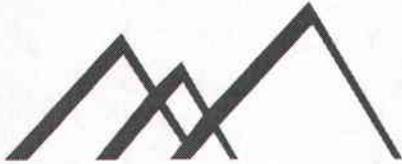


0026



Western States Minerals Corp.

250 South Rock Blvd., Suite 130
Reno, Nevada 89502
Ph. (775) 856-3339

ACT/015/002 #2

Copy all to
Mary Ann [unclear]
[unclear], PAM

October 14, 1999



Ms. Pamela Grubaugh-Littig, Permit Supervisor
Utah Coal Regulatory Program
1594 West North Temple, Suite 1210
Box 145801
Salt Lake City, UT. 84114-5801

RE: Response to DOGM letter outlining issues raised during the Phase II and III bond release review and technical analysis associated with the J.B. King reclaimed minesite, ACT/015/002, Folder #2, Emery County, Utah

Dear Pamela:

I have received your September 28, 1999 letter which summarizes the Division of Oil, Gas and Mining's (DOGM) concerns and questions associated with Western States Minerals Corp.'s (WSMC) request and justification for Phase II and III bond release at its reclaimed J.B. King minesite. The remainder of this letter addresses your list of comments and answers the questions, associated with your review for Phase II bond release. I have addressed the concerns in the order that they were listed in your letter.

Your request is listed first (in italicized print) and my response follows (in bold print).

Erosion-Related Issues

R645-301-353.140

The phase II bond release application did not address the erosion standards for the J.B. King Mine, which is a commitment in the approved J.B. King Mine plan at UMC 817.110. These erosion standards must be addressed according to your commitment. Please amend or follow the approved plan.

WSMC answer- The Coal Regulation referred to (e.g. R645-301-353.140) states:

"The vegetative cover will be: Capable of stabilizing the soil surface from erosion."

WSMC's application has addressed the erosion standards for the site as described in the approved J.B. King mine plan under sub-heading UMC 817.110. The current on-site vegetative cover is comparable to the off-site reference area. This vegetative cover, in concert with the development of surface litter and natural rock armoring in the intervening areas that are not covered with vegetation, have brought the site to a state of "normal" erosion (e.g. comparable to a similar off-site area). WSMC's commitment in UMC 817.110 was to 1) install and record on-

File in: C/0150002 1999. Incoming

Refer to:

- Confidential
- Shelf
- Expandable

Date 10/14/99 for additional information

WSMC response to DOGM

Page 2

site erosional transects, 2) install and record an on-site rain gauge, and 3) install and record comparable off-site erosional transects. The first two of these commitments were accomplished by WSMC and the results have been submitted to DOGM. The third was waived because DOGM personnel could not identify a comparable off-site location and, as we understand it, determined that this proposed task was unnecessary in light of prior off-site transect studies and their results, as discussed below.

The photos and measurements of the Erosional Transects showed that those areas where minor rills and gullies had formed, at the reclaimed site, were conforming to a "normal" erosional condition that is common to the local region. The precipitation information conforms to photos of the Erosional Transects (e.g. higher precipitation, in the form of thunderstorms, increased the erosional rate during those periods). This information confirmed previous observations. A year prior to the first recording of information from the Erosional Transects, Bamberg Associates performed an *Ecological Monitoring and Environmental Characterization* at the J.B.King Mine in August of 1994 (previously submitted to DOGM and part of WSMC's amended and approved J.B.King reclamation plan-July 1995). In this study, eight linear transects were laid out in the field; four on-site and four off-site. Each sample location along each transect measured vegetation, topography, soil type, substrate type, rock material, and erosion. Bamberg Associates concluded on pg. 24 of that report "Erosion is variable and rapid depending on degree of slope, soils, and topographic situation. There are no discernable trends or differences on-site versus off-site----." In addition, it states "There were fewer and smaller rills and gullies on the reclaimed site (e.g. compared to off-site), including the face of the refuse pile." It also states, on page 25 "WSMC should request that a determination that sedimentation rates and erosion controls on the site are equal to or better than conditions off-site in similar topographic situations, and that erosion has been controlled to the extent possible. We further recommend that based on the analysis of ecological and vegetation parameters, no further actions be taken on-site to increase or enhance vegetation or control erosion."

