses, means those activities that are not reasonably incident and are not authorized under any other applicable law or regulation. As applied to authorized uses, the term is used as defined in 43 CFR §3802.0–5 and §3809.0–5.

(2) Constitute substantially regular work - Substantially regular work means work on, or that substantially and directly benefits, a mineral property, including nearby properties under the control of the claimant/operator. The work must be associated with the search for and development of mineral deposits or the processing of ores. It includes active and continuing exploration, mining, and beneficiation or processing of ores. It may also include assembly or maintenance of equipment, work on physical improvements, and procurement of supplies incidental to activities meeting the conditions of §3715.2 and §3715.2–1. It may also include off-site trips associated with these activities. The term also includes a seasonal, but recurring, work program.

(3) Be reasonably calculated to lead to the extraction and beneficiation of minerals;

(4) Involve observable on-the-ground activity that the BLM may verify under §3715.7;

(5) Use appropriate equipment that is presently operable, subject to the need for reasonable assembly, maintenance, repair, or fabrication of replacement parts; and
(6) In addition to the requirements specified in §3715.2, the occupancy must involve one or more of the following:

(a) protecting exposed, concentrated, or otherwise accessible valuable minerals from theft or loss;

(b) protecting from theft or loss appropriate, operable equipment which is regularly used, is not readily portable, and cannot be protected by means other than occupancy;

(c) protecting the public from appropriate, operable equipment which is regularly used, is not readily portable, and, if left unattended, creates a hazard to public safety;

(d) protecting the public from surface uses, workings, or improvements which, if left unattended, create a hazard to public safety; or

(e) being located in an area so isolated or lacking in physical access as to require the mining claimant, operator, or workers to remain on site in order to work a full shift of a usual and customary length. A full shift is ordinarily 8 hours and does not include travel time to the site from a community or area in which housing may be obtained.

If the need for a watchman or caretaker to occupy the public lands to protect valuable or hazardous property, equipment, or workings, is asserted, it must be shown that the need for the occupancy is both reasonably incident and continual. It must be shown that a watchman or caretaker is required to be present either whenever the operation is not active or whenever workers are not present on the site.

The BLM may allow temporary occupancy at a single site to extend beyond the 14-day period described in §3715.1 if it is needed to secure the site beyond 14 days through the use of a watchman as allowed by §3715.2–2 and the claimant/operator has begun consultation with the BLM under §3715.3. If the BLM decides not to concur in the occupancy, the temporary occupancy must stop.
The following table has been included for use in identifying the requirements for occupancy.

**Table 2**

<table>
<thead>
<tr>
<th>Consultation Requirements</th>
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<tbody>
<tr>
<td><strong>If a use that would involve occupancy is proposed</strong></td>
</tr>
<tr>
<td>Under a Plan of Operations or a modification submitted under 43 CFR §3802 or §3809</td>
</tr>
<tr>
<td>Under the Notice provisions of 43 CFR §3809</td>
</tr>
<tr>
<td>“Casual use” under 43 CFR 3809.1–2 or does not require a Plan of operations under 43 CFR §3802.1–2 and §3809.1–4 or a Notice under 43 CFR §3809.1–3</td>
</tr>
<tr>
<td>Or enclosures, fences, gates, or signs intended to exclude the general public</td>
</tr>
</tbody>
</table>
(7) You must not begin occupancy until:

(a) 43 CFR §3715 and §3802 or §3809 have been complied with and the BLM has completed its review and made the required determinations and

(b) all Federal, State, and local mining, reclamation, and waste disposal permits, approvals, or other authorizations for the particular use or occupancy have been obtained by the claimant/operator.

b. Information Required to be Submitted

The following must be included in a Plan, Notice, or letter.

(1) A detailed map, preferably at least 1:24,000 or smaller scale, that identifies the site and the placement of the items specified in paragraphs (c), (d), and (e) below and a written description of the proposed occupancy that describes in detail:

(a) how the proposed occupancy is reasonably incident;

(b) how the proposed occupancy meets the conditions specified in §3715.2 and §3715.2-1;

(c) the location of temporary or permanent structures for occupancy;

(d) the location of and need for enclosures, fences, gates, and signs intended to exclude the general public;

(e) the location of reasonable public use, passage, or access routes through or around the area to adjacent public lands; and

(f) the estimated period of use of the structures, enclosures, fences, gates, and signs, as well as the schedule for removal and reclamation when operations end.

c. Time Frame for Review and Enforcement

The BLM will review all proposed occupancies and all proposed enclosures, fences, gates, or signs intended to exclude the general public to determine if the proposed occupancy or use will conform to the provisions of §3715.2, §3715.2-1, and §3715.5. The BLM will complete its review of a proposed occupancy not involving a Mining Plan within 30 business days of receipt of all required materials, unless it concludes that the determination cannot be made, until:

(1) 30 business days after it prepares necessary environmental documents and

(2) 30 business days after it has complied with section 106 of the National Historic Preservation Act, Section 7 of the Endangered Species Act, and/or other applicable statutes.
Occupancy must not begin until concurrence has been received from the BLM, even though a Mining Notice, a Mining Plan, an amended occupancy proposal, or an appeal has been submitted.

If at any time the BLM determines that the described use or occupancy is not reasonably incident and the continued presence of the use or occupancy is a threat to health, safety, or the environment; the BLM will order an immediate, temporary suspension of activities under §3715.7-1(a). If the determination is made that a part or all of the occupancy is not reasonably incident, but does not endanger health, safety, or the environment; the BLM may issue a temporary or permanent cessation order under §3715.7-1(b).

d. Existing Occupancies

(1) The BLM will visit the site during the normal course of inspection to obtain the information described in §3715.3-2. After the visit, the BLM will make a determination of concurrence or non-concurrence.

(2) The claimant/operator must provide the information described in §3715.3-2 to the BLM either in writing or verbally during a site visit by BLM field staff.

If written notice required in §3715.4 is not provided, the occupant will be subject to the enforcement actions of §3715.7-1, the civil remedies of §3715.7-2, and the criminal penalties of §3715.8.

(3) If the BLM determines that all or any part of an existing use or occupancy is not reasonably incident:

(a) the BLM may order a suspension or cessation of all or part of the use or occupancy under §3715.7-1;

(b) the BLM may order the land to be reclaimed to its satisfaction and specify a reasonable time for completion of reclamation under 43 CFR part 3800; and

(c) the BLM may order the occupant to apply within 30 days after the date of notice from the BLM for appropriate authorization under the regulations in 43 CFR Group 2900.

e. Standards Applicable to Use or Occupancy

(1) Use or Occupancy must be reasonably incident. “Unnecessary or undue degradation” of the public lands and resources must be prevented or avoided in all uses and occupancies.

(2) Uses must conform to all applicable Federal and State environmental standards and all required permits must have been obtained before beginning, as required under 43 CFR part 3800. This means getting permits and authorizations and meeting standards required by State and Federal
law, including, but not limited to, the Clean Water Act (33 U.S.C. 1251 et seq.), Clean Air Act (42 U.S.C. 7401 et seq.), and Resource Conservation and Recovery Act (42 U.S.C. 6901 et seq.), as required under 43 CFR part 3800.

(3) Occupancies must conform to all applicable Federal and State environmental standards and all required permits must have been obtained before beginning, as required under this subpart and 43 CFR part 3800. This means obtaining permits and authorizations and meeting standards required by State and Federal law; including, but not limited to, the Clean Water Act (33 U.S.C. 1251 et seq.), Clean Air Act (42 U.S.C. 7401 et seq.), and Resource Conservation and Recovery Act (42 U.S.C. 6901 et seq.), as required under this subpart and 43 CFR part 3800.

(4) If surface activities involve only prospecting or exploration activities, permanent structures must not be placed on the public lands. Any temporary structures placed on the public lands during prospecting or exploration will be allowed only for the duration of the activities, unless the BLM expressly and in writing allows them to remain longer. If prospecting or exploration activities involve subsurface activities, permanent structures may be placed on the public lands, if the BLM concurs.

