



STATE MINING AND GEOLOGY BOARD

EXECUTIVE OFFICER'S REPORT

For Meeting Date: April 10, 2003

ITEM 3 – Adoption of Permanent Regulatory Language Amending Section 3704.1 to Title 14, California Code of Regulations, Requiring the Backfilling and Site Recontouring of Open Pit Mine Excavations for Metallic Minerals

BACKGROUND: The Resources Agency and the State Legislature have informed the State Mining and Geology Board (SMGB) of their concerns with the detrimental impacts caused by large metallic mining projects to the California environment and landscape, particularly when large, open pit excavations remain as open craters, and piles of overburden and waste rock materials remain on the surface, following the termination of mining operations. The SMGB was requested to consider adopting into State Policy on an urgency basis reclamation regulations that would provide for the backfilling of open pit excavations caused by large metallic surface mining operations.

At its November 14, 2002 regular business meeting, and again at its December 12, 2002 meeting, the SMGB received comments on this issue from the California State Legislature, the Resources Agency, the Quechan Indian Tribe, The Mineral Policy Center (Washington, D. C.), the Center for Biological Diversity, the Sierra Club of California, Defenders of Wildlife, California Wilderness Coalition, the California Mining Association, Glamis Gold, Ltd., and other interested parties and surface mine operators. Following receipt of these comments, the SMGB made findings that an emergency condition existed and adopted on December 12, 2002 an emergency regulation adding §3704.1 to Title 14, California Code of Regulations (CCR), addressing the backfilling of open pit excavations caused by large metallic surface mining operations. This emergency regulation will remain in effect until April 18, 2003.

The SMGB instructed the Executive Officer to coordinate the development of permanent regulatory language with the guidance of an Ad Hoc committee consisting of two SMGB members appointed by the Chairman, and present the proposed text for consideration for approval by the SMGB at its January 16, 2003 regular business meeting.

At the January 16, 2003 meeting, the SMGB received oral comments from a representative of the C. R. Briggs Mine, and several written comments; all comments dealt with the issue of exempting the C. R. Briggs Mine from the requirements of the proposed regulation. No comments were received regarding the text in the proposed regulation. Following comments and suggestions from SMGB members, the SMGB made minor modifications to the text and approved the regulation. The Notice of Proposed Rulemaking for this regulation was published

EXECUTIVE OFFICER'S REPORT

in the California Regulatory Notice Register on February 14, 2003. This action commenced the 45-day public comment period, which closed April 1, 2003.

DISCUSSION:

The Surface Mining and Reclamation Act of 1975 (SMARA, Public Resources Code §2710 et seq.) became effective on January 1, 1976. The Legislative findings and declarations are contained in PRC §2711, and the Legislative intent is cited in PRC §2712.

§2711—(a) The Legislature hereby finds and declares that the extraction of minerals is essential to the continued economic well-being of the state and to the needs of the society, and that the reclamation of mined lands is necessary to prevent or minimize adverse effects on the environment and to protect the public health and safety.

(b) The Legislature further finds that the reclamation of mined lands as provided in this chapter will permit the continued mining of minerals and will provide for the protection and subsequent beneficial use of the mined and reclaimed land.

(c) The Legislature further finds that surface mining takes place in diverse areas where the geologic, topographic, climatic, biological, and social conditions are significantly different and that reclamation operations and the specifications therefore may vary accordingly.

§2712 -- It is the intent of the Legislature to create and maintain an effective and comprehensive surface mining and reclamation policy with regulation of surface mining operations so as to assure that:

(a) Adverse environmental effects are prevented or minimized and that mined lands are reclaimed to a usable condition which is readily adaptable for alternative land uses.

(b) The production and conservation of minerals are encouraged, while giving consideration to values relating to recreation, watershed, wildlife, range and forage, and aesthetic enjoyment.

(c) Residual hazards to the public health and safety are eliminated.

PRC §2733 defines “Reclamation”:

“Reclamation” means the combined process of land treatment that minimizes water degradation, air pollution, damage to aquatic or wildlife habitat, flooding, erosion, and

other adverse effects from surface mining operations, including adverse surface effects incidental to underground mines, so that mined lands are reclaimed to a usable condition which is readily adaptable for alternate land uses and create no danger to public health or safety. The process may extend to affected lands surrounding mined lands, and may require backfilling, grading, resoiling, revegetation, soil compaction, stabilization, or other measures.

In order to implement these statutes, the Legislature provided authority for the SMGB to adopt State Policy under **PRC §2755 and §2756**:

§2755 -- *The board shall adopt regulations which establish state policy for the reclamation of mined lands in accordance with the general provisions set forth in Article 1 (commencing with Section 2710) of this chapter and pursuant to Chapter 4.5 (commencing with Section 11371) of Part 1 of Division 3 of Title 2 of the Government Code.*

§2756 -- *State policy shall apply to the conduct of surface mining operations and shall include, but shall not be limited to, measures to be employed by lead agencies in specifying grading, backfilling, resoiling, revegetation, soil compaction, and other reclamation requirements, and for soil erosion control, water quality and watershed control, waste disposal, and flood control.*

The SMGB adopted into State Policy Article 9, Reclamation Standards, commencing with §3700 of Title 14, California Code of Regulations. These regulations became effective January 15, 1993.