WSMC submits this information establishes full and complete compliance with the erosion standards, as set forth in the approved J.B.King Reclamation Plan.

R645-301-300.140 through 143

The approved J.B.King plan also committed to an erosion monitoring program, (See UMC 817.110, pg. 3 incorporated in October 1995). WSMC has collected data and obtained photos, but needs to summarize and quantify the change encountered across each transect. Please submit this summary.

WSMC answer- WSMC has committed to and carried out an erosion-monitoring program (e.g. UMC 817.110). All of that data, including photos and cross-sections, has been submitted to DOGM. The photos and cross-sections completed have

captured the "normal" geomorphic changes that are occurring at the site. The following observations summarize those geomorphic changes:

- 1) The reclaimed site (32.4 acres) is in a transitional environment for surface hydrologic effects. A total of 61.9 acres of off-site drainages contribute flow to the site (e.g. taken from HA&L Report, 1992, entitled *JB King Mine Proposed Erosion Control Plan*). Therefore, approximately 2/3 of the surface water that is handled at the site is from off-site sources.
- 2) Approximately 61% of the off-site water is conveyed on-site by Ditch #1, which is shown by Erosional Transect photos C-C' and D-D'. Approximately 27% of the off-site water is conveyed on-site by Ditch #2, which is shown by Erosional Transect photos A-A' and B-B'. Therefore, a total of approximately 88% of the off-site flow is conveyed by constructed drainage channels. The remaining 12% off-site drainage flows onto the site over a broad area that is monitored by the other Erosional Transects (e.g. DOGM has photographs of all the transects for the 2 1/2 year monitoring period- Aug. 1995 through May 1998).
- 3) The minor rills and gullies that have formed across the transect monitoring area are within acceptable and expected erosion limits for this specific environment. The surface area in this vicinity, around the prevailing vegetation, has naturally rock armored itself. These minor rills and gullies that have formed will not disrupt the approved post mining land uses or unduly hamper the reestablishment of a diverse and stable vegetative cover. In addition, this area will not cause or contribute to a violation of water quality standards for receiving streams outside the reclaimed area.

The site currently meets the *Soil Stabilization* criteria as set forth in R645-301-244 and the criteria for bond release as set forth in R645-301-880.320. The series of photos and cross-sections of the Erosional Transects document the before-mentioned statement. In addition, Bamberg Associates report entitled "Ecological Monitoring and Environmental Characterization-dated August 1994" and WSMC's "Soil Loss Evaluation of the Reclaimed J.B. King Mine-dated May 1999", further confirms the erosional stability of the site.

R645-301-244, R645-301-120 and R645-301-731

An annual soil loss estimate, using the RUSLE (Revised Universal Soil Loss Equation) was submitted for the J.B. King Mine. Elements of the RUSLE equation (e.g. "K" factor) require specific physical soil parameters (including, but not limited to: soil permeability, soil structure, %very fine sand, coarse fragment %by weight, % rock cover, and soil density.)

The data used to determine the K value (e.g. the specific physical soil parameters) were submitted. Please provide the methodology used to obtain the K factor selection of the "data" transects. This should be presented to provide justification for the values used.

WSMC answer- The J.B. King site was divided into six (6) "data" evaluation areas. Each area was given a representative transect. These areas were selected based upon their internal similarities of soil type, vegetative cover, composition of rock fragments, and topography. The six areas that were selected provided a good representation of the site and kept the calculations to a reasonable level. In June 1993, several soil samples were collected and analyzed for the entire suite of soil nutrient characteristics and particle size gradation (e.g. % sand, silt, and clay – and determination of the USDA texture). The laboratory results are attached to a previous report submitted to DOGM, entitled "Soil Loss Evaluation of the Reclaimed J.B. King Mine- dated May 1999). The transect areas were selected, in part, to correspond to the soil samples collected (e.g. Area #1 corresponds to soil sample JBK02, Area #2 to JBK05, Area #3 to JBK06, Area #4 to JBK03, Area #5 to JBK04, and Area #6 to JBK01). The location of where these soil samples were collected is shown on the attached map entitled *Soil Location Map*. The values actually used in the K factor calculation differ slightly from the sampling data, to adjust for changes that have occurred over time and to account for the sample collection methodology. The two modifications that were made included: 1) a slight increase in the percent organics, based on the addition of biosolids and success of revegetation from 1993 to present; and 2) the percent silt and clay were decreased slightly to account for the greater proportion of rock fragments that exist, but were not initially sampled. Samples JBK03 and 04 were collected off-site, but were determined to correlate with Areas # 4 & 5, respectively; and were therefore utilized to represent those areas, accordingly.