(5) All permanent and temporary structures placed on the public lands must conform with applicable State or local building, fire, and electrical codes and occupational safety and health and mine safety standards. If State or local codes require a certificate of occupancy or its equivalent, it must be obtained before use or occupancy is begun involving permanent structures. If required by State or local law, appropriate sewerage and sanitation permits must also be acquired before the occupancy or use of a permanent structure placed on the public lands.

f. Standards Applicable to Ending Use or Occupancy

Unless the BLM expressly allows them in writing to remain on the public lands, all permanent structures, temporary structures, material, equipment, or other personal property placed on the public lands during authorized use or occupancy must be removed. The BLM allows 90 days after operations end to remove these items. If the BLM concurs in writing, this provision will not apply to seasonal operations that are temporarily suspended for less than one year and expected to continue during the next operating season or to operations that are suspended for no longer than one year due to market or labor conditions.

g. Abandoned Property

Any property left on the public lands beyond the 90-day period described in §3715.5-1 becomes the property of the United States and is subject to removal and disposition at the BLM's discretion consistent with applicable laws and regulations. The claimant/operator/occupant is liable for the costs the BLM incurs in removing and disposing of the property.
h. Prohibited Uses and Occupancies

Except where other applicable laws or regulations allow, the BLM prohibits the following:

(1) placing, constructing, maintaining, or using residences or structures for occupancy not meeting:

   (a) the conditions of occupancy under §§3715.2 or 3715.2–1 or

   (b) any of the standards of occupancy under §3715.5.

(2) beginning occupancy before the filing, review, and approval or modification of a plan of operation as required under 43 CFR part 3800, subparts 3802 or 3809;

(3) beginning occupancy before consultation with the BLM as required by §3715.3 for activities that do not require a plan of operations under 43 CFR part 3800, subpart 3802, or that are defined as casual use or notice activities under 43 CFR part 3800, subpart 3809;

(4) beginning occupancy without receiving a determination of concurrence because the proposed occupancy or fencing will not conform to the provisions of §3715.2, §3715.2–1, or §3715.5;

(5) not complying with any order issued under this subpart within the time frames the order provides;

(6) preventing or obstructing free passage, use, or transit over or through the public lands by force, threats, or intimidation; provided, however, that reasonable security and safety measures in accordance with this subpart are allowed;

(7) placing, constructing, or maintaining enclosures, gates, fences, or signs intended to exclude the general public without the BLM’s concurrence;

(8) causing a fire or safety hazard or creating a public nuisance;

(9) not complying with the notification and other requirements under §3715.4 relating to an existing occupancy; and

(10) conducting activities on the public lands that are not reasonably incident; including, but not limited to: non-mining related habitation, cultivation, animal maintenance or pasturage, and development of small trade or manufacturing concerns; storage, treatment, processing, or disposal of non-mineral, hazardous, or toxic materials or waste that is generated elsewhere and brought onto the public lands; recycling or reprocessing of manufactured material such as scrap electronic parts, appliances, photographic film, and chemicals; searching for buried treasure, treasure trove, or archaeological specimens; and operating hobby and curio shops, cafes, tourist stands, and hunting and fishing camps.
i. **Occupancy Inspections**

(1) The BLM field staff is authorized to physically inspect all structures, equipment, workings, and uses located on the public lands. The inspection may include verification of the nature of use and occupancy to ensure that use or occupancy is, or continues to be, reasonably incident and in compliance with §3715.2, 3715.2-1, 3715.4-1, and 3715.5.

(2) The BLM will not inspect the inside of structures used solely for residential purposes, unless an occupant or a court of competent jurisdiction gives permission.

j. **Occupancy Enforcement**

The BLM has four types of orders that it can issue depending on the circumstances:

(1) **Immediate Suspension** §3715.7-1(a)

(a) The BLM may order an immediate, temporary suspension of all or any part of use or occupancy if:

(i) all or part of the use or occupancy is not reasonably incident or is not in compliance with §§3715.2, 3715.2-1, 3715.3-1(b), 3715.5, or 3715.5-1 and

(ii) an immediate, temporary suspension is necessary to protect health, safety, or the environment.

(b) The BLM will presume that health, safety, or the environment is at risk and will order the use or occupancy to be immediately and temporarily suspended if:

(i) a determination of concurrence for occupancy is being conducted and

(ii) there is a failure at any time to meet any of the standards in §3715.3-1(b) or §3715.5(b), (c), or (e).

(c) The suspension order will describe:

(i) the failures to comply with the requirement and

(ii) the actions, in addition to suspension of use or occupancy, that must be taken to correct the noncompliance and the time by which use or occupancy must be suspended. It will also describe the time, not to exceed 30 days, during which to complete corrective action.

(d) The suspension order will not be stayed by an appeal.
(2) Cessation Order § 3715.7-l(b)

(a) The BLM may order a temporary or permanent cessation of all or any part of use or occupancy if:

(i) all or any part of the use or occupancy is not reasonably incident but does not endanger health, safety, or the environment to the extent it is not reasonably incident;

(ii) there is a failure to timely comply with a notice of noncompliance issued under paragraph (3) of this section;

(iii) there is a failure to timely comply with an order issued under paragraph (4) of this section; and

(iv) there is a failure to take corrective action during a temporary suspension ordered under paragraph (1) of this section.

(b) The cessation order will describe:

(i) the ways in which use or occupancy is not reasonably incident, is in violation of a notice of noncompliance issued under paragraph (3) of this section, or is in violation of an order issued under paragraphs (1) or (4) of this section, as appropriate;

(ii) the actions, in addition to cessation of the use or occupancy, that must be taken to correct the noncompliance;

(iii) the time by which the use or occupancy must cease, not to exceed 30 days from the date the Interior Board of Land Appeals affirms BLM's order; and

(iv) the length of the cessation.

(3) Notice of Noncompliance

(a) If use or occupancy is not in compliance with any requirements of this subpart, and the BLM has not invoked paragraph (1) of this section, the BLM will issue an order that describes:

(i) failure to comply with the requirements of this subpart;

(ii) the actions that must be taken to correct the noncompliance and the time, not to exceed 30 days, within which corrective action must be started; and

(iii) the time within which corrective action must be completed.

(b) If corrective action is not started and completed within the time allowed, the BLM may order an immediate suspension under paragraph (1) of this section, if necessary, or cessation of the use or occupancy under paragraph (2) of this section.
(4) Other

If an activity that is not reasonably incident but may be authorized under 43 CFR Group 2900 or 8300, or as to sites in Alaska, 43 CFR part 2560, is being conducted; the BLM may order the occupant to apply within 30 days from the date of receipt for the order for authorization under the listed regulations [61 FR 37125, July 16, 1996, as amended at 62 FR 59822, Nov. 5, 1997].

If a BLM order, issued under §3715.7–1, is not complied with, the Department of the Interior may request the United States Attorney to institute a civil action in the United States District Court for an injunction or order to prevent the use or occupancy of the public lands in violation of the regulations of this subpart. This relief may be in addition to the enforcement actions described in §3715.7–1 and the penalties described in §3715.8.

k. Penalties for Violations Use or Occupancy Regulations

The penalties for individuals and organizations are as follows:

(1) Individuals who knowingly and willfully violate the requirements of this subpart: may be subject to arrest and trial under section 303(a) of Federal Land Policy Management Act (43 U.S.C. 1733(a)) and/or section 4 of the Unlawful Occupancy and Enclosures of the Public Lands Act (43 U.S.C. 1064). If convicted, the violating party will be subject to a fine of not more than $100,000 or the alternative fine provided for in the applicable provisions of 18 U.S.C. 3571 or imprisonment not to exceed 12 months or both a fine and imprisonment for each offense.

(2) Organizations. If an organization or corporation knowingly or willfully violates the requirements of this subpart, it is subject to trial and, if convicted, will be subject to a fine of not more than $200,000 or the alternative fine provided for in the applicable provisions of 18 U.S.C. 3571.

l. Penalties for False Statements to the BLM

The accused is subject to arrest and trial before a United States District Court if, in any matter under this subpart, the accused knowingly and willfully falsified, concealed, or covered up by any trick, scheme, or device a material fact or made any false, fictitious, or fraudulent Statements or representations or made or used any false writings or documents knowing the same to contain any false, fictitious, or fraudulent Statement or entry. If convicted, the violating party will be subject to a fine of not more than $250,000 or the alternative fine provided for in the applicable provisions of 18 U.S.C. 3571 or imprisonment not to exceed 5 years, or both a fine and imprisonment for each offense.

m. Appeal Rights

If adversely affected by a BLM decision, order, or determination made under this subpart, the decision, order, or determination may be appealed to the Interior Board of Land Appeals (IBLA) under the provisions of 43 CFR Part 4.
n. Affects of an Appeal to IBLA

(1) An appeal to the IBLA does not suspend an order requiring an immediate, temporary suspension of occupancy issued under §3715.7-1(a) before the appeal or while it is pending. In this case, the provisions of 43 CFR 4.21(a) do not apply.