CCR §3704 provides the Performance Standards for Backfilling, Regrading, Slope Stability, and Recontouring. Subsection (b) states that:

Where backfilling is required for resource conservation purposes (e. g., agriculture, fish and wildlife habitat, and wildland conservation), fill material shall be backfilled to the standards required for the resource conservation use involved.

SMARA requires that upon the termination of surface mining operations, lands affected by the mining operations shall be, “reclaimed to a usable condition which is readily adaptable for alternate land uses and create no danger to public health or safety.” Often, open pit metallic surface mines with reclamation plans approved by their lead agencies after January, 1993 did not require the backfilling of the excavation or the recontouring of affected mined lands, thereby leaving large, unfilled pits and mounds of overburden or mine waste rock material on the

surrounding landscape. Often, too, the end use to which the site was to be readily adaptable was given as an undefined “open space”.

However, where open pit excavations remain on the landscape, it often is difficult to envision how the remaining open pit is readily adaptable for a beneficial alternate use, or how the “open space” itself is usable. CCR §3704(b) addresses the backfilling of surface mines where wildlife habitat or wildland conservation is required.

Open pit metallic mineral mines often create very large excavations with at least equally large overburden and rock waste piles. Material “swelling” may create overburden and rock waste piles having greater volumes than the pit from which the material was excavated. Industry statements provide that swelling by as much as 40 percent occurs. In addition, metallic mineral mines that employ the cyanide heap leach method for mineral segregation and collection frequently generate very large leach piles. These features remain on the landscape following the conclusion of mining operations, and may pose a contamination problem when residual cyanide (or any other processing solution) not removed by rinsing is exposed to precipitation percolating through the pile and flushing the processing solution into surface waters.

DESCRIPTION OF REGULATORY LANGUAGE: The proposed permanent language closely follows the language contained in the emergency regulation.

The preface paragraph states that, notwithstanding the provisions of CCR §3700(b) that provides for a lead agency to exempt a surface mining operation from specific reclamation requirements under certain conditions, the lead agency cannot exempt a proposed surface mining operation from the requirements of this §3704.1.

Subsection (a) requires that the open pit excavation created by a metallic surface mine must be backfilled to at least match the surrounding surface elevation. This requirement is to prevent open pits from being left as environmental hazards on the landscape.

Subsection (b) states that backfilling, and backfill material, shall both be subject to the engineering and other requirements of the State Water Control Board’s regulations on Mining Waste Management. This is to ensure that the ground and surface waters are protected from any undesired affects from backfilling.

Subsection (c) requires that material that has been excavated from the pit and not used in the backfilling activities must be contour graded to create a final land surface that is consistent with the surrounding topography. This is consistent with regulation already adopted by the SMGB in §3704. The purpose of this subsection to prevent large, unnatural mounds and piles of overburden and waste rock material from imposing on the natural landscape and creating undesirable environmental conditions.

Subsection (d) requires that the backfilling of the pit and the recontouring of residual mined materials be accomplished according to engineering and geologic standards necessary to meet the stated end use in the reclamation plan. In addition, this subsection requires the pit fill and the slopes of piles left on the surface to be designed to protect groundwater, surface water and erosion, and to facilitate revegetation. It is necessary for the backfill and surface contouring to be performed to specific engineering and geological standards so that future adverse impacts from these reclamation activities are avoided. This is consistent with regulations already adopted by the SMGB in §3704 and §3706.

Subsection (e) elaborates on the final fill slope angles that are permissible (2:1, horizontal:vertical) and caps the maximum elevation above local topography of recontoured lands at 25 feet. These features must also meet static and dynamic factors of safety as determined by a licensed California engineer. These requirements are to ensure that the resultant topography is not intrusive into the natural landscape, has dynamically stable characteristics, and is capable of being revegetated. These requirements are consistent with regulations already adopted by the SMGB in §3704, §3705, and §3711.

Subsection (f) defines a “metallic mine”. This is necessary to distinguish these types of mines, which are subject to this regulation, from other types of surface mines, which are not. The metals used in this definition are modified from the SMGB’s *Guidelines for Classification and Designation of Mineral Lands*. The metals Nickel and Tin are added to the definition because there may be deposits of these metals that can be mined by the open pit method.

Subsection (g) defines an “open pit mine”. This is necessary because open pit mines are called by various names, although they substantially refer to the same feature.

Subsection (h) recognizes that, in some instances, much of the mined material becomes product, and even after swelling factors are taken into account, there may not be enough overburden and waste rock to completely backfill the open pit excavation to the surface. In these cases, the subsection provides that the remaining waste rock and overburden be used to fill the pit to whatever elevation is achievable. This ensures that mined waste rock material does not remain on the landscape, and that backfilling using available material will occur.

Subsection (i) clarifies that the regulation does not apply to those open pit metallic surface mines that have received lead agency approvals of reclamation plans and financial assurances prior to the effective date of the emergency regulation, which is December 18, 2002.

An “alternate end use” provision has not been included in this regulation. This is for several reasons:

(1) If the site is proposed to be reclaimed as “wildland”, “wildlife habitat”, or “open space”, by leaving the excavation as an open hole in the ground, then this end use does not create any additional new wildlife habitat or open space than that which existed prior to the onset of surface mining activities. It would, in fact, create a non-natural, and “artificial” environment from that which was originally on the site. Refilling the pit and recontouring any remaining mined materials left on the surface would return the site as nearly as possible to its original wildlife habitat or open space condition.

