ATTACHMENT A – Reclamation Standards Discussion

RECLAMATION STANDARDS

Reclamation activities must comply with the reclamation standards found in California Code of Regulations, title 14, sections 3700-3713. The following is a discussion of how the project will comply with each of these standards.

§ 3702 Financial Assurances

Sections 2770 and 2773.1 of the Surface Mining and Reclamation Act of 1975, Public Resources Code Section 2710 et seq. ("SMARA") require surface mining operators to obtain lead agency (city or county) approved financial assurances for reclamation. To this end, the County annually requires Baldwin to update the existing financial assurances to ensure there are adequate financial assurances in place for all costs related to completing the reclamation. The current financial assurances cost estimates for the Project are $103,526.93. (See Reclamation Plan, Attachment 4.)

§ 3703 Performance Standards for Wildlife Habitat

The Reclamation Plan for the Project meets the requirements of Section 3703. Baseline conditions are described in Section 4.6 (Biological Resources) of the Draft Environmental Impact Report ("Draft EIR"). (See Reclamation Plan, Attachment 15.) As discussed in the revised Reclamation Plan dated September 2004 ("Reclamation Plan"), shallow wetlands will be established along the margins of a reclaimed lake. A combination of shallow and deep water habitat for a variety of wildlife species will be created using the best management practices. Further, a nesting island will be constructed using excess overburden. (See Reclamation Plan, pp. 18-19, Attachments 7, 13.) Native vegetation will be established on reclaimed area by a combination of natural revegetation and plantings. Topsoil will be respread on the margins of the lake and in the shallow wetlands areas to enhance the establishment and growth of native vegetation. (Reclamation Plan, pp. 18-19, 22-23.)

Baldwin will retain an expert in wildlife habitat reclamation to implement the revegetation plan and monitor success. Performance standards for the shallow wetlands and lake perimeter will be evaluated based on the effectiveness of the vegetation for wildlife habitat by comparing appropriate measured of cover, density and species richness for the reclaimed lands to similar parameters on reference areas and the baseline conditions put forth in the Draft EIR. Methods of monitoring and assessment will be based on guidelines provided in the Department of Conservation's recently published manual on the rehabilitation process for disturbed lands (Newton and Claassen, 2003). (Reclamation Plan, pp. 22-23.)

§ 3704 Performance Standards for Backfilling, Regrading, Slope Stability, and Recontouring

A comprehensive slope stability study was prepared for the Project by AGRA Earth & Environmental, Inc., *Excavation Stability: M&T Chico Ranch Mine Reclamation* (See Draft EIR, Appendix E; Reclamation Plan, Attachment 8.) The study found that 3:1 is an appropriate factor of safety for slopes at the Project site. Therefore, Baldwin has incorporated a 3:1 slope for all final slopes into the Project design. In addition, the design of any structures proposed onsite, including batch plants, offices, and other ancillary facilities will be regulated by the Butte County Building Division of the Development Services Department. (See Draft EIR, Section 4.3, p. 4.3-16.)

§ 3705 Performance Standards for Revegetation

Section 3705 measures success of revegetation "based upon the effectiveness of the vegetation for the approved end use, and by comparing the quantified measures of vegetative cover, density, and species-richness of the reclaimed mined-lands to similar parameters of naturally occurring vegetation in the area." (Cal. Code Regs., tit. 14, § 3705(m).)

The Reclamation Plan provides for a detailed and exhaustive revegetation plan. The Reclamation Plan's revegetation standards track the statutory requirements mandated by SMARA and its associated regulations.

California Code of Regulations, section 3705(m) states the following:

> Success of revegetation shall be judged based upon the effectiveness of the vegetation for the approved end use, and by comparing the quantified measures of vegetative cover, density, and species-richness of the reclaimed mined-lands to similar parameters of naturally occurring vegetation in the area.

(Cal. Code Regs., tit. 14, § 3705(m).)

The Reclamation Plan tracks these requirements. The Reclamation Plan states: "Performance standards . . . will be evaluated based on the effectiveness of the vegetation for wildlife habitat by comparing appropriate measures of cover, density and species richness of the reclaimed lands to similar parameters on reference areas."

Further, the Reclamation Plan specifically provides that revegetation monitoring will take place for five years. During the five-year monitoring period, annual reports will be submitted to the Butte County Planning Division. The reports will describe the success of the revegetation plan and will include recommendations

for how to improve, if possible, the plan's success in the following year. In addition, the reclamation plan requires that "[m]ethods for monitoring and assessment will be based on guidelines provided in the Department of Conservation's recently published manual on the rehabilitation process for disturbed lands (Newton and Claassen, 2003)."

