

# PERMIT TRACKING FORM

- Permit Amendment(INS)  
  Exploration Permit(INS)  
  N.O.V. (INS)  
  D.O.  
  Permit Transfer  
  Incidental Boundary Change  
 Permit Midterm (MT)  
  Permit Renewal (PR)  
  New Permit  
  Significant Revision (SR)  
  Bond Release (BR)

DATE RECEIVED <b>4/28/97</b>	By: <b>PBL</b> (Initial)	PERMIT NUMBER	ACT/015/002
Title of Proposal: <b>Subsidence Monitoring</b>		PERMIT CHANGE #	<b>97A</b>
Description: <b>Request for Cessation of Subsidence Monitoring</b>		PERMITTEE	WESTERN STATES MINERAL CORP.
# Copies Required <b>3</b>	# Copies Received <b>3</b>	MINE NAME	J.B. KING

PERMIT CHANGE APPLICATION SENT TO SLC      DATE: \_\_\_\_\_      LETTER TO PERMITTEE: \_\_\_\_\_

<input type="checkbox"/> 15 DAY INITIAL RESPONSE TO PERMIT CHANGE APPLICATION OR INITIAL COMPLETENESS REVIEW	DATE DUE	DATE DONE	LETTER TO PERMITTEE:
<input type="checkbox"/> Notice of Affidavit of Publication. (If change is a Significant Revision, New Permit or Permit Transfer)	DATE DUE	DATE DONE	PUBLIC COMMENT RECEIVED:

PRICE REVIEW TRACKING	REVIEW		SLC REVIEW TRACKING	REVIEW	
	DUE	DONE		DUE	DONE
<input type="checkbox"/> Lead <input type="checkbox"/> Generalist			<input type="checkbox"/> Lead		
<input type="checkbox"/> Administrative			<input type="checkbox"/> Administrative		
<input type="checkbox"/> Land Use/AQ			<input type="checkbox"/> Land Use/AQ		
<input type="checkbox"/> Biology			<input type="checkbox"/> Biology		
<input checked="" type="checkbox"/> Engineering <b>Jess</b>		<b>5/14/97</b>	<input type="checkbox"/> Engineering		
<input type="checkbox"/> Geology			<input type="checkbox"/> Geology		
<input type="checkbox"/> Soils			<input type="checkbox"/> Soils		
<input type="checkbox"/> Hydrology			<input type="checkbox"/> Hydrology		

TA Review Due	Date:	Permittee Response Due	Date:	DIVISION DECISION LETTER
		<input type="checkbox"/> Stipulation <input type="checkbox"/> Condition <input type="checkbox"/> No Requirements		<input type="checkbox"/> APPROVE <input type="checkbox"/> DENY
TA Review Done	Date:	Response Received	Date:	Date:

COORDINATED REVIEWS	PHONE CONTACT	SENT	DUE	RECEIVED	ADDITIONAL TRACKING	Date:
<input type="checkbox"/> OSMRE					PUBLIC HEARING	
<input type="checkbox"/> US Forest Service					LETTER FROM COMPLIANCE SUPER.	
<input type="checkbox"/> BLM					AVS COMPLETED	
<input type="checkbox"/> US FWS					APPROVAL EFFECTIVE DATE	
<input type="checkbox"/> US NPS					APPROVED COPY TO FILE	
<input type="checkbox"/> UT SHPO					APPROVED COPY TO PERMITTEE	
<input type="checkbox"/> UT DEQ (L)					APPROVED COPY TO PFO/SLC	
<input type="checkbox"/> UT Water Rights (L)					APPROVED COPY TO AGENCIES	
<input type="checkbox"/> UT Wildlife Resources(L)					CHIA MODIFIED	
<input type="checkbox"/> UT SITLA (L)					UPDATE MASTER TA    DONE/NEEDED	

PRICE FIELD OFFICE COMMENTS:	SLC OFFICE COMMENTS:
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# APPLICATION FOR PERMIT PROCESSING

Permit Change <input checked="" type="checkbox"/>	New Permit <input type="checkbox"/>	Renewal <input type="checkbox"/>	Transfer <input type="checkbox"/>	Exploration <input type="checkbox"/>	Bond Release <input type="checkbox"/>	Permit Number: ACT/015/002
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Title of Proposal:  
Request for the cessation of subsidence survey monitoring at WSMC's J.B. King Reclaimed Mine Site

Mine: J.B. KING  
Permittee: WESTERN STATES

Description, include reason for application and timing required to implement:

Annual Subsidence monitoring indicates that the area has stabilized. WSMC requests the cessation of all survey monitoring, immediately

**Instructions:** If you answer yes to any of the first 8 questions (gray), submit the application to the Salt Lake Office. Otherwise, you may submit it to your reclamation specialist.