(2) No beneficial “alternate end uses” have been demonstrated for these types of open pit excavations in California. Other than those natural end uses described in (1), the most common alternate end uses mentioned are, “landfills” and, recreational lakes or water recharge basins. However, there has been no information provided to the SMGB of post-SMARA open pit metallic mine excavations being backfilled by landfill operations, nor of these pits successfully being converted to recreational lakes. The very nature of the pit walls being quite steep and high precludes the pit from usefulness as a recreational lake facility, and water that has tended naturally to collect in the open pit most often is not conducive to recreational activities.

(3) The purpose of this regulation is to ensure that these large excavations are backfilled so as to avoid adverse environmental impacts on the land. An integral and important part of the backfilling process is to remove the waste rock and overburden adjacent to the pit excavation by placing that material back into the open hole. Following that backfilling, the site may be converted to an alternate use. In the instance where a pit cannot be completely backfilled to the surface because there remains on site an insufficient volume of waste rock and overburden, then the remaining unfilled portion of the pit may be used for an “alternate use”, such as a commercial landfill, at the discretion of the lead agency.

RECOMMENDATION OF THE EXECUTIVE OFFICER: The Executive Officer declares that the rulemaking process has been followed in accordance with the Administrative Procedure Act, and recommends that the SMGB approved the findings, determinations, and disclosures contained in this Report, and adopt this regulation amending §3704.1 to Title 14, California Code of Regulations, requiring the backfilling and site recontouring of open pit mine excavations for metallic minerals without further changes.

CEQA COMPLIANCE:

The SMGB has determined that this rule making project is either not a project under Title 14, CCR Section 15378 of the CEQA Guidelines, or is Categorically Exempt under Title 14, CCR Section 15308 of the CEQA Guidelines.

DISCLOSURES REGARDING THE PROPOSED ACTION:

The SMGB has made the following determinations:

Mandate on local agencies and school districts: The SMGB determined that adoption of this regulation does not impose any new mandates on local agencies or on local school districts.

Costs or savings to any State agency: The SMGB determined that no savings or additional expenses to state agencies are identified.

Cost to any local agency or school district which must be reimbursed in accordance with Government Code §§ 17500 through 17630: The SMGB determined that the adoption of this regulation does not impose any additional cost obligations on local agencies or on local school districts.

Other non-discretionary costs or savings imposed upon local agencies: The SMGB determined that no other non-discretionary costs or savings to local agencies are identified.

Cost or savings in Federal funding to the State: The SMGB determined that no costs or savings in Federal funding to the State are identified.

Significant statewide adverse economic impact directly affecting business including the ability of California businesses to compete with businesses in other states: The SMGB determined that no statewide adverse impacts to California businesses result from the adoption of this proposed regulatory language.

Potential cost impact on private persons or directly affected businesses: The SMGB is not aware of any cost impacts that an existing representative private person or business would necessarily incur in reasonable compliance with the proposed action. A representative private person or business that commences future open pit metallic mining as defined in the regulation may be liable for the costs of backfilling the excavation and contour grading the surrounding surface lands as circumstances warrant. Any cost impacts in the future to a private person or directly affected business would be a result of voluntary actions on the part of a private person or directly affected business.

Creation or elimination of jobs in California: The SMGB has determined that the adoption of these regulations will not:

- Create nor eliminate jobs within California;

- Create new nor eliminate existing businesses within California;
- Expand businesses currently doing business in California.

Significant effect on housing costs: The SMGB has determined that the adoption of these regulations will have no significant effect on housing costs.

Effects on small businesses: SMGB has determined that there is no additional impact on private persons or businesses; this proposed regulation serves to clarify and make specific existing requirements contained in statute. This proposed regulation does not mandate actions upon private persons or businesses, but rather clarifies existing statutory mandates.

CONSIDERATION OF ALTERNATIVES:

The SMGB has determined that no reasonable alternative that it considered or that has otherwise been identified and brought to the attention of the SMGB would be more effective in carrying out the purpose for which the action is proposed or would be as effective and less burdensome to affected private persons than the proposed action. The SMGB has not identified any adverse impacts resulting from these proposed regulations.

No alternatives have been considered by the SMGB that would be more effective in carrying out the purpose for which these regulatory changes are proposed, nor have any other alternatives been proposed that would be as effective and less burdensome to affected private persons, lead agencies, or small businesses.

CONFLICT WITH FEDERAL REGULATIONS:

This regulation does not duplicate or conflict with existing Federal statutes or regulations. Also, by Memorandum of Understanding with the Federal Bureau of Land Management, the U. S. Forest Service, the Department of Conservation, and the State Mining and Geology Board, the application of SMARA and federal law are coordinated to eliminate conflict.

SUGGESTED MOTION LANGUAGE:

To adopt the proposed language into regulation:

Mr. Chairman, in light of the information before the Board, I move that the Board adopt the proposed regulatory language amending Section 3704.1 Performance Standards for Backfilling Excavations and Recontouring Lands Disturbed by Open Pit Surface Mining Operations for Metallic Minerals to Title 14, California Code of Regulations as

presented to ensure that open pit metallic mines are reclaimed in accordance with the legislative intent of the Surface Mining and Reclamation Act of 1975, and instruct the Executive Officer to file the adopted regulation with the Office of Administrative Law.

