



October 11, 2007

<u>Via FED EX</u> Tracking # 7982 8306 8658

Mr. William Olson Bureau Chief Ground Water Quality Bureau New Mexico Environment Department P.O. Box 26110 Santa Fe, New Mexico 87502

Dear Messrs. Olson and Brancard:

Via FED EX Tracking # 7908 4778 7281

Mr. Bill Brancard
Director, Mining and Minerals Division
New Mexico Energy, Minerals and
Natural Resources Department
1220 S. St. Francis Drive
Santa Fe, New Mexico 87505

Re: Phelps Dodge Tyrone, Incorporated - Updated Closure/Closeout Plan

Pursuant to Conditions 1 and 117 of Discharge Permit DP-1341 ("DP-1341") Phelps Dodge Tyrone, Incorporated (Tyrone) is providing an updated Closure/Closeout Plan ("CCP") for the Tyrone Mine Facility. A copy of this letter is being transmitted to the Mining and Minerals Division ("MMD") under Section 9.S of Mining Act Permit GR010RE ("MAP"). Tyrone is not applying for a modification of the MAP at this time but expects to do so following NMED and MMD review of the updated CCP and future action by NMED on the application to renew DP-1341.

The update of the CCP is available at the following file transfer site: ftp://157.208.235.157 (the user name is w2buwi and the password is liaohb). Three hard copies of the update and an electronic copy will be provided to NMED and MMD on or before October 19, 2007.

The updated CCP revises the scope of work and cost estimate for closure/closeout of the Tyrone Mine under the Water Quality Act and the Mining Act. The updated plan reflects the results of various studies completed or underway under the conditions of DP-1341 and the MAP that were available at the time the update was prepared, reclamation that is expected to be completed by April 2008, changes due to ongoing mining, and updated cost information. The updated plan is based largely upon the design criteria set forth in the existing DP-1341 and MAP requirements, modified in certain respects based upon the studies conducted by Tyrone including the feasibility study required under Condition 89 of the permit.

The renewal application includes a request for modification of certain conditions in DP-1341. A brief description of the requested modifications and the permit conditions which they affect follows.

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Condition 4 Increase the reclaimed interbench slope angle from 3:1 to a maximum of 2.5:1 on stockpiles located outside of the surface water capture zone of the interior pits and not regrade the slopes of stockpiles that are within the surface water capture zone of the interior open pits.

Condition 17 Reduce the minimum cover thickness for cover placed on stockpiles outside of the surface water capture zone of the interior pits from 36 inches to 24 inches and not place a cover on stockpiles located within the surface water capture zone of the interior pits.

The requested modifications will not affect mine features that are currently undergoing reclamation. The primary basis for these modifications are results and observations of the Tyrone test plots required under Condition 76 and the results of the feasibility study.

Tyrone may seek to modify the permit and the renewal application to incorporate changes that arise out of NMED and MMD review and discussions regarding the updated CCP. Tyrone also notes that the matter of our appeal of DP-1341, on remand by the New Mexico Court of Appeals, is currently pending before the Water Quality Control Commission ("WQCC"). The WQCC is considering proposed criteria for determinations regarding the "place of withdrawal of water for present or reasonably foreseeable future use" under the Water Quality Act and WQCC Regulations. Tyrone reserves the right to request that, following the WQCC's decision, NMED make a determination regarding the "place of withdrawal of water for present or reasonably foreseeable future use" at Tyrone and reserves the right to propose modifications of the application and the updated CCP to reflect any criteria adopted by the WQCC and any determinations based thereon.

The updated cost estimate reflects current costs of labor, rental equipment, supplies, energy and other cost components. The updated cost on a nominal (current dollar) and net present value (NPV) basis reflect a substantial increase over the existing cost estimate.

The following discussion addresses some of the key concepts and planning criteria used by Tyrone to develop the updated CCP.

The primary reclamation challenges at Tyrone involve the control of water, stabilization of the mining byproducts to prevent off-site dispersal, and establishment of a self-sustaining ecosystem, where applicable. Tyrone intends to achieve the reclamation goals through a combined, technically proven approach involving source control and revegetation complemented by surface and ground water controls and water treatment. In addition to honoring environmental commitments, Tyrone is bound to providing for the economic viability of its mining operations. Thus, the reclamation plans must be rationalized from a cost-benefit perspective.