(2) The provisions of 43 CFR 4.21(a) apply to all other BLM decisions, orders, or determinations under this subpart.
3. NOTICE- AND PLAN-LEVEL COST ESTIMATE GUIDELINES

Components of a Reclamation Cost Estimate

a. General

If operations are conducted under a Mining Notice or a Mining Plan, an individual financial guarantee must be provided. Typically, the actual cost of reclamation is less expensive when completed by the operator with existing, on-site equipment. However, a reclamation cost estimate must be calculated as if the BLM were to contract with a licensed and bonded third party to complete reclamation of the project area in the event an operator vacates prior to the completion of reclamation.

The estimate must include construction and maintenance costs for any treatment facilities necessary to meet Federal and State environmental standards. The financial guarantee must also cover any interim stabilization and infrastructure maintenance costs needed to maintain the area of operations in compliance with applicable environmental requirements while third-party contracts are developed and executed.

The BLM will periodically review the estimated cost of reclamation for adequacy of any funding mechanism established and require increased coverage, if necessary.

When the BLM identifies a need for it, a trust fund or other funding mechanism must be established and made available to the BLM to ensure the continuation of long-term treatment to achieve water quality standards and for other long-term, post-mining maintenance requirements. The funding must be adequate to provide for construction, long-term operation, maintenance, or replacement of any treatment facilities and infrastructure for as long as the treatment and facilities are needed after mine closure. The BLM may identify the need for a trust fund or other funding mechanism during plan review or later.

b. The cost estimate must include, but is not limited to:

1. The estimate must cover all relevant operation, maintenance, and administrative costs for all reclamation identified in the filed Notice or approved Plan of operations [43 CFR 3809.301(b), 3809.401(d) and 3809.552(a)].

2. Costs must be estimated as if the BLM were hiring a third-party contractor to perform all required reclamation [43 CFR 3809.552(a)].

3. Costs must include the use of off-site equipment as if the project area was vacated, and the estimate must include all associated mobilization and demobilization costs [43 CFR 3809.554(a)] for each piece of equipment and personnel.

4. The cost to back fill and re-contour all ground disturbance associated with the Plan or Notice operation must be calculated using acceptable industry standard equipment production
rates. The reclamation earthwork should focus on blending the operation with the surrounding topography and site stabilization. Reclamation of all excavations, including ponds and constructed water courses is required.

(5) Removal of items utilized in the operation such as wood cribbing material, pipelines, pond liners, buckets, barrels, power poles, electric cable, scrap metal, inoperable equipment/vehicles, junk, trash, and mining-related equipment must be included in the reclamation cost estimate for haulage and disposal in the nearest approved landfill or scrap yard. Also, reclamation includes the removal of approved structures, buildings, or other support facilities. These costs must be included in the reclamation cost estimate.

(6) Reclamation also includes the remediation of all previously disturbed areas for which the operator accepted responsibility by including those areas in his/her Notice or Plan, Use and Occupancy, or additional disturbance to said areas.

(7) The estimate must include, when applicable, all interim maintenance required to keep the area of operation in compliance with applicable safety and environmental requirements while reclamation contracts are developed and executed [43 CFR 3809.552(a)].

(8) The estimate must cover costs to construct and maintain any long-term treatment facilities or post-closure structures required by the filed Notice or approved Plan of operations [43 CFR 3809.552(a)].

(9) Where applicable, labor costs must be based on Federally mandated labor rates, as required by the Davis-Bacon Act and the Federal Acquisition Regulations (FAR) for contracts over $2,000. If the reclamation and cost estimate is solely for the dismantling, demolition, or removal of improvements; then contracting is accomplished under the Service Contract Act and Davis-Bacon wage rates do not apply. If construction, alteration or repair of the improvements is contemplated, even if it is under a separate contract, then the Davis-Bacon wages apply. For more information on the Davis-Bacon Act, please visit www.access.gpo.gov/davisbacon.

Maximum Reclamation Cost. The reclamation cost estimate must reflect the maximum cost of reclamation for the proposed disturbance to be covered by the financial guarantee. The point of maximum reclamation costs is often when there is the greatest area of disturbance, greatest volume of materials needing special handling, or some other factor or combination of factors which escalate the cost to reclaim. The maximum cost of reclamation is generally not at the end of the project life.

Unless the field manager authorizes a phased financial guarantee under 43 CFR 3809.553, the financial guarantee is for the entire life of the mine. In reviewing the operator’s estimate, the BLM must make sure the reclamation cost estimate for a life-of-mine financial guarantee reflects the maximum reclamation obligation.

Inflation. Inflation can, over time, become a significant factor in the amount of the required financial guarantee. This is an especially important concern where the potential exists for a substantial time interval between the BLM’s review of the reclamation cost estimate and the
potential collection and use of a forfeited financial guarantee. To minimize the potential impact inflation can have on the amount of the financial guarantee needed to cover the current reclamation cost, the field office must review on a periodic basis (every 2 years for Notices or every 3 years for Plans of Operations) the reclamation cost estimates for all ongoing operations as addressed in this IM.

c. Reclamation, Closure, Mitigation, and Monitoring

The reclamation operating and maintenance (O&M) costs reflect the direct current costs of reclamation based on the reclamation and closure measures in the Notice or approved Plan of Operations. Reclamation and closure tasks typically fall into the following categories:

(1) Interim Operation and Maintenance – If an operator abruptly ceases operations, immediate site operation and maintenance may be required by a third party to maintain the area of operation in compliance with applicable safety and environmental requirements. There is no preset time period for the care and maintenance of a site prior to the start of reclamation; much depends on the BLM’s ability to access the financial guarantee, especially in bankruptcy cases. It is a good rule-of-thumb to allow for a minimum of six months of interim O&M by a contractor. Large operations or project areas with limited seasonal access may warrant a longer time period.

(2) Hazardous Materials – This may include the cost of decontaminating, neutralizing, disposing, treating, or isolating hazardous materials used, produced, or stored on the site. The estimated cost for handling hazardous materials should assume, unless otherwise documented, that the material is properly stored and labeled.

(3) If, upon site inspection, it is determined the operator is using, producing, or storing material on site that could be hazardous (e.g., unlabeled barrels), and the BLM is unsuccessful in getting the operator to properly manage those materials (operator has failed to comply with a noncompliance order); the reclamation cost estimate must be updated to reflect the higher cost of disposing of such material. This distinction is important as the disposal of properly managed hazardous materials may be a fraction of the disposal cost for materials that are not properly stored and identified.

(4) Physical Hazards and Safety Considerations - No safety or physical hazards will remain on site after final reclamation has been completed. For example, if a nearly vertical slope remains where an adit has been backfilled, the residual slope must be reduced to a safe angle, and the final slope must be reclaimed to insure long-term stability and integrity.

During operations, the operator shall maintain structures, equipment, and other facilities in a safe and orderly manner.

(5) Water Treatment – All necessary construction and maintenance water treatment costs needed to ensure that mine discharge or drainage will meet relevant standards must be identified in the reclamation cost estimate. The cost of long term, post-reclamation operation, maintenance, and replacement requirements may be addressed in a trust fund established under 43 CFR 3809.552(c).
(6) Mine Facilities – The demolition, removal, and disposal of all mine facilities, immobile equipment and material from the project area must be accounted for in the reclamation cost estimate. Disposal costs for those facilities which have been approved in writing by the BLM for post-reclamation use may be excluded from the reclamation cost estimate. No salvage value for structures, equipment, or materials is allowed in the reclamation cost estimate.

Operable mobile equipment, e.g., trucks, dozers, etc., may be excluded from the cost estimate. If, upon site inspection, it is determined that the mobile equipment is inoperable and the BLM is unsuccessful in getting the operator to repair or remove the inoperable equipment from the project area (operator has failed to comply with a noncompliance order); the cost of removing and disposing of that equipment must be included in the reclamation cost estimate.

(7) Earthwork – Earthwork includes, but is not limited to, the cost of hauling, placement, regrading, and backfilling to reclaim mine disturbances, including roads that have not been specifically identified and approved to remain open.

