



# STATE MINING AND GEOLOGY BOARD

## EXECUTIVE OFFICER'S REPORT



ARNOLD  
SCHWARZENEGGER  
GOVERNOR

For Meeting Date: December 11, 2008

**Agenda Item No. 8: Approval of Adjusted Financial Assurance Cost Estimate for the Cal Sierra surface mining operation (CA Mine ID #91-58-0003), Cal Sierra Development, Inc. (Operator), Anthony Massey (Agent), Yuba County.**

**INTRODUCTION:** The State Mining and Geology Board (SMGB) is the lead agency for Yuba County, pursuant to the Surface Mining and Reclamation Act of 1975 (SMARA, Public Resources Code (PRC) Section 2710, et seq.). SMARA requires that each surface mining operation maintain a financial assurance in an amount adequate to reclaim, in accordance with the requirements of an approved reclamation plan, the land disturbed by the mining operation at the conclusion of mining activities. SMARA lead agencies are required to annually review the financial assurance amounts for each surface mining operation, and adjust the amount, as necessary, to account for new land disturbed, inflation, or land reclaimed. In any event, the lead agency must ensure that the approved amount is adequate to reclaim the mine site in accordance with the approved reclamation plan (PRC Sections 2770 and 2773.1, and California Code of Regulations (CCR) Section 3804).

**STATUTORY AND REGULATORY AUTHORITY:** Financial assurance cost estimate adjustment requirements are discussed under SMARA, and within the SMGB's regulations and guidelines. Lead agencies are required to assure that financial assurances for reclamation are sufficient pursuant to Division 2, Chapter 9, Article 5 of PRC Section 2770(d) which states:

*"The lead agency's review of reclamation plans submitted pursuant to subdivision (b) or of financial assurances pursuant to subdivision (c) is limited to whether the plan or the financial assurances substantially meet the applicable requirements of Sections 2772, 2773, and 2773.1, and the lead agency surface mining ordinance adopted pursuant to subdivision (a) of Section 2774, but, in any event, the lead agency shall require that financial assurances for reclamation be sufficient to perform reclamation of lands remaining disturbed. Reclamation plans or financial assurances determined to substantially meet these requirements shall be approved by the lead agency for purposes of this chapter. Reclamation plans or financial assurances determined not to substantially meet these requirements shall be returned to the operator within 60 days. Reclamation plans or financial assurances determined not to substantially meet these requirements shall be returned to the operator within 60 days. The*



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*operator has 60 days to revise the plan or financial assurances to address identified deficiencies, at which time the revised plan or financial assurances shall be returned to the lead agency for review and approval.”*

In addition, PRC Section 2773.1(a) states:

*“...Lead agencies shall require financial assurances of each surface mining operation to ensure reclamation is performed in accordance with the surface mining operation's approved reclamation plan, as follows:*

*(3) The amount of financial assurances required of a surface mining operation for any one year shall be adjusted annually to account for new lands disturbed by surface mining operations, inflation, and reclamation of lands accomplished in accordance with the approved reclamation plan.”*

Furthermore, the SMGB's regulations pursuant to Article 11 of the CCR Section 3804, Calculation of Financial Assurance Amount, states:

*“(a) The Financial Assurance Amount shall be calculated as prescribed in Public Resources Code Section 2773.1 and based on:*

- (1) an analysis of the physical activities and materials necessary to implement the approved reclamation plan;*
- (2) the lead agency's unit costs, or costs for third party contracting, for each of these activities, if applicable;*
- (3) the number of units of each of these activities, if applicable;*
- (4) a contingency amount not to exceed 10% of the reclamation costs.*

*(b) The calculated amount should not include the cost of completing mining of the site.*

*(c) In order for the lead agency or the Department of Conservation to determine what annual adjustments, if any, are appropriate to the Financial Assurance Amount, the operator shall annually submit to the lead agency a revision of the written calculation required under Section 3804(a).”*

**BACKGROUND:** Cal Sierra Development operates an active gold dredging and processing operation situated in the historic Yuba Goldfields northeast of Marysville, California. Operating within the same footprint as Western Aggregates, LLC (Western Aggregates), Cal Sierra mines and processes gold and heavy minerals, whereas, Western Aggregates primarily extracts material for sand and gravel production.



Dredging operations within the Yuba Goldfields were initiated in 1904, and by the 1930s, 12 dredges operated in the area. The mine site is an irregularly shaped area referred to as the “Deep Reserve Area” which encompasses approximately 2,000 acres in areal extent. The site is bordered to the north by the southern bank of the west-flowing Yuba River, and by Hammonton Road to the south. Cal Sierra co-resides, and shares its currently approved Reclamation Plan (RP 80-01), with Western Aggregates. Western Aggregates’ processing area is located west-southwest of Cal Sierra’s office, equipment maintenance and staging area, and mineral processing facility, which is located in the east-central portion of the site.