While conceptually simple, the reclamation process is extremely complex in practice and the development of the CCP has required the coordinated efforts of a diverse group of scientists and engineers. The updated CCP relies on the application of standard reclamation principles to the unique set of environmental and practical conditions that characterize the facilities at

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Tyrone. Consistent with industry practices at large open pit copper mines with long operating histories, Tyrone's CCP employs selectively located vegetated soil covers and surface and subsurface water management systems to stabilize the mining wastes and control water quality. These practices are combined to optimize the reclamation and provide efficient, long-term achievement of Tyrone's environmental goals. Tyrone is continually evaluating and implementing practices that will facilitate the efficiency of the reclamation being performed now and in the future.

To aid Tyrone in selecting a plan, environmental scientists and engineers have performed extensive, site-specific investigations to develop a comprehensive understanding of the environment. Over the past decade, a broad range of specialized studies (e.g., ground water, cover design, slope stability, revegetation, and water treatment) have been conducted to evaluate the environmental and economic implications of various closure alternatives.

Results from these, and other studies were integrated through a comprehensive feasibility study to better understand the global implications of various closure alternatives. Development of the Tyrone feasibility study was a collaborative process whereby representatives from Tyrone, the NMED, and MMD selected closure alternatives and mechanisms for evaluation. Ultimately, the results of the feasibility study figured prominently in the closure decisions that are represented in this plan. Tyrone acknowledges that the feasibility study has not as yet been submitted to NMED or MMD; however, Tyrone has completed the majority of the feasibility study based on previous discussions with the agencies.

The overarching conclusions of the feasibility study from a technical perspective were that increasing levels of source control (cover thickness) would not significantly affect ground water quality. Thus, there was no expectation that any of the alternatives would perform relatively better to decrease the size of the area where ground water currently exceeds the quality standards of 20.6.2.3103 NMAC. The ground water surface shows that the area of open pits acts as a hydraulic sink and will continue to do so as long as pumping of the pit is maintained, as required by DP-1341. DP-1341 requires water from the pit to be pumped as long as the water contains contaminants that exceed the standards of 20.6.2.3103 NMAC. This means that solutions contained in the stockpiles and ground water within the open pit capture zone will flow toward the pit. Impacted water within the pit capture zone will be collected in the pit sump and treated. In the case where ground water impacts may occur outside the pit ground water zone capture, the seepage and ground water will be contained by the interceptor well systems and sent to the water treatment system. All impacted waters would be collected and treated under the updated plan through the combination of a nanofilitration plant and a lime precipitation, high density sludge plant. The precipitate sludge would be placed in lined disposal areas located within the main pit.

There are areas within the interior of the mine unit where surface water can not be feasibly drained to the outside of the primary mining area. For these areas, which we have termed the surface water capture zone, there appears to be only a modest environmental benefit to regrading and covering stockpiles as compared to a large cost to cover. As described above,

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above, Tyrone is proposing to modify the permit conditions in line with this finding.

Tyrone recognizes that the closure plan must be structured to accommodate advancements in science, engineering, and mining technology. Thus, Tyrone reserves the option to modify the closure plan to adopt developments in reclamation science or improved understanding of the site.

Tyrone appreciates the time and effort spent by the NMED and MMD staffs in reviewing and commenting on the studies and data submitted by Tyrone and in discussing the approaches to be used to update the CPP. Tyrone is ready to meet with your staffs and to respond to any questions or comments on the updated CCP. Please contact Chuck Johnson at (575) 574-6359 regarding scheduling. Tyrone appreciates your consideration of the enclosed CCP and looks forward to further discussions with the objective of reaching agreement on the updated CCP and achieving timely permit renewal.

Sincerely,

Brent Fletcher, Manager Environment, Land and Water

BF:cj Attachments 20071011-104

c Mary Ann Menetrey Clint Marshall Holland Shepherd