(8) Drill Hole Plugging – The cost of plugging, capping, and isolation of drill holes, including exploration, production, and monitoring holes, must be addressed in the reclamation cost estimate. Specifically, care needs to be taken in determining plugging costs based upon whether drill holes encounter water, water under artesian pressure, or dry holes. Proposed plugging must meet all applicable Federal and State requirements.

Where the operator is proposing drilling, the reclamation cost estimate must include, at a minimum, the estimated cost of plugging the maximum number of drill holes that may be open at one time or the number of drill holes at a particular phase of the exploration program. The reclamation cost estimate must never be less than the cost of plugging one drill hole for each drill rig that will be working in the project area.

Where the submitted Notice or approved Plan of Operations calls for drill holes to be plugged, but doesn’t specifically require the drill holes to be plugged before the drill rig has been moved from the drill pad, the reclamation cost estimate must include the plugging cost for all drill holes identified in the Notice or Plan of Operations. For all drill holes, water, monitoring and piezometer wells scheduled to be left open, the estimated plugging cost must be included in the reclamation cost estimate. Where the approved Plan of Operations proposes mining through an area where drilling is to occur and the cost of the post-mining reclamation is included in the reclamation cost estimate, the cost estimate for plugging those drill holes is not needed.

If the BLM State Director determines the State’s plugging and financial guarantee requirements related to drill hole plugging accomplishes the same level of protection as this policy, the Field Manager may base the estimated plugging costs on the State requirements.

(9) Revegetation – The reclamation cost estimate must include the cost of obtaining the seed mix agreed upon by the BLM and specified in the reclamation plan and the cost of soil preparation, such as ripping or harrowing; soil amendments, such as mulching or fertilizer;
application of the seed mix; noxious weed control; and placement of tree and shrub seedlings, if required. The cost for hauling and placement of growth medium, if not addressed under earthwork, must be included.

(10) Mitigation – Mitigation may include avoiding, minimizing, rectifying, and reducing or eliminating the impact or compensating for the impact. The cost of any deferred mitigation the field office is requiring the operator to perform must be included in the reclamation cost estimate. For example, if the operator is required to develop five acres of wetlands to compensate for disturbance elsewhere on the project area, until that wetland development is completed, the reclamation cost estimate must include the cost of that mitigation.

(11) Post-Reclamation Costs – The costs of meeting any long-term construction, operation, maintenance, or replacement of any treatment facilities and infrastructure, which are not addressed in a trust fund established by 43 CFR 3809.552(c), must be included in the reclamation cost estimate.

In estimating the cost to perform these reclamation, closure, mitigation and monitoring tasks; the operator’s estimate must identify the current O&M costs relating to reclamation including:

- equipment rental or acquisition costs;
- equipment operation costs;
- equipment maintenance costs;
- cost of operating supplies;
- labor costs for operations, maintenance and supervision;
- site maintenance including roads, infrastructure, power lines, fences, and monitoring facilities;
- reclamation materials acquisition costs; and
- mobilization and demobilization costs.

All line items contained in an acceptable reclamation cost estimate are not to be considered spending constraints should a financial guarantee be forfeited. The line items listed are solely for the purpose of arriving at a total financial guarantee amount. This total amount may be spent however the BLM deems necessary to implement the reclamation plan. Care should be exercised so that decisions on the amount of the financial guarantee correctly reflect this policy.

Information sources that may be useful in conducting a cost analysis include: applicable parts of the Office of Surface Mining’s Handbook for Calculation of Reclamation Bond Amounts (http://www.wrcc.osmre.gov/), the BLM’s Solid Minerals Reclamation Handbook H-3042-1, the Caterpillar Performance Handbook, Western Mine Engineering, Inc. (use for operator estimates only—does not consider third party contract estimates), R.S. Means Site Work Cost Data, Dataquest (equipment operating and owning costs), Rental Rate Blue Book for Construction Equipment, and Skills & Knowledge of Cost Engineering. The user of these references needs to be cognizant of how the data may be applied. The reclamation cost estimate must reflect the BLM’s cost to contract to have the work performed; owner/operator cost data does not reflect the BLM’s contracting cost.
d. **BLM Administrative Costs**

The field office must ensure the cost of reclamation is estimated as if the BLM were hiring a contractor to perform all required reclamation. This will include costs that the operator does not normally encounter. The BLM reviewer needs to pay particular attention to costing standards that are based, in part, on the Federal Acquisition Regulations. The responsible BLM specialist should coordinate with his/her State office procurement analyst concerning current labor wages, contracting requirements, and advice on various types of contracts, contract language, and administration.

This guidance contains suggested percentages for some of these administrative costs. Unless otherwise noted, these percentages should be treated as rules-of-thumb and not as precise amounts specified by regulation or law. Figures or percentages, other than those listed below, should be included in a calculation if they are explicitly addressed in a Federal-State agreement regarding the financial guarantee and/or are required by Federal or State law.

Unless otherwise noted, the administrative cost categories identified below should be included in the reclamation cost estimate.

1. **Engineering, Design, and Construction (ED&C) Plan** - An ED&C plan provides the details needed for contracting the reclamation construction work. Where appropriate, the reclamation cost estimate should reflect the costs to prepare such a plan. Should the operator fail to reclaim, the BLM may need to undertake a number of tasks including:

   i. preparation of maps and plans to show the extent of required reclamation;

   ii. survey of topsoil and growth medium stockpiles to determine amount of material available;

   iii. sampling and analysis of waste rock, tails, heap material, surface and ground water, etc.;

   iv. sampling and analysis of topsoil, growth medium, and waste piles to determine whether special handling or treatment is necessary;

   v. evaluation of structures to determine requirements for demolition and removal;

   vi. evaluation of storm water facilities and process solutions or water impoundments to determine if treatment, clean out, or other improvements are necessary; and

   vii. preparation of a supplemental environmental analysis or site studies before reclamation may commence.

For the purpose of reclamation cost, estimating the ED&C costs for preparation of this data collection, analysis, and planning is to be 3 percent where O&M costs are greater than or equal to
$50,000; if less than $50,000, the cost is zero. For very large operations, the actual cost will depend to a great extent on the specifics, including reclamation complexities, of the proposed operation. The amount or percentage applied should be based on available data within the subject State. Absent specific local or State data, it is recommended that the ED&C costs be estimated as 2 to 15 percent of the estimated reclamation O&M costs.

(2) Contingency – Contingency allowance is for cost overruns that regularly occur but cannot be ascertained when an operation is being reviewed. Contingency costs generally reflect the level of detail and completeness of the cost estimate, as well as the level of uncertainty in the assumptions used for the reclamation cost estimate. With the development of an ED&C plan, many of the unforeseen circumstances and costs are identified. Contingency costs do not, however, include changes in the scope or unforeseeable or unanticipated events such as earthquakes, labor strikes, or floods.

Federal and State agencies that routinely prepare construction cost estimates apply contingencies ranging from 3 to 45 percent of the O&M costs. The amount or percentage required should be based on available reclamation or construction contract information within the subject State.

Where the proposed operation involves a relatively small, uncomplicated reclamation effort, and development of an ED&C plan is not anticipated, a contingency of 3 percent is used. For operations with estimated reclamation O&M costs over $100,000 a contingency of 10 percent is required.

(3) Contractor Profit – Government contracts generally include a contractor profit over and above the estimated reclamation O&M costs. Reported prime contractor’s profits and overheads on existing contracts cover a wide range of values (5 to 35 percent). Financial guarantees in OR/WA use 6 percent of the estimated O&M costs. Where State or local contract information suggests a different amount or where State law specifies an amount, use that figure.

(4) Liability Insurance - The contractor’s liability insurance premium must be included in the reclamation cost estimate. If the liability insurance is included in the reclamation O&M estimate, this needs to be documented. The contractor’s liability insurance premium should be estimated as 1.5 percent of the estimated labor costs for the project and included in the reclamation cost estimate.

(5) Payment and Performance Bonds - Payment of premiums for both a performance bond and a payment bond as required by the Miller Act, with estimated contract costs over $100,000, must be included in the reclamation cost estimate. A set amount equal to 3 percent of the estimated O&M costs should be used to calculate the payment of premiums for both a performance bond and a payment bond.

(6) The BLM Contract Administration – The BLM’s labor and operations costs for the field and State offices to administer the contract must be included in the financial guarantee. Contract administration costs range from 2 to 25 percent, but a cost of 12 percent is currently used.
Where data is available, the State or field office should review its records to determine appropriate costs. Generally, the larger the amount of the financial guarantee, the lower the percentage needed for contract administration.