Prevention of Suspended Solids of Runoff Outside the Permit Area Not in Excess of the Requirements

R645-301-880.320 (UCA 40-10-17-(j))

UCA 40-10-17(j), (l) p4 (A) specifies that reclamation must prevent or remove water from contact with toxic –producing deposits. Currently, the sedimentation pond captures this sediment and runoff. As evidenced by the exposed coal refuse materials in the rills, gullies, and channel, water has been in contact with possible toxic-producing deposits.

The pond sediments should be sampled for toxic and acid forming characteristics according to the Division's guidelines for topsoil and overburden in conjunction with water quality sampling (see R645-301-733). If sampled sediment and water test results prove negative accordingly, then bond release should proceed.

WSMC answer- During 1992 soil and refuse samples were collected from the J.B. King site and analyzed using the Meteoric Water Mobility Procedure. These samples included a sample from the sediment pond, three samples of the soils at the west edge of the refuse pile, and three samples from the top of the refuse pile (which included the exposed coal on the vegetation test plots). These tests show conclusively that water that contacted these samples did not exceed the water quality standards for off-site receptors (e.g. Agricultural Water Quality Standards for Ivie Creek that you sent to me). In fact they were well below any action levels.

WSMC response to DOGM

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This information was originally submitted to DOGM, c/o Ms. Dianne Nielson, on Sept. 15, 1992. This letter was in response to concerns expressed by a DOGM staff member (Mr. Henry Sauer) that the site could have toxic and acid forming characteristics. A Technical Memorandum, dated Sept. 10, 1992, accompanied that letter to Ms. Nielsen as Appendix 3.

The results of this data satisfy the concerns of DOGM staff that this regulation is being met. I have attached a copy of this report for your convenience.

Impoundment-Related Issues- the impoundment is intended for use as part of the post-mining land use, i.e. a stock and wildlife watering pond.

R645-301-880.320

"Provisions for sound future maintenance by the landowner (SITLA) or operator" is a requirement when a permanent impoundment is retained. The September 14, 1994 letter from SITLA "concurs with WSMC's request to leave both reclamation facilities in place because they will enhance grazing practices on the management for this area." However, SITLA did not agree to any future maintenance. Clarification from SITLA about the "sound future maintenance" is needed. (SITLA and WSMC letters attached)

WSMC answer- WSMC's counsel has been advised by DOGM's counsel that DOGM has approached SITLA to obtain directly the assurances that DOGM seeks. In addition, I have contacted Mr. Jim Cooper of SITLA and understand that he has directed his staff to inspect the J.B. King site and write him a report concerning the condition and status of the current facilities. Once he has received and reviewed that information, we understand that he will communicate directly with DOGM to satisfy its concerns in this area.

R645-301-733

A demonstration that the size and configuration of the impoundment is adequate for the use as a stock pond must be included in the bond release application.

WSMC answer- The configuration of the pond (e.g. side slope) is the most important element of consideration for wildlife and livestock usage. This pond has gentle slopes (e.g. less than 4 horiz. to 1 vert. slope) around the entire perimeter; which allows safe access to both livestock and wildlife. The size (e.g. water holding capacity) is sufficient to handle large herd of cattle; more than can be sustained by the available grazing forage. The size factor is more a determination to be made by the land owner/administrator. Certainly, the pond has more than enough capacity to sustain grazing for livestock on the reclaimed site. Like most dry-land stock watering ponds, this one is dependent upon sufficient rainfall to fill it. This subject of water availability is discussed further in this write-up.

The water quality of the impounded water must meet applicable Utah and Federal water quality standards, which are agricultural water quality standards for Ivie

WSMC response to DOGM

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Creek. A sample must be taken and analyzed to demonstrate that the pond is meeting these standards.

WSMC answer- Information previously submitted by WSMC (e.g. Technical Memorandum dated Sept. 10, 1992) demonstrates the long term water quality that can be expected from this pond. The water meets the Agricultural Water Quality Standards for Ivie Creek.