REGULATION TEXT

§3704.1 Performance Standards for Backfilling Excavations and Recontouring Lands Disturbed by Open Pit Surface Mining Operations for Metallic Minerals

Notwithstanding the provisions of Section 3700(b) of this Article, no reclamation plan, including any reclamation plan in which the end use is for wildlife habitat, wildland conservation, or open space, or financial assurance for a surface mining operation subject to the provisions of this section, shall be approved by a lead agency unless the reclamation plan meets the provisions of this section. Financial assurances must be maintained in an amount sufficient to provide for the backfilling and contour grading of the mined lands as required in this section.

(a) An open pit excavation created by surface mining activities for the production of metallic minerals shall be backfilled to achieve not less than the original surface elevation, unless the circumstances under subsection (h) are determined by the lead agency to exist.

(b) Backfilling shall be engineered, and backfilled materials shall be treated, if necessary, to meet all of the provisions of Title 27, California Code of Regulations, Chapter 7, Subchapter 1, Mining Waste Management, commencing with Section 22470, and the applicable Regional Water Quality Control Board's Water Quality Control Plan.

(c) Excavated materials remaining in overburden piles, waste rock piles, and processed or leached ore piles not used in the backfilling process and remaining on the mine site shall be graded and contoured to create a final surface that is consistent with the original topography of the area. Care shall be taken to avoid the creation of un-natural topographic features, impediments to natural drainage, or conditions hazardous to human life and wildlife.

(d) Backfilling, recontouring, and revegetation activities shall be performed in clearly defined phases to the engineering and geologic standards required for the end use of the site as stipulated in the approved reclamation plan. All fills and fill slopes shall be designed to protect groundwater quality, to prevent surface water ponding, to facilitate revegetation, to convey runoff in a non-erosive manner, and to account for long term settlement.

(e) The requirements of subsections (a), (b), (c), and (d) notwithstanding, no final reclaimed fill slopes shall exceed 2:1 (horizontal:vertical), nor shall the resultant topography exceed in height

the pre-mining surface contour elevations by more than 25 feet. Final fill slopes shall have static and dynamic factors of safety, as determined by an engineer licensed in California, that are suitable for the proposed end use of the site and meet or exceed the requirements of applicable building or grading codes, ordinances, statutes, and regulations. Final slopes must be capable of being revegetated, and shall blend visually with the local topography. Surface soil shall be salvaged, stored, and reapplied to facilitate revegetation of recontoured material in accordance with the requirements of Section 3711 of this Article.

(f) For the purposes of this section, a metallic mine is defined as one where more than ten percent of the mining operation's gross annual revenues as averaged over the last five years are derived from the production of, or any combination of, the following metallic minerals by the open pit extraction method:

Precious metals (gold, silver, platinum);

Iron;

Nickel;

Copper;

Lead;

Tin;

Ferro-alloy metals (tungsten, chromium, manganese);

Mercury;

Uranium and thorium;

Minor metals including rubidium, strontium, and cesium;

Niobium and tantalum;

(g) For the purposes of this regulation, an open pit mine is the same as an open pit quarry, opencast mine, or opencut mine, and is defined as a mine working or excavation that is open to the surface and in which the opening is approximately the full size of the excavation.

(h) The requirement to backfill an open pit excavation to the surface pursuant to this section using materials mined on site shall not apply if there remains on the mined lands at the conclusion of mining activities, in the form of overburden piles, waste rock piles, and processed or leached ore piles, an insufficient volume of materials to completely backfill the open pit excavation to the surface, and where, in addition, none of the mined materials has been removed from the mined lands in violation of the approved reclamation plan. In such case, the open pit excavation shall be backfilled in accordance with subsections (b) and (d) to an elevation that utilizes all of the available material remaining as overburden, waste rock, and processed or leached ore.

(i) This regulation does not apply to any surface mining operation as defined in Public Resources Code Section 2735(a) and (b) for which the lead agency has issued final approval of a reclamation plan and a financial assurance prior to December 18, 2002.

NOTE: Authority cited: Sections 2755 and 2756 Public Resources Code; Reference, Sections 2733, 2772, and 2773, Public Resources Code.

COMMENTS RECEIVED DURING THE 45-DAY PUBLIC COMMENT PERIOD:

The following letters of support for the adoption of the regulation were received during the public comment period between February 14, 2003 and April 1, 2003.

No responses to these support comments are required.

Courtney Ann Coyle, Attorney representing the Quechan Indian Nation, in support of the regulation.

Keith Hammond, California Wilderness Coalition, in support of the regulation.

Dan Randolph, Mineral Policy Center, Colorado, in support of the regulation.

Terry Weiner, Desert Protective Council, in support of the regulation.

A. Petit Jean (e-mail) -- Support for adoption of the regulation. 389 e-mail letters of this form letter were received.

A. J. Owen (e-mail) -- Support for adoption of the regulation. 1,206 e-mail letters of this form letter were received.

Lyn Washington (facsimile) -- Support for adoption of the regulation. 481 facsimile letters of this form letter were received.

Stephanie Douglass (facsimile) -- Support for adoption of the regulation. 226 facsimile letters of this form letter were received.

30 additional support letters.