(7) The BLM Indirect Costs – The BLM’s indirect costs for contract administration must be included in the amount of the required financial guarantee. The indirect cost rate is fixed and is currently 17.1 percent annually of the estimated BLM contract administration cost.

If the BLM is required to administer a reclamation contract under a forfeited financial guarantee, these indirect cost funds are to remain within the State where the reclamation work will be done. The funds will be available to pay for within-State indirect costs (building rental, telephone, etc.) associated with the project and any project support needed from other offices such as the National Operations Center contract officers or inspectors.

In reviewing the operator’s reclamation cost estimate, the field office may need to determine what administrative costs the operator has included with his/her reclamation O&M costs. To avoid overlooking or double counting any of the identified administrative costs, such as contractor profit, the operator must document what administrative costs are included in his/her labor costs or other O&M costs. This may be done by itemizing the cost estimates or by providing the BLM with a signed statement that identifies the specific administrative costs that are included in his/her estimated O&M costs.

e. Reclamation Cost Estimating Tools

It is recommended that field offices use the reclamation cost estimating tools provided by the State office, Sherpa, or other offices; but field offices may develop their own tools to support the reclamation cost estimating process as long as those tools meet the requirements for doing the appropriate calculations and they are updated for locality and inflation on a regular basis. Reclamation Cost Estimating programs are for internal use only and are not to be released to the general public. Summary sheets, checklists, and cost models may be available to assist the operator in developing the reclamation cost estimate.

Standardized reclamation cost estimating processes that include standardized unit costs, schedules, spreadsheets, and models are useful tools that provide simplified, efficient, defensible, and consistent means of estimating reclamation costs for both Notices and Plans of Operations. Where appropriate, the BLM State and field offices are encouraged to develop processes based on standardized unit costs to facilitate the review and approval of the operator’s reclamation cost estimate. A process that uses standardized costs may be developed based on local and/or regional costs to reclaim typical activities, features, and facilities (roads, drill pads, drill-holes, trenches, pits, structures, site stabilization, revegetation, etc.) for specific kinds of terrain (topography).

Where a standardized reclamation cost estimating process is used, the amount of a financial guarantee must be sufficient to meet the requirements of 43 CFR 3809.552(a) and 3809.554(a). The assumptions used in developing the cost inputs must be consistent with both State and Federal regulations and laws. Determining consistency with State and Federal regulations laws goes beyond the applicable environmental requirements. The assumptions used must also be consistent
with applicable contracting requirements, such as Federal Acquisition Regulations. For example, under Federal contracting, we cannot require an operator to work double shifts. As such, the reclamation cost estimate should not be based on the assumption that the reclamation contractor will conduct the work using a double shift.

f. Periodic Review

The BLM field office must provide a periodic review of reclamation cost estimates for ongoing operations and issue a determination as to the amount of the required financial guarantee. Based on a complete evaluation and update of the reclamation cost estimate, the periodic review must ensure the current amount of the financial guarantee continues to meet the requirements of 43 CFR 3809.552(a), 3809.552(c), and 3809.554(a).

The following establishes the maximum time the BLM may allow to elapse between reviews. The BLM has the authority to require a more frequent review of the reclamation cost estimate at the discretion of the Field Manager.

1. Reclamation cost estimates for Notice operations must be reviewed every 2 years or at the time of the Notice extension under 43 CFR 3809.333.

2. Reclamation cost estimates for Plans of Operations must be reviewed at least every 3 years.

3. Where the BLM has an agreement under 43 CFR 3809.200 with the State that requires a review more frequently than every 2 years for Notices or every 3 years for Plans of Operations, reviews must be conducted in conformance with that agreement.

4. Where the Notice or Plan of Operations is modified, a review must be conducted at the time of modification. The reclamation cost estimate review must focus on how the modification affects the existing cost estimate on file. Unless the proposed modification necessitates a complete review, the entire current reclamation cost estimate does not need to be reviewed. However, a review that covers a portion of the reclamation cost estimate on file for the modified Notice or Plan does not substitute for the required 2-year review for a Notice or 3-year review for a Plan of Operations.

5. Where the financial guarantee is for a part of the operation, as provided under 43 CFR 3809.553, the BLM must review the reclamation cost estimate annually [43 CFR 3809.553(b)]. The field office will evaluate and update the reclamation cost estimate for each increment of the operations. In addition to the annual review requirement for the phased financial guarantee coverage, the field office must also review the reclamation cost estimate for the entire Notice every 2 years or entire Plan of Operations every 3 years as required above.

6. The field office must conduct, at least every 3 years, a thorough review of the cost estimates and other assumptions used in determining the amount of funds needed in the long-term funding mechanism required under 43 CFR 3809.552(c). The field office must also monitor the growth of all trust funds. At least once a year the responsible field office must review the financial
Statements to ensure growth of the fund is keeping pace with the assumptions used to determine the amount needed in the fund.

g. **Review Results and Decisions**

The Field Manager must issue a decision that establishes the amount of the required financial guarantee. The decision must be provided to the operator following the completion of the review of the reclamation cost estimate with a copy provided to the BLM office responsible for adjudication of the financial guarantee.

Acceptable Review Results - When the field office has received an estimate that is acceptable, the Field Manager must provide the operator with a written decision as to the amount of the required financial guarantee. The decision must State: (1) for reclamation cost estimates of less than $1,000, the bond will be rounded up to the nearest $10; for reclamation cost estimates over $1,000 the bond will be rounded up to the nearest $100; and (2) the types of financial instruments that are acceptable to the BLM. The Field Manager's decision must also State that an operator may not begin operations under a new or modified Notice or Plan of Operations without first providing the BLM with an acceptable financial guarantee that meets the requirements of 43 CFR 3809.551 through 3809.572; no activity greater than casual use is authorized until the BLM has accepted and obligated the operator's financial guarantee.

Following the periodic review for an ongoing operation, the Field Manager will make a determination as to the amount of the required financial guarantee. If there is a change in the required amount of the financial guarantee or the review was conducted at the request of the operator, the Field Manager must issue a decision as to the amount of the required financial guarantee. For ongoing operations under an existing Notice and Plan, the decision must State: (1) the amount of the required financial guarantee, (2) any change (increase or decrease) in the amount of the required financial guarantee, (3) that the operator has 60 days from receipt of the decision to submit an acceptable financial guarantee if the amount has increased, and (4) that failure to provide an acceptable financial guarantee within the specified time frame will result in an enforcement action against the operator for failure to maintain an acceptable financial guarantee.

For a Notice extension under 43 CFR 3809.333 where the amount of the required financial guarantee has increased, the decision must also State: (1) that the Notice is conditionally extended subject to meeting the financial guarantee requirements, (2) that failure to provide an acceptable financial guarantee within 60 days will result in the Notice expiring immediately upon conclusion of the time frame, and (3) that, upon expiration of the Notice, all activities, other than reclamation, are unauthorized and must cease.

Unacceptable Review Results - If the field office finds the operator has incorrectly calculated operating and maintenance costs or finds that the estimate is based on out-of-date cost data that does not reflect the actual cost of reclamation, then the estimate will not be accepted. When an estimate is not acceptable, the Field Manager must notify the operator in writing of its unacceptability and identify the deficiencies or errors that led to that conclusion. The BLM must advise the operator to incorporate the administrative costs outlined above if they are not included in the estimate.
Where the reclamation cost estimate for a new Notice is not acceptable to the BLM, the Notice will not be considered complete as required under 43 CFR 3809.301.

Additional Information - For ongoing operations where the field office lacks the information necessary to determine the adequacy of the existing reclamation cost estimate, the Field Manager must notify the operator of the deficiencies or errors and include a due date when the information or revised reclamation cost estimate must be submitted. Failure to provide the required information within the specified time frame will result in an enforcement action against the operator for failure to maintain an acceptable financial guarantee.

For Notices to be extended under 43 CFR 3809.333 where the field office lacks the information necessary to determine the adequacy of the existing reclamation cost estimate, the Field Manager must issue a decision giving the operator 30 days from receipt to provide all of the requested information. The Notice will be conditionally extended pending the field office receipt of the required information. Failure to provide the required information within the 30-day period will result in the Notice expiring.