Information to demonstrate that the water level will be capable of supporting the intended use, must be provided. That is, WSMC must provide data demonstrating water is available when needed for stock watering and wildlife.

WSMC answer- This pond is being fed by an ephemeral drainage; and therefore, the existence of water in the pond, for livestock or wildlife watering, is intermittent. The highest probability for capturing water in the pond is during late summer and early fall, when severe thunderstorms occur. However, significant water can carry-over from late season, one year; to early-season, the year following. Usually, the water that remains through the winter is in a frozen to partially frozen state until the following spring thaw. There are exceptions to all normal conditions, but the data supports these observations. As is the case with all comparable water-impoundment facilities, water is not available at all times, nor should it be. During dry periods appropriate grazing practices dictate that stock be moved to areas with more reliable water supplies. This has the further beneficial effect of preventing overgrazing of the area, with attendant increase in erosion potential, during dry periods. It was never the intent nor purpose of this facility to provide a permanent source of water for stock or wildlife. Rather, the intended use is for intermittent stock watering, and that use is supported by the intermittent availability of water at the impoundment.

North Perimeter Ditch

R645-301-761.220

The north perimeter ditch routed to the sedimentation pond needs to be removed, regraded, roughened and seeded. This must be done prior to the Phase II bond release being granted.

WSMC answer- The north diversion ditch is located on a terrace that is situated on the north edge of the reclaimed site boundary. This terrace ranges in width between nine (9) to thirteen (13) feet. The ditch is located in the center of the terrace and gently slopes from east to west, and discharges into the sediment pond. The most prudent reclamation of this ditch is to deeply "pock-mark" the terrace across the entire width and length, from its origin on the East Side to its ending at the sediment pond, on the West Side. WSMC proposes to use a mini-excavator to complete the following tasks: ditch removal, minor re-grading, surface "pocking", and hand broadcasting of seed. WSMC is ready to proceed, once DOGM is satisfied with this approach and WSMC's response to the other

issues discussed in this response. This task would take a maximum of one to two days field time to complete.

In conclusion, WSMC has responded herein to the issues outlined in your letter dated September 28, 1999. These responses provide adequate data to entitle WSMC to receive a Phase II bond release. DOGM's July 6, 1999 letter outlined two components that were absent from WSMC's application for bond release that would not allow DOGM to proceed with its Phase III bond release review. These two components were:

- 1) *Absence of vegetation performance data for 1999* WSMC answer- That information was supplied to you on September 28, 1999.
- 2) *It is incumbent upon WSMC to demonstrate how all the commitments contained in the permit have been met* WSMC answer-The responses provided herein and all previous correspondence supplied to DOGM by WSMC, clearly demonstrates how all permit conditions have been met.

Since both of these components have been submitted, WSMC is also entitled to Phase III bond release at this time, and formally requests such release.

If you concur, please notify me as soon as possible and I will proceed with the removal and final reclamation of the north diversion ditch corridor. Upon conclusion of the ditch removal/reclamation, WSMC will be entitled to receive the final site inspection by DOGM personnel, for Phase II and III bond release.