<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	1. Change in the size of the Permit Area? _____ acres Disturbed Area? _____ acres <input type="checkbox"/> increase <input type="checkbox"/> decrease
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<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	10. Is the application submitted as a result of other laws or regulations or policies? Explain: _____
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<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	12. Does the application require or include underground design or mine sequence and timing? (Modification of R2P??)
<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	13. Does the application require or include collection and reporting of any baseline information?
<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	14. Could the application have any effect on wildlife or vegetation outside the current disturbed area?
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<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	20. Does the application require or include subsidence control or monitoring?
<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	21. Have reclamation costs for bonding been provided for?
<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	22. Does application involve a perennial stream, a stream buffer zone or discharges to a stream?
<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	23. Does the application affect permits issued by other agencies or permits issued to other entities?

INCORPORATED  
EFFECTIVE:

MAY 16 1997 97A

Attach 3 complete copies of the application.

I hereby certify that I am a responsible official of the applicant and that the information contained in this application is true and correct to the best of my information and belief in all respects with the laws of Utah in reference to commitments, undertakings, and obligations, herein. (R645-301-123)

Signed - Name - Position - Date

*Jonny D. Berg*, ENVIRONMENTAL COORDINATOR

Subscribed and sworn to before me this \_\_\_\_\_ day of \_\_\_\_\_, 1997.

24th April 97

Notary Public

*April 24, 1997*  
*State of Nevada*



LORRAINE PORTER

Notary Public - State of Nevada

Appointment Recorded in Washoe County, NV

MY APPOINTMENT EXPIRES JUNE 16, 1998

UTAH DIVISION OIL, GAS AND MINING

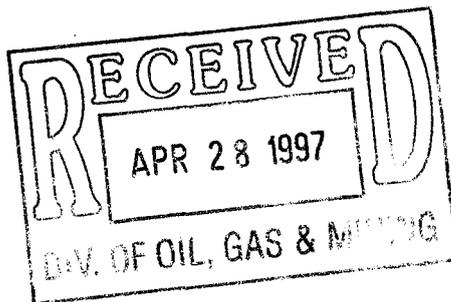
Received by Oil, Gas & Mining

RECEIVED

Assigned Tracking Number APR 28 1997

DIV. OF OIL, GAS & MINING

**WESTERN  
STATES  
MINERALS  
CORPORATION**



April 23, 1997

Susan White  
Biologist  
Division of Oil, Gas, & Minerals  
1594 West North Temple, Ste. 1210  
Box 145801  
Salt Lake City, Utah 84114-5801

**Re: Request for Cessation of Subsidence Monitoring at WSMC's J. B. King Reclaimed Mine Permit ACT/015/002, Emery County, Utah**

Dear Ms. White:

Attached please find an application for the amendment of the J.B. King Permit to curtail the yearly surveying of the subsidence area. All data supports the fact that the subsidence area has been stabilized for a number of years. WSMC would still provide yearly inspections of the subsidence area for tension cracks which may manifest themselves. Note that significant tensions cracks would be maintained as outlined in section 817.124 of the permit.

As part of the application to amend the J.B. King Permit, I have included the WSMC letter dated April 18, 1997 along with an amended Section UMC 784.20 "Subsidence Control Plan" as well as the UDOGM forms entitled "Application for Permit Processing" and "The Detailed Schedule of Changes to the MRP". This requested amendment is only to cease the annual surveying of the subsidence area and provide care and maintenance as necessary. Note that all survey monuments will remain in-place as reference points for future surveys, if necessary.

If you have any questions or require additional information, Please contact Buzz Gerick or myself at (702) 856-3339.

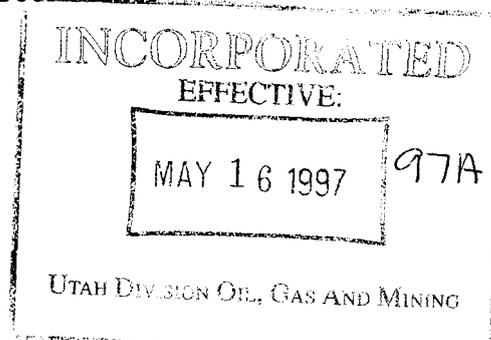
Sincerely,  
Western States Minerals Corporation

A handwritten signature in cursive script that reads "Larry D. Berg".