The site is characterized by historic dredged topography consisting of tailings piled in narrow ridges separated by intervening topographic lows. Although the gravel and cobble tailings support very little vegetative cover, the intervening lows support marsh and shallow pond conditions, and a mixture of grass, weeds, cottonwoods, oaks, and other species. Geologically, the site is underlain (top to bottom) by dredged tailings up to 80 feet in total thickness, fluvial deposits, fine-grained lake or marine sediments of the lone Formation, and bedrock (metavolcanics and granodiorites).

Six ponds comprise the primary areas of former dredging operations. These ponds are demarcated by Cal Sierra as Pond No. 1 through Pond No. 6. Various structures are situated in the virtually flat area in the east-central portion of the site. This area includes an administrative office, gold recovery facility, maintenance and machine shops, and equipment staging areas. Scrap metal and historical equipment is locally stored throughout the area. Most of the site has been dredged at least twice and in some parts of the property three to four times, each time to a greater depth with larger and/or more efficient recovery equipment.

At time of inspection on December 27, 2007, Cal Sierra was in the process of refurbishing Dredge 17, which had previously been relocated from Federal lands within the Yuba Goldfields to the east of the site. The operator has reported that Dredge 17 is currently operational. Initial gold and heavy-mineral extraction is also performed via equipment installed in the Western Aggregates processing line. Further gold and heavy-mineral recovery occurs at Cal Sierra’s facilities in the eastern portion of the site. As of December 2008, no violations or corrective measures are noted.

The financial assurance is currently established in the form of a Surety Bond for the amount of \$57,039 for reclamation purposes, and \$1,637,918 for the recovery of two dredges in the event that they sunk. Former Dredge 21 sunk in January 2003. In 2006, Dredge 21 was removed by dewatering the extraction pond, cutting the dredge into relatively smaller pieces, and subsequently removing them as scrap. In October, 2008, a revised financial assurance cost estimate (FACE) was submitted to the SMGB in the amount of \$1,346,075.



**FINANCIAL ASSURANCE COST ESTIMATE (FACE) ADJUSTMENT:**

**Cal Sierra Development, Inc.**

I.	Primary Reclamation Activities	\$44,634
II.	Revegetation	\$262.00
III.	Plant Structures and Equipment Removal	\$6,000.00
IV.	Miscellaneous Costs	\$0

**Total Direct Cost** **\$50,896**

I.	Supervision/Overhead/Contingencies	
a.	Supervision (6.2%)	\$3,156
b.	Profit/Overhead (12.8%)	\$6,515
c.	Contingencies (10%)	\$5,090
d.	Mobilization (5%)	\$2,545
II.	Monitoring	\$7,200

**Total Indirect Cost** **\$24,506**

Lead Agency administrative cost (15%) \$11,310

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**Total Estimated Cost for Site Reclamation** **\$86,712**

**Teichert Aggregates Dredge 17**

I.	Primary Reclamation Activities	\$0
II.	Revegetation	\$0
III.	Plant Structures and Equipment Removal	\$849,479.76
IV.	Miscellaneous Costs	\$75,045.00
V.	Monitoring	\$2,500.00

**Total Direct Cost** **\$927,024.76**

III.	Supervision/Overhead/Contingencies	
a.	Supervision (7%)	\$41,716.11
b.	Profit/Overhead (14%)	\$83,432.23
c.	Contingencies	\$64,891.73
d.	Mobilization	\$27,810.74

**Total Indirect Cost** **\$217,850.82**

Lead Agency administrative cost (15%) \$114,487.56

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**Total Estimated Cost for Dredge Removal** **\$1,259,363.14**

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**Grand Total Estimated Cost for Reclamation     \$1,346,075.14**

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**CONSIDERATION BEFORE THE SMGB:** The SMGB may consider the following actions:

1. Approve as adequate the adjusted financial assurance cost estimate, without additions;  
[or]
2. Modify the adjusted financial assurance cost estimate, and then accept it as adequate;  
[or]
3. Reject the adjusted financial assurance cost estimate as inadequate and order it to be redone.

**EXECUTIVE OFFICER'S RECOMMENDATION:** The Executive Officer recommends that the SMGB approve the adjusted FACE. The adjusted financial assurance cost estimate has been reviewed for its consistency and completeness in meeting the minimum requirements of SMARA, and the SMGB's regulations and guidelines. Based on the annual inspection conducted on December 27, 2007, SMGB staff considers the recently revised FACE amount to be adequate. The OMR has reviewed the adjusted FACE, and also considers it adequate to reclaim the site in accordance with the approved reclamation plan.

**SUGGESTED MOTION LANGUAGE:**

To approve the Adjusted Financial Assurance Cost Estimate:

*Mr. Chairman, in light of the information before the State Mining and Geology Board today, I move that the Board approve the adjusted financial assurance cost estimate of \$1,346,075.14 for the Cal Sierra Development, Inc. surface mining operation, CA Mine ID #91-58-0003, located in Yuba County, as being adequate to reclaim the site in accordance with the approved reclamation plan, and meeting the minimum requirements of SMARA and the SMGB's regulations.*

Respectfully submitted:

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Stephen M. Testa  
Executive Officer