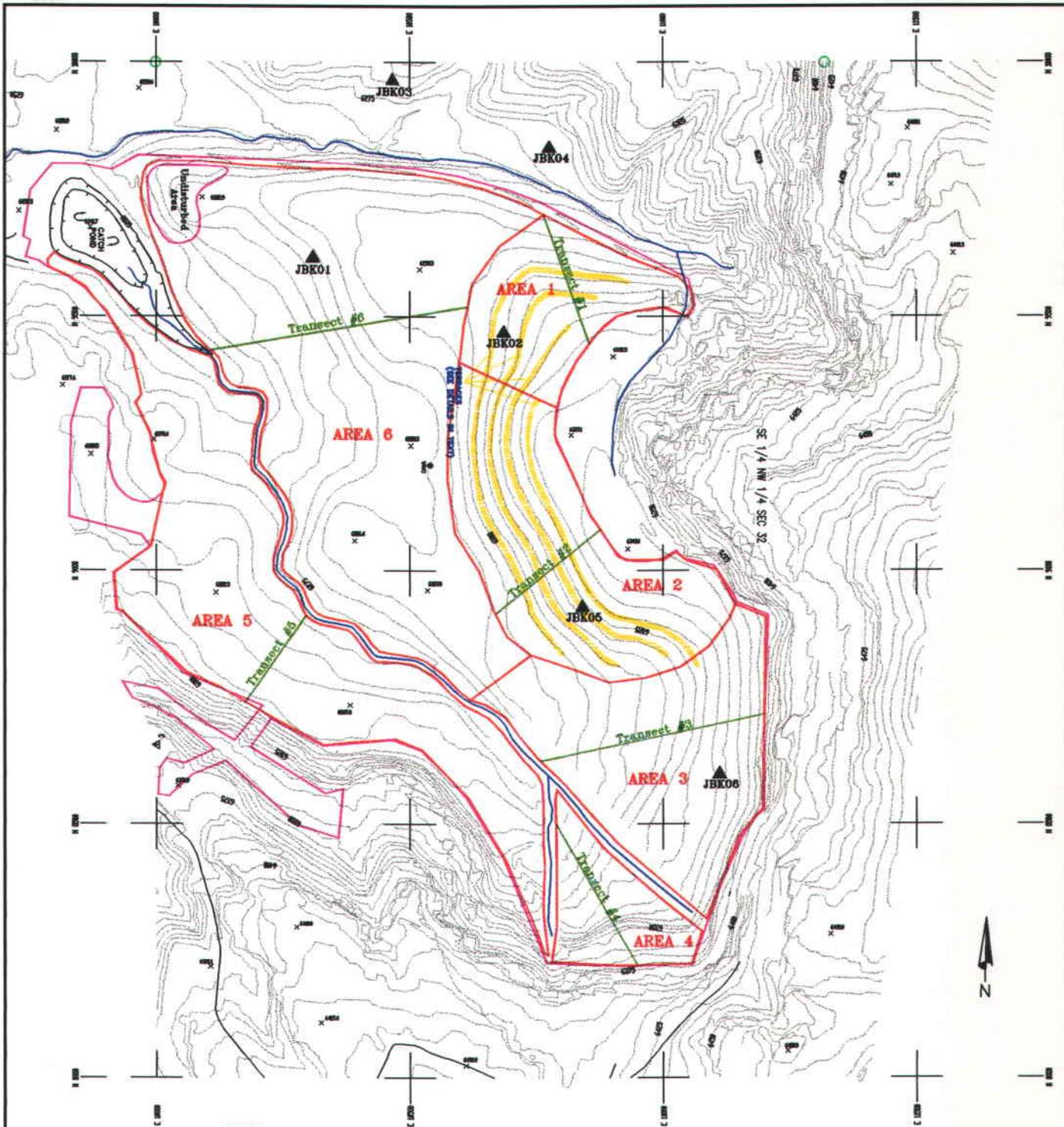
If you have any questions, please let me know at your earliest convenience.

Sincerely,



E.M. (Buzz) Gerick
Vice President of Operations

See map and results of
sampling sediment pond
solids. Sample # SPM-1
The areas discussed and
data presented are
~~highlighted~~ for your
review.



LEGEND

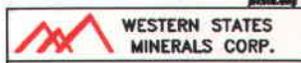
- LOCATION OF EXISTING WATER WELL ●
- BOUNDARY OF WSHC RECLAMATION RESPONSIBILITY (approx. 32.4 acres) —
- TERRACES (TO CONTROL RUNOFF & ACCESS TO APPLY ROCK MULCH TO SLOPE AREAS) —
- AREA OF INFLUENCE BOUNDARY —
- TRANSECT LINE FOR LS FACTOR —
- GENERAL LOCATION OF SOIL SAMPLE ▲

SAMPLE CORRELATION TABLE

- AREA #1 TO JBK02
- AREA #2 TO JBK05
- AREA #3 TO JBK06
- AREA #4 TO JBK03
- AREA #5 TO JBK04
- AREA #6 TO JBK01

NOTE: DEPICTED SOIL LOCATIONS REPRESENT THE GENERAL VICINITY OF WHERE THE COMPOSITE SOIL SAMPLE WAS COLLECTED.

T23S, R6E



TITLE: Soil Location Map	
PROJECT: J.B.KING RECLAMATION	
STATE: UTAH	COUNTY: EMERY
SCALE: 1"=100'	DRAWING NO.:
DATE: 3-5-99	DRAWN BY: REV./10/99