Larry D. Berg  
Environmental Coordinator

cc: E.M. Gerick

**Attachments: WSMC Letter Dated 4-18-97  
Amended Section UMC 784.20  
Application for Permit Processing  
Detailed Schedule of Changes to the MRP**





State of Utah  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

Michael O. Leavitt  
Governor  
Ted Stewart  
Executive Director  
James W. Carter  
Division Director

1594 West North Temple, Suite 1210  
Box 145801  
Salt Lake City, Utah 84114-5801  
801-538-5340  
801-359-3940 (Fax)  
801-538-7223 (TDD)

May 30, 1997

Larry D. Berg, Environmental Coordinator  
Western States Minerals Corporation  
250 South Rock Boulevard, Suite 130  
Reno, NV 89502

Re: Cessation of Subsidence Monitoring at WSMC's J.B. King Reclaimed Mine Permit,  
ACT/015/002-97A, File #2, Emery County, Utah

Dear Mr. Berg:

The referenced amendment is hereby approved effective May 16, 1997. A stamped approved incorporated copy is enclosed for insertion into your approved Mining and Reclamation Plan.

If you have any questions please call.

Sincerely,

Joseph C. Helfrich  
Permit Supervisor

tt  
Enclosure

cc: Dave Ariotti, Health, w/o  
Bill Bates, DWR, w/o  
Mark Page, Water Rights, w/o  
David Terry, SITLA, w/o  
Price Field Office

O:\015002.JBK\FINAL\APPROVAL.97A



State of Utah  
DEPARTMENT OF NATURAL RESOURCES  
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May 16, 1997

TO: File

THRU: Joe Helfrich, Permit Supervisor *JH*

FROM: Jess Kelley, Reclamation Specialist *JK*

RE: Request for Cessation of Subsidence Monitoring, Western States Minerals Corporation, J.B. King Mine, ACT/015/002-97A, Folder #2, Emery County, Utah

**SUMMARY:**

On April 28, 1997, the permittee submitted an application to discontinue subsidence monitoring at this site. This ought to be done, the permittee contends, because subsidence has stabilized and monitoring is, therefore, no longer necessary or even useful.

**TECHNICAL ANALYSIS:**

Mining ceased at this site in 1981 and subsidence monitoring has been done at least every year from that time to the present. Ten points are monitored using standard optical level measuring equipment: 8 subsidence points and 2 control points. The subsidence points are designated S-1 through S-8 while the control points are designated A-A and CAP. The points are all located in a straight line which spans the area above the old workings. Control points A-A and CAP are, of course, outside the subsidence trough. Points S-1, S-2, S-7 and S-8 are close to the edges of the subsidence trough while points S-3, S-4, S-5 and S-6 are over its center.

In the present application, the permittee has tabulated the measured elevations from 1981 to the present and has summarized the data. The data are about what one might expect to see at a site like this one and they do indeed support the permittee's contention that subsidence has stabilized. Most subsidence occurred from 1981 to 1983, the first 2 years after cessation of mining. From 1983 to the present, both subsidence and the rate of subsidence lessen year-by-year and tend to approach a horizontal asymptotic limit. The data are also quite erratic, in some cases showing subsidence one year and an almost equal rebound or gain in elevation the next. And almost all points show a small overall gain in elevation from 1983 to the present. This erraticism in the data is common in conventional subsidence surveys and probably results

Cessation of Subsidence Monitoring

ACT/015/002-97A

May 16, 1997

Page 2

from a combination of measuring error, cantilevering of consolidated subsurface rock strata, and rebound due to the release of residual stresses by removal of coal. Nevertheless, subsidence has stabilized and, even over the center of the subsidence trough, the measurements vary through a range of plus or minus only about 2 to 4 tenths of a foot.

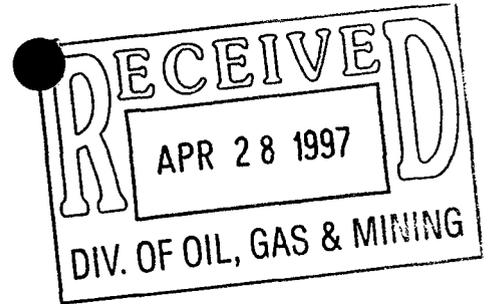
**RECOMMENDATION:**

It is recommended that the application for cessation of subsidence monitoring be approved and that the permittee amend the plan to show that subsidence monitoring has been discontinued.

tt

O:\015002\JBK\FINAL\SUBSIDE.97A\*

**WESTERN  
STATES  
MINERALS  
CORPORATION**



April 23, 1997

Susan White  
Biologist  
Division of Oil, Gas, & Minerals  
1594 West North Temple, Ste. 1210  
Box 145801  
Salt Lake City, Utah 84114-5801

Re: Request for Cessation of Subsidence Monitoring at WSMC's J. B. King Reclaimed Mine Permit ACT/015/002, Emery County, Utah

Dear Ms. White: # 2

Attached please find an application for the amendment of the J.B. King Permit to curtail the yearly surveying of the subsidence area. All data supports the fact that the subsidence area has been stabilized for a number of years. WSMC would still provide yearly inspections of the subsidence area for tension cracks which may manifest themselves. Note that significant tensions cracks would be maintained as outlined in section 817.124 of the permit.