Appeal of Review Decisions - Decisions relating to the acceptability or unacceptability of a financial guarantee are subject to appeal under the provisions of 43 CFR 3809.800. Any adversely affected party may elect to seek a State Director Review (SDR) under 43 CFR 3809.800(a) or appeal directly to the Office of Hearings and Appeals (OHA) under 43 CFR 3809.801. The field office then forwards the Notice of Appeal to OHA. Appeals must be filed by the appellant with the office that issued the decision within 30 days of receipt of the decision. Requests for an SDR are filed with the office of the State Director within 30 days of the Field Manager’s decision. If the review and evaluation of the financial guarantee and/or financial instrument was conducted by the State office, a request for SDR under 43 CFR 3809.806 may not be accepted.

Decrease the Amount - Where the existing amount of the financial guarantee exceeds the Field Manager’s determination as to the amount of the required financial guarantee, the operator may request that the BLM decrease the amount of the required financial guarantee. Any request by the operator for a reduction in the amount of the financial guarantee must be made to the BLM office responsible for adjudicating the financial guarantee.
3. **FINANCIAL GUARANTEE PROCESS FOR NOTICE LEVEL OPERATIONS UNDER 43 CFR 3809 SURFACE MANAGEMENT REGULATIONS**

Pursuant to §3809.554(b) and §3809.503(c), the operator/claimant must provide a financial guarantee acceptable to the BLM before operations can begin under a new notice. The financial guarantee must cover the estimated reclamation cost as if the BLM were to contract with a licensed and bonded third party to reclaim disturbances resulting from the operations or pre-existing disturbances for which the claimant/operator has taken responsibility, pursuant to §3809.552(a) and §3809.554(a). Acceptable financial guarantee instruments may be found at §3809.555.

a. **Financial Guarantee Process**

To fulfill the 43 CFR 3809 Surface Management financial guarantee requirements, the following process must be followed.

1. The BLM district office determines that the Notice is complete.

2. The Notice must be accompanied by the operator’s reclamation cost estimate. The Notice will not be considered “acceptable” by the BLM without submission of an acceptable reclamation cost estimate by the operator (see Davis-Bacon and Administrative Charges below).

**Davis-Bacon Wages**

Davis-Bacon wages must be used in the reclamation cost estimate for all amounts over $2,000.

**Administrative Charges**

The following administrative charges must be added to the reclamation cost estimate and included in the financial guarantee:

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<tbody>
<tr>
<td>Contract Administration Cost (Operational Project costs)</td>
<td>12.0%</td>
</tr>
<tr>
<td>BLM Indirect Cost Variable</td>
<td>17.1%</td>
</tr>
</tbody>
</table>

The Administrative Charges are applied to the total reclamation estimate.

For reclamation cost estimates of less than $1,000 the bond will be rounded up to the nearest $10; for reclamation cost estimates over $1,000 the bond will be rounded up to the nearest $100.

A portion of an existing financial guarantee for reclamation earthwork that has been completed may be applied to proposed earthwork in another location. For example, if a trench has been bonded, excavated, and backfilled the dollar amount associated with the earthwork portion of the bond can be applied to a second phase of trench excavation¹ which has been identified under the same Notice.

---

(3) The BLM reviews the reclamation cost estimate and determines if it is acceptable. If it is determined to be acceptable, the BLM sends the operator a decision letter accepting the estimate.

(4) Financial guarantees, acceptable to the BLM, can be made in two forms—Surety Bonds or Personal bonds in the form of Cash Bonds, Letters of Credit, or Certificates of Deposit. Whichever financial guarantee is filed, it must be acceptable to the BLM, cover all reclamation and administrative costs, and be payable to the Department of the Interior-BLM, on demand, in case of default.

Financial guarantee forms for surety and personal bonds are available from field offices and the completed forms must accompany the submittal of the financial instrument. It is recommended that the financial instrument and accompanying form be sent certified mail—return receipt requested. The financial instrument and accompanying form must be sent to the BLM office responsible for adjudication of the financial guarantee indicating: Attention: Bond Adjudicator. If the financial instrument is through a financial institution, the BLM must receive a letter and/or form from the institution on its official letterhead, establishing the Secretary of the Interior, Bureau of Land Management, as the beneficiary.

(5) The BLM will determine if the financial instrument is acceptable.

(6) The BLM will issue a decision letter accepting the financial guarantee. Operations may not commence until the BLM Plan/Notice and the reclamation bond acceptance letter are received by the operator.

The BLM will periodically review the estimated cost of reclamation and the adequacy of any funding mechanism and require increased coverage, if necessary.

When the BLM identifies a need for it, the operator must establish a trust fund or other funding mechanism available to the BLM to ensure the continuation of long-term treatment to achieve water quality standards and for other long-term, post-mining maintenance requirements. The funding must be adequate to provide for construction, long-term operation, maintenance, or replacement of any treatment facilities and infrastructure for as long as the treatment and facilities are needed after mine closure. The BLM may identify the need for a trust fund or other funding mechanism during plan review or later.

b. Forfeiture

Under § 3809.595, the BLM may initiate forfeiture of all or part of a financial guarantee for any project area or portion of a project area if:

(1) the operator or mining claimant refuses or is unable to conduct reclamation as provided in the reclamation measures incorporated into the notice or approved plan of operations or the regulations in this subpart;

(2) the operator or mining claimant fails to meet the terms of the notice or approved plan of operations; or
(3) the operator or mining claimant defaults on any of the conditions under which financial guarantee was obtained.

If the amount forfeited is insufficient to pay for the full cost of reclamation, the operators and mining claimants are liable for the remaining costs as set forth in §3809.116. The BLM may complete or authorize completion of reclamation of the area covered by the financial guarantee and may recover from responsible persons all costs of reclamation in excess of the amount forfeited.

c. Release of Financial Guarantees

Requests for release of existing financial guarantees must be provided to the BLM in writing before the BLM contacts the financial institution. These requests must include the Notice "OR," serial number, name/s/ of all claimants and operators, mailing addresses, phone numbers, and the amount requested for release. The BLM must verify satisfactory completion of site reclamation prior to authorizing the release of the financial guarantee.

d. Frequency of Inspections

The BLM may inspect mining operations at any time with no advance notice. Inspections may include all structures, equipment, workings, and uses located on the public lands. The inspection may also include verification that operations comply with this subpart (§3809.600). Under §3715.7, the BLM field staff is authorized to physically inspect all structures, equipment, workings, and uses located on the public lands. The inspection may include verification of the nature of use and occupancy to ensure that use or occupancy is, or continues to be, reasonably incident and in compliance with §3715.2, 3715.2-1, 3715.4-1 and 3715.5.

The BLM will not inspect the inside of structures used solely for residential purposes, unless an occupant or a court of competent jurisdiction gives permission.
Examples of Earthwork Production and Scarification Estimation

The following information has been referenced from the Caterpillar Performance Handbook, Editions 32, from October 2001, and 33, from October 2002. These calculations should be used as a general guideline in calculating off-the-job equipment performance. On-the-job equipment performance may differ from these calculations depending upon material type, blade/bucket configuration, job size, operator skill, and site conditions. The available equipment may not always match the earthmoving job volume creating performance and cost variances. Equipment mobilization costs must be included in the cost estimate.

EXAMPLE RECLAMATION COST ESTIMATE

Non Davis-Bacon Rates

PROJECT DESCRIPTION: Three hundred feet (300') of road is going to be upgraded and used for access. Three trenches, each 20' x 30' x 12' deep, will be excavated and backfilled after processing. The processing site area of disturbance is approximately 400 square feet. The project is 35 miles from the equipment source location.

Earthwork:

Backfilling
20' X 30' X 12' = 7,200 ft³/27 ft³/1 yd³ = 267 yd³
The production rate for a D-6 bulldozer including industry standard corrections factors is 280 yd³/hr. The time is will take to backfill one excavation is: 267 yd³/280 yd³/hr = .95 hr. For three trenches the time would be 3 x .95/hr = 2.85 hrs.