The following letters of support require responses to the comments:

Commentator 1 – Steve Tabor, President, Desert Survivors:

“Our group objected to only one of the provisions listed, the decision to exclude mining of the base metals (copper, lead and zinc) from the regulations. The reason given for this seems flimsy: “These metals most likely are not found in deposits in California that economically are recoverable by surface mining techniques.” If there are no mines to regulate, then there will not be any reclamation done, but if any mines ARE dug in the future, then the regulations SHOULD apply. Copper, lead and zinc should be included under these revised regulations”.

Response to Commentator 1: The metals copper and lead are included in the regulation. The metal zinc is not included, because it is not found in the type of deposits in California that would result in open pit mines. Zinc is most often associated with lead and tin, both of which are covered in the regulation.

Commentator 2 – Johanna H. Wald, director Earth Justice / Natural Resources Defense Council:

On Pg. 2, ¶2, the Commentator requests the SMGB to clarify the regulatory language to state that only those mines currently in operation are exempt from the requirements of the regulation, rather than those mines that have reclamation plans and financial assurances approved prior to December 18, 2002. In this manner, only mines actually being excavated would be exempt.

Response to Commentator 2: The SMGB does not have the authority to change a lead agency approved reclamation plan unless such review and change requirements are a part of the approved plan, or unless the operator is not in compliance with the approved plan; therefore, the SMGB can not require an approved, but not yet excavated, pit to be subject to the new backfill requirements. In reality, there are no mines with plans approved prior to December 18, 2002 that are not already in operation.

Commentator 3 – Merle Norman:

Comment 3A – [H]owever, I do question the decision to exclude copper, zinc, and lead mining from the law. Please include all mining ventures to provide insurance for future ventures.

Response to Comment 3A – Please refer to Response to Commentator 1.

Comment 3B – [t]he regulations must include not only new mining proposals but expansion plans on existing mines as well.

Response to Comment 3B – The SMGB describes how “new” mines and “expansions” to current mines are subject to reclamation requirements (including this regulation) in regulation 14CCR §3502. In most instances of major “expansion”, the existing surface mining operations may have been changed substantially and would trigger inclusion of the “backfill” requirement.

Commentator 4 – Kimberley Delfino, Defenders of Wildlife, California Office:

Commentator states, “Finally, we also urge the board to clarify that the proposed open pit mine regulations will apply to all new mine proposals, including the possible expansion of the Briggs mining operation in the Panamint Mountains.”

Response to Commentator 4: Please refer to Response to Comment 3B.

Commentator 5 – Christie Whiteside, Great Basin Mine Watch, Reno, Nevada:

Commentator states, “Additionally, we urge the board to amend the proposed language to state that all new open pit metallic mines in the state will be subject to backfill requirements, to ensure that the proposed regulations clearly address which mines will be subject to backfill, and to close any loopholes which may be open to exploitation by those wishing to avoid the requirements.”

Response to Commentator 5: Please refer to Response to Comment 3B.

Commentator 6 – Paul Brickett:

Commentator states, “I also suggest that the regulations include provisions for “reclaimed” sites to include boundary demarcation and monitoring to allow closed open-pit mines use as Off-Highway Vehicle Recreation areas in exchange for the closure of existing OHVR sites in ecologically sensitive areas.”

Response to Commentator 6: Designating a specific land use for the reclaimed site is the responsibility of the permitting lead agency within whose jurisdiction the reclaimed mine is located. This land use designation cannot be included in the regulation.

The following letters offering comments for specific changes to the regulation were received during the public comment period between February 14, 2003 and April 1, 2003.

Commentator 7 – Tom Budlong, Friends of the Panamints:

The Commentator is concerned that, in some cases, the expansion of an existing surface mining operation (that is, one that has an approved reclamation plan and financial assurance by December 18, 2002) by excavating a new pit may allow that new pit to be exempt from the requirement for backfilling because the activity is an “expansion” of operations, rather than a “new” operation. Commentator proposes language to subsection (i) to ensure expansion pits are covered by the backfilling requirement of this regulation.

Response to Commentator 7: Please refer to Response to Commentator 3B.

Commentator 8 – Linda A. Falasco, Executive Director, Construction Materials Association of California:

Comment 8A – The Commentator argues that in defining a metallic mine subject to the regulation (subsection [f]), setting a 10% revenue stream is too low. Commentator suggests eliminating a “percent revenue” as a defining term for a metallic mine, and substituting as the defining condition the term, “primary activity” is the production of metallic minerals. Commentator suggests that mine revenue from a metal or metals should exceed 50% before the mine is to be considered a metallic mine subject to the regulation.

Response to Comment 8A – The SMGB intentionally set the defining threshold for metallic mines at this level because of the importance attached to reclaiming metallic mine sites, and the negative environmental impact often associated with metallic mines. The SMGB defines a metallic mine in this regulation as one where more than ten percent of the mining operation’s gross annual revenue, as averaged over the previous five years, is derived from the production of metallic minerals. Therefore, it is possible for a mine to have as much as 50 percent of its gross revenue stream derived from metallic minerals (on the specified list of qualifying minerals) in any one year and still be exempt from the requirements of the regulation. Usually, the revenue stream from metallic minerals, especially precious metals, from a “non-metallic” aggregate mining operation is relatively small. Also, some aggregate mines with secondary metallic mineral production (usually gold), do not sell the minor amounts of gold on an annual basis, but “en masse” every few years when enough gold has been accumulated and market prices are attractive.