§ 3706 Performance Standards for Drainage, Diversion Structures, Waterways, and Erosion Control

The Reclamation Plan meets the requirements of Section 3706. Baldwin will obtain coverage under a general stormwater control permit from the Regional Water Quality Control Board before initiating onsite activities. The stormwater permit will require the development and implementation of a stormwater pollution prevention plan ("SWPPP"). By complying with the requirements of the stormwater permit and SWPPP, Baldwin will necessarily control runoff to ensure that discharge of surface flows from the site meet stormwater pollution control permit requirements, and will comply with applicable erosion control and sediment control requirements. Further, as indicated in the excavation stability study (Reclamation Plan, Attachment 8), the 3:1 final slopes incorporated into the final Project design will stabilize the reclaimed area, allowing most onsite runoff to remain onsite, thereby minimizing contribution of sediment to nearby streams and limiting erosion.

The streambed and streambanks of Little Chico Creek will not be disturbed except for road and conveyor crossings. Stanchions supporting the conveyor will be footed in nonsensitive areas, and the road crossing of the stream will be improvements on an already existing crossing, thus resulting in no increased impact. There will be no in-stream mining. (Reclamation Plan, p. 13.)

§ 3707 Performance Standards for Prime Agricultural Land Reclamation

This performance standard does not apply to the project because it is not located on Prime Agricultural Land.

§ 3708 Performance Standards for Other Agricultural Land

The Reclamation Plan meets the requirements of Section 3708. As discussed in Section 4.2 of the Draft EIR, the Project's ensured use will be reclamation to agricultural uses for the plant area (40 acres), while the mining area (193 acres) will be reclaimed as open water and wetlands.

The revegetation scientist that Baldwin will retain for the Project will set up appropriate reference areas for both the plant site agricultural reclaimed area, as well as the perimeter of the lake/wetland area. Productivity of the irrigated agricultural land at the reclaimed plant site will be compared to that of adjacent

irrigated agricultural land on the M&T Ranch. The plant site will revert to become a part of a larger field on the M&T Ranch, and will be managed the same as the rest of the land in that field. Performance standards for the shallow wetlands and lake perimeter will be evaluated based on the effectiveness of the vegetation for wildlife habitat by comparing appropriate measures of cover, density and species richness of the reclaimed lands to similar parameters on reference areas approved by County staff.

§ 3709 Performance Standards for Building, Structure and Equipment Removal

There are currently no buildings or structures within the proposed permit area. Buildings and structures associated with the aggregate processing plant will be removed when mining is completed.

§ 3710 Performance Standards for Stream Protection, Including Surface and Groundwater

Section 4.4 (Hydrology and Water Quality) of the Draft EIR describes the potential water-related impacts of the Project. The only proximate surface water stream, Little Chico Creek, will not be disturbed or impacted by the Project. There will no in-stream mining. Other surface water bodies include wetlands which will be mitigated as required by the U.S. Army Corps of Engineers and other state and federal agencies. During mining operations, industrial stormwater and process water will be collected in onsite recycle ponds. In addition, Baldwin will operate the Project in accordance with a California Regional Water Quality Control Board stormwater control permit and SWPPP.

As discussed in the *Hydrology Report for Proposed Gravel Mining – M&T Chico Ranch* (Reclamation Plan, Attachment 9; Draft EIR, Appendix D.1), the Project will not have a significant impact on groundwater resources. (See Draft EIR, section 4.4). The proposed lake will actually result in enhanced groundwater recharge from precipitation and evaporation from the shallow groundwater. Further, although there is recharge to the water table which occurs as a result of percolation losses from Little Chico Creek, the Project will not alter that process. (Draft EIR, p. 4.4-38.)

The groundwater quality study prepared for the Draft EIR by Monarch Laboratory concluded that there is no groundwater impact associated with the proposed operations. (Reclamation Plan, Attachment 11; Draft EIR, Appendix D-3). Following reclamation, as part of the approved Mitigation and Monitoring Plan for the Project, Baldwin will develop a groundwater monitoring program to be approved by the Central Valley Regional Water Quality Control Board and Butte County to monitor recharge and water quality following reclamation. (Draft EIR, pp. 4.4-64 - 4.4-78.)

§ 3711 Performance Standards for Topsoil Salvage, Maintenance, and Redistribution

The Reclamation Plan describes how topsoil and subsoil (growth medium) will be saved and stockpiled for reclamation uses as shown in Attachment 7 Revegetation Plan. (Reclamation Plan, p. 8; Attachment 3, Item 6, p. 5; Attachment 5.)

§ 3712 Performance Standards for Tailing and Mine Waste Management

Under the Reclamation Plan, the Project will not generate any mine wastes because all mine products will be sold or used in reclamation. (Reclamation Plan, Attachment 3, Item 5, p. 5.)

§ 3713 Performance Standards for Closure of Surface Openings

There are no drill holes, portals, shaft or tunnels proposed for the mining operations that would require abandonment.

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