$(A) is the cost per hour for a D-6 from the average cost table:

(A) $(A) x 2.85 hrs. = $Operating Cost

The total area of disturbance, which must be scarified and seeded is:

Processing area 400 ft²
Trenches 1,800 ft²
Road 3,600 ft² assume a 12' width

Total area disturbed: 5,800 ft²

Scarifying

A D-6 can rip 19,296 ft²/hr. Therefore, the time it would take to rip the area of disturbance is:

5,200 ft²/19,296 ft²/hr = .27 hrs x $(A) = $Operating Cost
Seeding:

The seed application rate is 20 lbs seed/acre at a cost of $B/ac
$B = cost of seed per acre
Seed cost = 5,800 ft²/43,560 ft²/ac = .13 ac
(B) $B/ac x .13 ac = $Project Seed Cost

The seed application with an ATV is $C/hr. at 1 ac/hr
$C = Labor cost per hour
(C) Labor = .13 ac x $C/hr = $Seeding Labor Cost

(D) Pickup truck & driver to haul in ATV and seed site: 100 miles x $D/mi = ATV Seeding Cost
$D = Cost of ATV per mile
(E) Driver 2 hours x $E/hr = $Cost of driver for project

(F) Mobilization: $/hr x 4 hrs = $Cost of mobe/demobe

(G) Total Costs: $A + $B + $C + $D + $E + $F

Administrative Charges

Contingency 3.0% x $(G) = H
Contract Administration 12% x $(G) = I
BLM Indirect Cost 17.1% x $I = J

Total Financial Guarantee

$Reclamation Bond
Attachment 2

43 CFR 3809 NOTICE-LEVEL OPERATIONS
GENERAL INFORMATION

As required by the Surface Management Regulations (43 CFR 3809), any operator who intends to use mechanized earth-moving equipment or explosives to conduct exploration-related work, annual assessment work, or bulk sampling on the Bureau of Land Management-administered "Federal Lands," whether claimed or not, must submit a completed Notice and receive notification of the BLM's acceptance of the associated financial guarantee prior to commencing operations.

Per the Use and Occupancy Regulations (43 CFR 3715), any operator who proposes to erect a structure (e.g., building or fence) and/or proposes to stay on public lands on a full- or part-time basis for more than 14 calendar days in any 90-day period within a 25-mile radius of the initially occupied site must include the proposal as part of the Notice. Written concurrence from the BLM is required before erecting the structure or occupying the lands.

Filing Locations:

Notice level-operations within the ___________ Resource Areas must be filed with the

__________________________________________, Oregon __________

(District Name) (Address) (City) (Zip Code)

Notices submitted without all of the information required by 43 CFR 3809.300 will not be accepted as complete until all of the necessary information is included. This is an optional notice form for use, if so desired. Regulations do not require the use of this form. However, the form was developed to make it easier to file a complete Notice and avoid unnecessary review and processing delays. It is recommended that the claimant/operator make one or more copies for his/her records and submit the completed form by Certified Mail, Return Receipt Requested or hand-deliver it to the above office having responsibility for the subject lands.

The Notice should be as complete and as detailed as possible and ensure all roads, existing, and proposed disturbances, and structures are shown on sketches or maps (preferably expanded 7½", (1:24,000), topographic quadrangles) and the township(s), range(s), and section(s), are clearly labeled on the maps. Information and data submitted and specifically identified by the operator as containing trade secrets or confidential or privileged commercial or financial information should be attached as clearly marked separate pages and cited in the text of the Notice. This information will be filed separately and will not be available for public inspection.
Reclamation is required on all disturbed areas (refer to 43 CFR 3809.420). The requirements include, but are not limited to, reshaping and stabilization of all disturbed areas; removal, segregation, and storage of topsoil or other suitable growth material to minimize erosion and sustain its utility for re-vegetation; measures to isolate, remove, or control toxic materials; and re-vegetation of disturbed lands by establishing a stable and self-sustaining vegetative cover.
43 CFR 3809
NOTICE-LEVEL OPERATIONS

NOTICE NUMBER: OR - ____________

1. GENERAL INFORMATION

NAMES AND ADDRESSES

Include the name, permanent mailing address, and telephone number of the mining claimant(s) and operator(s), if other than the claimant. If the operator has a temporary local address and telephone number, include that as well. Use additional sheets as necessary. The claimant/operator is required to notify the local Bureau Land Management Office in writing within 30 days of all changes of address or operators.

Claimant(s) *

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<td>(4)</td>
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</tbody>
</table>

(Use additional sheets as necessary)

* If the claim is an association placer (i.e., 160 acres and 8 claimants), only the name, address and telephone number of the claimant who acts as the spokesperson, or attorney-in-fact for the group (if one is chosen) is required.
Operator:  

<table>
<thead>
<tr>
<th>Name of Claims on Which Operations Will Be Conducted</th>
<th>ORMC Serial No.</th>
<th>Location</th>
<th>County</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Township</td>
<td>Range</td>
</tr>
</tbody>
</table>

TYPE OF CLAIM: Placer □; Lode □; Mill Site □; Tunnel Site □.

Will the operations involve Federal land not under a mining claim: YES □ NO □. (This would include Federal land surface/non-Federal mineral estate.) Depict the location on an attached map.

2. ACCESS ROUTES (TO CLAIMS AND AREAS OF OPERATION)

Show existing/proposed access routes on an expanded 7½' topographic map (1:24,000), including locations of existing routes requiring upgrade. Show locations of proposed culverts, low water crossings, water-bars, turn-outs, etc.
Type of access route proposed:

Existing, no upgrading needed: ______________________________________________________

Existing, major upgrading needed: __________________________________________________

Dimensions of proposed upgrade: Width: _______ Length: _______ (miles/feet).

New Road(s): ____________________ Location(s): ____________________

Dimensions of proposed upgrade: Width: _______ Length: _______ (miles/feet).

Total disturbed width (top of cut to bottom of fill): ________ feet; at Grade: ________%

Will any road cuts be greater than 3 feet in height on the inside edge? YES □ NO □

If "yes," describe: ________________________________________________________________

Include sketch of typical road cross sections and continue, as needed, on the back of this sheet

3. DESCRIPTION OF EXPLORATION OPERATIONS

Show the specific location of all drill holes, mud pits, trenches, adits, shafts, bulk sample sites, exploration roads, etc., on an expanded 7½’ (1:24,000), topographic map or appropriate scale map.

Type of Exploration Activities: ______________________________________________________

__________________________________________________________________________

__________________________________________________________________________

Proposed start date of exploration operations: ___________; Proposed end-date: ___________

List inactive periods: _______________________________________________________________________

Reclamation will be completed by: _______________________________________________________________________

Total surface disturbance proposed (including all road work): __________________________

Square feet: ____________ and acres: ____________ (1 acre = 43,560 square feet).
Will explosives be used? YES □ NO □
If “yes,” where will they be stored on site? __________________________
during what periods of time? __________________________
(show on attached map)

Will hazardous materials (e.g., cyanide, arsenic, mercury, etc.) be used or generated on site?
YES □ NO □
If “yes,” describe: ____________________________________________

Will any hazardous materials be stored on site? YES □ NO □
If “yes,” where and how will they be stored? ____________________________________________
(Show on attached map)

Will any fuels, lubricants, or coolants be stored on site? YES □ NO □
If “yes,” where and how will they be stored? ____________________________________________
(Show on attached map)

Will water be used in the operation? YES □ NO □
If “yes,” how many? __________________________ gallons/day
Where will it be obtained? __________________________
How will it be transported to the site? __________________________
How will it be stored at site? __________________________
(Show water source, transportation route, and storage on attached map.)
Will settling ponds be constructed? YES □ NO □

If “yes,” dimensions of ponds: _____ feet long; by _____ feet wide; and _____ feet deep. (Show related facilities, settling ponds, pipelines, etc., on attached map.)

Will any trees be cut? YES □ NO □

If “yes,” first obtain a free-use permit from this office.

Will cut trees be put to beneficial use at site? YES □ NO □

PITS, TRENCHES, PONDS, BULK SAMPLE SITES

Will trenches, test pits, bulk sample sites, etc., be excavated? YES □ NO □

List and describe the number and type of excavations:

Size: __________ feet long; by __________ feet wide; by __________ feet deep.

(1) ____________________________________________________________

(2) ____________________________________________________________

(3) ____________________________________________________________

(4) ____________________________________________________________

(Continue, as needed, on the back of this sheet)

UNDERGROUND WORKINGS

Do adits, shafts or other underground workings exist on the claims? YES □ NO □

If “yes,” describe: ______________________________________________________
                                                                                       ______________________________________________________
                                                                                       ______________________________________________________

Describe any proposed underground exploration and the type of workings to be modified or constructed:
                                                                                       ______________________________________________________
                                                                                       ______________________________________________________
                                                                                       ______________________________________________________
                                                                                       ______________________________________________________
Dimensions of Proposed Workings:

DRILLING

Will any holes be drilled? YES □ NO □

If “yes,” how many? ___________; by how deep? ________________.