In the most unlikely event that an approved aggregate mining operation unexpectedly qualifies as a metallic mine under this regulation, but has managed to sell off all of its original aggregate product and has no material left to “backfill” the remaining pit, the operator is provided relief under subsection (h) of the regulation that provides that backfilling of the excavation shall only occur to a level achievable with the amount of waste rock remaining on site. If no waste rock remains, then the excavated pit is simply reclaimed to the requirements of the original reclamation plan.

The SMGB entertained several methods for defining a metallic mineral mine, and settled on the one approved in the current language. The SMGB has made no changes to the regulation.

Comment 8B -- The Commentator argues that the regulation should provide for other reclamation options than just backfilling the excavation with remaining overburden and waste rock. Commentator states that local lead agencies should have the option to approve alternate reclamation plans when there are overriding benefits.

Response to Comment 8B: Since the Surface Mining and Reclamation Act of 1975 became effective in January, 1976, large, open pit excavations from metallic mines have not been reclaimed to uses other than “open spaces”, “wildlands”, or “recreational lakes”. In reality, the open pits have remained open holes in the ground, with large piles of waste rock surrounding them, and with toxic or hazardous water collecting in the pit bottoms. Metallic surface mines in operation today do not have reclamation plans approved by local lead agencies that call for alternate uses other than open space, wildlands, or recreational lakes. Demonstrably, the land remaining after the mining process is completed has not been reclaimed to a condition readily adaptable to an alternate land use, nor have residual hazards to the public health and safety been eliminated. Local lead agencies have not been able to find other, overriding benefits to their communities for these mine pits.

In considering the alternate reclamation issue, the SMGB requested from interested parties that language be proposed to address other reclamation scenarios. No proposed language was volunteered. The SMGB has made no changes to the regulation.

Comment 8C -- The Commentator requests that the exemption clause, provided for in subsection (i), be modified to include exemption for reclamation plans that provide for the expansion of an existing, approved, surface mining operation. The

operator agrees that this modified language would be in harmony with the Legislative Intent of proposed SB 483 that addresses the “backfilling” of open pit metallic mine pits. The Commentator offers language for consideration.

Response to Comment 8C -- Providing an exemption for amending approved reclamation plans so that new excavations under the amended plans did not have to meet the reclamation requirements for backfilling would be in conflict with the requirements of 14CCR §3502. Also, please refer to Response to Comment 3B.

This regulation applies to all metallic surface mines, as defined, in the State. The proposed legislation to which the Commentator refers requires backfilling of all new metallic surface mines on or within one mile of Sacred Indian Lands, and exempts from that requirement those mines that are already in existence. The proposed SMGB regulation, also, does not apply to surface mines already in existence anywhere in the state.

Commentator 9 – Cameron Smyth, Mayor, City of Santa Clarita:

Comment 9A -- Commentator states that the regulation should include performance standards that specify that fill material shall be backfilled to the standards required for future end use consistent with the zoning and land use designations of the lead agency.

Response to Comment 9A-- The Commentator's concerns are addressed in subsections (b), (d), and (e) of the regulation.

Comment 9B -- Commentator states that the regulation should include performance standards addressing hazardous materials remediation.

Response to Comment 9B—The Commentator’s concerns are addressed in subsections (b) and (e).

Comment 9C -- The Commentator suggests that the regulation allow for some alternate reclamation use other than backfilling.

Response to Comment 9B – Please refer to Response to Comment 8B.

The following letters of opposition for the adoption of the regulation were received during the public comment period between February 14, 2003 and April 1, 2003.

Earl F. Fox, prospector and mineral claims owner, in opposition to the regulation (no response required).

The following letters of opposition require responses to the comments:

Commentator 10, Jurg Heuberger, Planning Director, Imperial County:

Comment 10A -- Commentator states, "If there is no scientific analysis to show that cyanide leaching causes significant, adverse environmental impacts to desert washes, its habitat and impacts to wildlife, then what's the problem?"

Response to Comment 10A – The regulation does not address cyanide heap leaching as a process in mining. However, the Commentator may wish to write to the U. S. Program Coordinator, Mineral Policy Center, 1612 K Street NW, Suite 808, Washington, D. C. 20006, for copies of studies on the impact to the environment of cyanide heap leach processes.

Comment 10B – Commentator states, "Certainly, economic impacts may result from the United States having to obtain gold and other precious metals from other countries in the world. This is particularly true at this time of war and possible disruptions in world trade."

Response to Comment 10B – There has been no information or other statistical data presented to the SMGB that the regulation will result in an adverse economic impact to the United States with respect to gold or other precious metals.

Commentator 11, L. Andrea Clark, Deputy County Administrator, Inyo County:

Comment 11A -- Commentator states, "By requiring an open pit excavation be reclaimed by backfilling the pit to the surface, and recontouring the disturbed lands to the approximate original contours, this regulation limits the County's ability to make end-use determinations that may utilize a pit in an alternate form for a beneficial purpose."

Response to Comment 11A – Please refer to Response to Comment 3B. Also, reclaiming the site to stable conditions in which residual hazards to the public health and safety are eliminated, is not a land use decision, but rather a reclamation requirement of SMARA. SMARA provides for the backfilling of mine

pits as a reclamation technique. The County retains the authority to use the reclaimed site to a land use of its choosing.