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If you have any questions or require additional information, Please contact Buzz Gerick or myself at (702) 856-3339.

Sincerely,  
Western States Minerals Corporation

  
Larry B. Berg  
Environmental Coordinator

cc: E.M. Gerick

Attachments: WSMC Letter Dated 4-18-97  
Amended Section UMC 784.20  
Application for Permit Processing  
Detailed Schedule of Changes to the MRP

# APPLICATION FOR PERMIT PROCESSING

<input checked="" type="checkbox"/> Permit Change	<input type="checkbox"/> New Permit	<input type="checkbox"/> Renewal	<input type="checkbox"/> Transfer	<input type="checkbox"/> Exploration	<input type="checkbox"/> Bond Release	Permit Number: ACT/015/002
Title of Proposal: Request for the cessation of subsidence survey monitoring at WSMC's J.B. King Reclaimed Mine Site						Mine: J.B. KING
						Permittee: WESTERN STATES

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Attach 3 complete copies of the application.

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Signed - Name - Position - Date

*July D. Berg, ENVIRONMENTAL COORDINATOR*

Subscribed and sworn to before me this \_\_\_\_\_ day of \_\_\_\_\_, 1997.

*24th April 97*

Notary Public

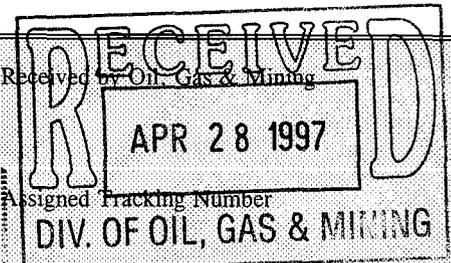
*April 24, 1997*  
*State of Washington*



*4-23-97*  
LORRAINE PORTER

Notary Public - State of Nevada  
Appointment Recorded in Washoe County  
MY APPOINTMENT EXPIRES JUNE 16, 1996

*Lorraine Porter*



Received by Oil, Gas & Mining

APR 28 1997

Assigned Tracking Number

DIV. OF OIL, GAS & MINING



## UMC 784.20 SUBSIDENCE CONTROL PLAN

Monitoring of the J.B. King subsidence area has been performed by Coal Systems, Inc. from 1987 to 1990 and later by Western States Minerals Corporation from 1990 to 1996. The survey results and location of tension cracks performed by Coal System Inc. are illustrated on Dwg. 4050-5-36. A summary table of all subsidence surveys from 1983 to 1996 is presented in table 1 of section UMC 784.20. A review of this data shows that the subsidence area has essentially stabilized since 1984. Some additional subsidence was recorded between 1988 and 1990 as a result of a 5.0 magnitude earthquake that occurred in July 1988. As a result of this earthquake it was believed that some of the subsurface stresses were redistributed and additional subsidence occurred. In addition, some minor tension cracks required backfilling.

Based on the length of time since mining has occurred and any significant settlement has been recorded, WSMC plans to cease all subsidence surveying at the J.B. King Reclaimed Mine Site. However, WSMC will monitor the area for tension cracks that may manifest themselves along the outside perimeter of the subsidence area and fill the cracks as outlined in section UMC 817.124.

The subsidence area has a natural drainage which flows to the west. A small depression occurs at the northwest side of the subsidence area which may result in intermittent ponds for short periods of time. The ponded water is not considered to present a problem for the following reasons:

- less than 100 square yards
- limited depth (several inches )
- no tension cracks are located in the area that would provide a pathway for infiltration into the mine

The field inspections since the mine has closed down have shown that the tension cracks have been significantly reduced with time (reduced width and depth). As the area stabilizes, the tension cracks are more easily filled by erosion and sloughing (naturally filled).

No material damage or impacts to groundwater will be caused by subsidence or tension cracks as a result of subsidence. Little or no infiltration of water via subsidence cracks or other means is ever expected at the J.B. King Reclaimed Mine Site. In the vicinity of the subsidence area the depth to groundwater is approximately 335 ft. below the ground surface (see attached drawing). Based on this depth to water and the surface drainage conditions, no detrimental impacts to groundwater are expected.

The reader is referred to UMC 817.124 for further discussion concerning the subsidence control plan.