Will mud pits be constructed?

If “yes,” pit size: ________ feet long; by ________ feet wide; by ________ feet deep.

Will drill pads be constructed?

If “yes,” number _______; and location ____________________________

Pad size: ________ feet long; by ________ feet wide; by ________ cut / feet deep.

(Show drill pad location on attached map.)

EQUIPMENT TO BE USED

Equipment (brand and size):

----------------------------------------------- Number of Pieces ______
----------------------------------------------- Number of Pieces ______
----------------------------------------------- Number of Pieces ______
----------------------------------------------- Number of Pieces ______
----------------------------------------------- Number of Pieces ______
----------------------------------------------- Number of Pieces ______

(Use additional sheets as necessary)
4. RECLAMATION COST ESTIMATE INFORMATION

The BLM requires that operators post bonds sufficient to pay all reclamation costs as if the BLM were to contract with a third party (a licensed and bonded contractor) to reclaim the operation. Please submit a separate estimate of the costs to fully reclaim the proposed operations once the Notice has been determined to be complete by the BLM.

Calculate for all disturbances that will be newly created or existing disturbances that will be modified, add any disturbances or structures not listed above. List the dimensions of the disturbances (square feet or acres) and/or the volumes in cubic yards (yds\(^3\)) of the necessary earthwork. List the method, type of equipment and number of hours required to complete the reclamation. For structures (and inoperable equipment), list the removal method and transport hours.

Roads/Access dimensions (length & width):

Roads cut and fill dimensions (length, width & depth (LxWxD)):

Equipment

Equipment

Equipment

Equipment

(Continue list, as needed, on back of this sheet.)

Pits/Trenches dimensions of each (length, width & depth):

Equipment

Equipment

Equipment

(Add other items as needed on back of this sheet.)
Ponds and ditches dimensions (LxWxD):

<table>
<thead>
<tr>
<th>Equipment</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
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</tbody>
</table>

(Add other items as needed on back of this sheet.)

Dumps/Spoils/Tailings and dimensions of each (length, width & height (LxWxH)):

<table>
<thead>
<tr>
<th>Equipment</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
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</tbody>
</table>

(Add other items as needed on back of this sheet.)

Equipment/Processing Areas for scarification and re-contouring earthwork dimensions (length and width (LxW)):

<table>
<thead>
<tr>
<th>Equipment</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
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</tbody>
</table>

(Add other items as needed on back of this sheet.)
Seed costs: Area = ____ ft.² Seed = ____ Acres @ $ ____ / Acre = ______  
Labor = ____ hrs @ $ ____ hr  
Total = ____________________________ 

Topsoil stockpile dimensions for spreading (LxWxH and volume in yds³) & haulage distances: 

________________________________________________________

________________________________________________________

________________________________________________________

________________________________________________________

Equipment ___________________________ Hours ___________________________
Equipment ___________________________ Hours ___________________________
Equipment ___________________________ Hours ___________________________
Equipment ___________________________ Hours ___________________________

(Add other items as needed on back of this sheet.)

Structures (buildings, milling facilities, fences, power poles, wire, and other infrastructure). List the type, dimensions, removal methods, and haulage costs, and distance to landfill or scrap yard:

________________________________________________________

________________________________________________________

________________________________________________________

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________________________________________________________

________________________________________________________

Equipment ___________________________ Hours ___________________________
Equipment ___________________________ Hours ___________________________
Equipment ___________________________ Hours ___________________________
Equipment ___________________________ Hours ___________________________

(Add other items as needed on back of this sheet.)
Haulage: __________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

Equipment___________________________ Hours____________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

(Add other items as needed on back of this sheet.)

Underground workings (list the dimensions of the openings, closure methods, safety gates and estimate costs):
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

Equipment___________________________ Hours____________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

(Add other items as needed on back of this sheet.)

5. RECLAMATION

Reclamation shall include, but is not limited to, the following:

a. Measures to prevent unnecessary or undue degradation to public lands.

b. Removal and stockpiling of topsoil for later reclamation of the disturbed area.

c. Re-vegetation of disturbed lands by the establishment of a stable native vegetation cover.
d. Efforts to minimize disturbances and adverse impacts to fish, wildlife, and related environmental values.

e. Measures to minimize erosion, siltation, air pollution, and impacts to resources.

f. Measures to isolate, remove, treat, or control acid-forming, toxic, or other deleterious materials.

g. Reshaping of disturbed areas to minimized infiltration and contamination of ground and surface water.

h. Grading of disturbed areas to a stable condition to minimize erosion and facilitate re-vegetation.

i. Reshaping of all disturbed areas to blend with the pre-mining, natural topography, to the extent practical.

j. Measures to restrict access to hazardous portions of operations in the interest of public safety.

6. RECLAMATION STATEMENT

Reclamation of all areas disturbed will be completed to the standards described in regulations at 43 CFR 3809.420, and all reasonable measures will be taken to prevent unnecessary degradation of the public lands during operations.

Operator's Signature

Date

Operator's Signature

Date
7. DESCRIPTION OF THE PROPOSED RECLAMATION:

(Use additional sheets as necessary.)
SKETCH MAP FOR FOUR SECTIONS

Township ___________ Range ___________ Sections ___________

Scale of sketch blank is 3 inches = 1 mile. At that scale a 20 acre placer claim (1320 feet x 660 feet) would be \( \frac{3}{4} \) inch by \( \frac{3}{4} \) inch (1320 feet = \( \frac{3}{4} \) mile = \( \frac{3}{4} \) inch).

Claimant’s Signature ___________________________ Date ___________
### MAP of Mining Claims

<table>
<thead>
<tr>
<th>Township</th>
<th>Range</th>
<th>Section</th>
<th>State of</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>NW/NW</th>
<th>NE/NW</th>
<th>NW/NE</th>
<th>NE/NE</th>
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</thead>
<tbody>
<tr>
<td>SW/NW</td>
<td>NE/NW</td>
<td>SW/NE</td>
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<tr>
<td>NW/SW</td>
<td>NE/SW</td>
<td>NW/SE</td>
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</tr>
<tr>
<td>SW/SW</td>
<td>SE/SW</td>
<td>SW/SE</td>
<td>SE/SE</td>
</tr>
</tbody>
</table>
**DEFINITIONS AND ABBREVIATIONS USED IN THIS DOCUMENT**

<table>
<thead>
<tr>
<th>Term</th>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>7½' Topographic Map</td>
<td></td>
<td>7½ minute, 1:24,000 scale</td>
</tr>
<tr>
<td>Acre</td>
<td>ac</td>
<td>43,560 Square Feet</td>
</tr>
<tr>
<td>Cubic Foot</td>
<td>ft³</td>
<td>12 inches X 12 inches X 12 inches (L X W X H) where H = Height, 7.48 Gallons</td>
</tr>
<tr>
<td>Cubic Yard</td>
<td>yd³</td>
<td>27 Cubic Feet, 3 ft X 3 ft X 3 ft (L X W X H) where H = Height</td>
</tr>
<tr>
<td>Cubic Yards per Hour</td>
<td>yd³/hr</td>
<td>Volume in cubic yards per hour</td>
</tr>
<tr>
<td>Gallons</td>
<td>Gal, gal</td>
<td>231 cubic inches, 0.1331 ft³, 8.33 pounds (water)</td>
</tr>
<tr>
<td>Hour</td>
<td>hr</td>
<td>60 minutes</td>
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<tr>
<td>Mile</td>
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<td>5,280 Feet</td>
</tr>
<tr>
<td>Section</td>
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<td>1 Square Mile, 640 Acres</td>
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<tr>
<td>Square Foot</td>
<td>ft²</td>
<td>Length X Width (L X W)</td>
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<tr>
<td>Square Foot per Hour</td>
<td>ft²/hr</td>
<td>Area in square feet per hour</td>
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<tr>
<td>Ton</td>
<td>t</td>
<td>Short ton 2,000 Pounds</td>
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<tr>
<td>Township (One)</td>
<td>T</td>
<td>36 Square Miles</td>
</tr>
<tr>
<td>Township</td>
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<td>Part of a land grid system identifying location north or south from an established point</td>
</tr>
<tr>
<td>Range</td>
<td>R</td>
<td>Part of a land grid system identifying location east or west from an established point</td>
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</tbody>
</table>