Comment 11B – Commentator requests that the condition making this regulation not subject to the requirements of 14CCR §3700(b) be removed, thus allowing the lead agency to exempt an open pit excavation for metallic minerals from the requirements of the proposed regulation.

Response to Comment 11B – This course of action would defeat the entire purpose of the proposed regulation. The SMGB made no changes to the regulation.

Commentator 12, Chris Eckert, Environmental Coordinator, CR Briggs Corporation:

Comment 12A – Commentator states, “CR Briggs contends that the proposed regulation imposes an unnecessary and draconian economic burden on California mining companies. If the current Briggs mine was permitted under the proposed backfill regulation the reclamation of the mine would increase from the current \$3 million estimate to approximately \$50 million. The increased reclamation cost of \$47 million dollars would have been a direct result of the proposed rule making and the mine would not have been constructed. The increased reclamation cost has a direct effect on the ability of California based mines to compete with mine [sic] based in other states and countries as the value of the mine’s products fluctuate on the open market.”

Response to Comment 12A – The regulation provides an exemption for surface mines that were approved prior to December 18, 2002. This exemption includes the current CR Briggs mine (CA Mine ID #91-14-0120), and therefore, has no cost impact to the current operations. The SMGB received no information during its review process that the proposed regulation would have any significant statewide adverse economic impact directly affecting business including the ability of California businesses to compete with businesses in other states. This is because no currently approved open pit metallic mining operations are subject to the conditions of the proposed regulation.

Comment 12B – Commentator states, “CR Briggs has been greatly impacted by the Emergency Regulation, and will be further impacted by the Proposed Rulemaking. At the time the Emergency Regulation was passed CR Briggs had defined a 20,000 gold ounce pit south of an existing pit and was preparing to request an amendment to the Briggs Mine Reclamation plan to add the newly defined ore body. CR Briggs has expended a significant amount of resources in drilling and defining the ore body with the expectation of mining the [sic] using the

industry wide method of placing waste rock in prepared dump locations or utilizing mined out pits as waste rock dumps. In the prepared mine plan all the waste rock from the new pit would be placed in existing pit disturbance. The increased reclamation cost, as a result of the proposed rule making, has resulted in the pit becoming uneconomic, and a direct loss to CR Briggs of 20,000 ounces of gold.”

Response to Comment 12B – The SMGB describes how “new” mines and “expansions” to current mines are subject to reclamation requirements (including this regulation) in regulation 14CCR §3502. This regulation does not address expansions to existing mine sites or amendments to approved reclamation plans, but rather reclamation requirements for new, non-existing operations.

The SMGB noted in its review of the impacts of this proposed regulation that it was not aware of any cost impacts that an existing representative private person or business would necessarily incur in reasonable compliance with the proposed action. A representative private person or business that commences future open pit metallic mining as defined in the regulation may be liable for the costs of backfilling the excavation and contour grading the surrounding surface lands as circumstances warrant. Any cost impacts in the future to a private person or directly affected business would be a result of voluntary actions on the part of a private person or directly affected business.

Comment 12C – The Commentator states that, as a result of the proposed regulation, CR Briggs has postponed its exploratory activities. This postponement has resulted in the elimination of several high paying temporary jobs in Inyo County. In addition, proposed expansion of the existing pit and the development of new pits have been postponed, possibly not allowing for the mine operations to continue for an additional six months to one year beyond the current proved reserves. The Commentator states that closure of the existing mine because of exhausted reserves will cost the area 86 jobs; not being able to develop a new mine pit will not allow those 86 jobs to be retained for potentially an additional five to ten years.

Response to Comment 12C – The current CR Briggs operations are facing a natural closure because of the exhaustion of proved reserves. The application of the requirements of the proposed regulation for any expansion of the current Briggs operations, which are exempt from the requirements of the proposed regulation, are subject to the provisions of 14CCR §3502. The 86 jobs that will be lost because of the natural closing of the current Briggs operations are a result of the natural exhaustion of proved reserves; this is a condition that, ultimately, befalls

all mining operations. The potential retention of the 86 jobs because of a proposed, future, mining project that has not been permitted is problematic.

The following verbal comments were received at a Public Hearing conducted by the SMGB on March 13, 2003 in Sacramento.

Commentator 13, Adam Harper, California Mining Association:

Comment 13A -- [Transcript, pg 4, commencing line 10] Commentator is concerned that the regulatory action did not involve an environmental assessment pursuant to CEQA.

Response to Comment 13A – The SMGB has determined that this rule making project is either not a project under Title 14, CCR Section 15378 of the CEQA Guidelines, or is Categorically Exempt under Title 14, CCR Section 15308 of the CEQA Guidelines.

Comment 13B -- [Transcript, pg 5, commencing line 1] Commentator states that this regulation is vulnerable under Federal law and the Supremacy Clause to the Constitution.

Response to Comment 13B – The Constitutionality of a state law is not within the jurisdiction of a state agency to make; this authority rests solely with the Federal Courts. Nevertheless, the SMGB believes that this regulation is not in conflict with Federal laws. Specifically, the preamble to the Bureau of Land Management’s revised regulations governing hard rock mining (“3809 Regulations”) state that,

“...[t]here are also certain situations where the State law or regulations may provide a higher standard of protection than subpart 3809, such as the restriction on cyanide-leaching based operations approved by voters in Montana. In this situation, the State law or regulation will operate on public lands. BLM believes that this is consistent with FLPMA, the mining laws, and the decision in the *Granite Rock* case.” (65 Fed. Reg. 70008, 70009(2000) at 70009).

Also,

“We included paragraph (a)(6) in the general standards to make clear that operators must comply with pertinent state and Federal laws and regulations.” (66 Fed. Reg. 54840, Section 3809.420).

In like manner, the 1872 Mining Law specifically states that any activities done pursuant to that law can only occur, “[s]o long as they comply with the laws of the United States, and with State, territorial, and local regulation.” 30 U.S.C. §26.

For an extended discussion of state authority regarding mining regulations, please refer to the March 31, 2003 letter from Dan Randolph, Mineral Policy Center, Colorado to the SMGB.

Comment 13C -- [Transcript, pg 5, commencing line 11] Commentator states that the adoption of the regulation will result in a legal taking and result in claims brought against the state for “millions upon millions of dollars.”

Response to Comment 13C – The SMGB has been advised by its legal counsel that this regulatory action does not constitute a legal taking.

Comment 13D -- [Transcript, pg 5, commencing line 20] Commentator states that the SMGB did not consider SB22 currently in the legislative process as an alternative.

Response to Comment 13D – SB 22 is a bill that provides for the re-consideration of SB 483. For comments on SB 483, please refer to Response to Comment 8C. The legislation contemplated by the State Legislature is not a alternative to the SMGB’s regulatory action.

Comment 13E -- [Transcript, pg 6, commencing line 16] Commentator states that the regulation does not discuss how the contamination effects of the leach pad being put back into the excavation will be handled.

Response to Comment 13E – The regulation does not discuss specifically the leach pad being placed into the excavation. The regulation states in subsection (c) that materials not placed into the excavation as backfill, including leached ore piles, shall be contour graded about the mine site. The regulation does state in subsection (b) that all backfill materials shall be treated to meet all of the provisions of the Regional Water Quality Control Board’s Water Quality Control Plan, as well as the provisions of Title 27, California Code of Regulations, Chapter 7, Subchapter 1, Mining Waste Management, commencing with Section 22470.

Comment 13F -- [Transcript, pg 7, commencing line 1] Commentator recommends that the SMGB wait for the Legislature to “finalize” SB 22 before acting on the proposed regulation.

Response to Comment 13F – SB 22 is a legislative bill to provide for the reconsideration of SB 483. It is not clear what the Commentator means by the Legislature “finalizing” SB 22. In any event, SB 22 is not the vehicle that describes the Legislature’s intent to require the backfilling of open pit metallic surface mines; however, SB 483 is the correct vehicle. The requirements of SB 483, which pertains to activities on or near Sacred Indian Lands, is not the same as, or an alternative to, the proposed regulation.

Commentator 14, Charlie Rae, Construction Materials Association of California:

Comment 14A -- [Transcript, pg 7, commencing line 16] Commentator requests a change in the definition of a metallic mine so as to clarify that aggregate mines are not included in the regulation.

Response to Comment 14A – Please refer to Response to Comment 8A.

Comment 14B -- [Transcript, pg 8, commencing line 11] Commentator requests that alternatives to backfilling be incorporated into the regulation as a option for the lead agency.

Response to Comment 14B – Please refer to Response to Comment 8B.

Comment 14C -- [Transcript, pg 8, commencing line 25] Commentator requests that the “grandfathering” clause (subsection [i]) be changed to provide for changes or amendments to the operations or reclamation plans.

Response to Comment 14C – The SMGB describes how “new” mines and “expansions” to current mines are subject to reclamation requirements (including this regulation) in regulation 14CCR §3502.

Comment 14D -- [Transcript, pg 9, commencing line 12] Commentator makes reference to language submitted in an earlier letter from CMAC dealing with exemption status for existing surface mining operations, and a legislative letter.

Response to Comment 14D – Please refer to Response to Comments 8C. The legislation had attached to it a letter from the authors of SB 483 stating that it was not their intent for the bill to affect existing operations on or within one mile of Sacred Indian Lands. The letter did not exempt new operations. The SMGB describes how “new” mines and “expansions” to current mines are subject to reclamation requirements (including this regulation) in regulation 14CCR §3502.

Commentator 15, Jason Marshall, Assistant Director, Department of Conservation:

[Transcript, pg 9, commencing line 20] Commentator states Department of Conservation is in support of the regulation.

Commentator 16, Kim Delfino, California Program Director, Defenders of Wildlife:

[Transcript, pg 10, commencing line 14] Commentator states she represents 120,000 members, organization supports the regulation.

Commentator 17, Courtney Cuff, Pacific Regional Director for National Parks

Conservation Association:

[Transcript, pg 11, commencing line 15] Commentator states she represents 50,000 California members, organization nationally is 400,000, organization supports the regulation.

Commentator 18, Ingrid Crickmore.

[Transcript, pg 14, commencing line 2] Commentator supports the regulation.

Commentator 19, Bob Ellis.

[Transcript, pg 14, commencing line 17] Commentator supports the regulation.

Commentator 20, Christie Whiteside, Program Associate, Great Basin Mine Watch.

[Transcript, pg 17, commencing line 8] Commentator supports the regulation.