

0004

# Western States Minerals Corporation

File  
Act/015/002

Address reply to:  
7479 West Fifth Avenue  
Lakewood, Colorado 80226  
Telephone: 303/232-1636



March 6, 1979

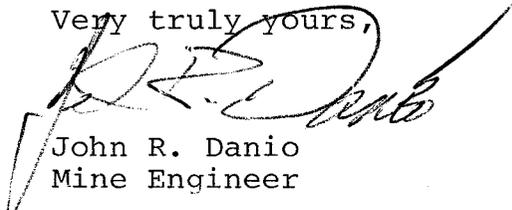
Mr. Ron Daniels  
Dept. of Natural Resources  
Division of Oil, Gas & Mining  
1588 West North Temple  
Salt Lake City, Utah 84116

Dear Mr. Daniels,

Enclosed please find copies of the Notice of Intention to Commence Mining Operations and the Mining and Reclamation Plan for the Dog Valley Mine. Also enclosed are the engineering design for the sediment pond, plans dealing with refuse disposal, sediment disposal, revegetation, topsoil, water monitoring and a general statement.

Please contact me for any additional information you require.

Very truly yours,

  
John R. Danio  
Mine Engineer

JRD:pf

MINING APPLICATION  
NO. \_\_\_\_\_

Date \_\_\_\_\_

STATE OF UTAH  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING  
1588 West North Temple  
Salt Lake City, Utah 84116



NOTICE OF INTENTION TO COMMENCE MINING OPERATIONS  
(Sec Rule M of General Rules and Regulations)

1. Name of Applicant or Company Western States Minerals Corporation  
Corporation (X ) Partnership ( ) Individual ( )

2. Address 7475 W. 5th Ave., Lakewood, CO 80226  
Permanent Temporary

3. Name and title of person representing company John R. Danio

4. Address 7475 W. 5th Ave, Lakewood 80226 Office Phone (303) 232-1636

5. Location of Operation Emery Sec. 32 T. 23S R. 6E  
County

6. Name of Mine J. B. King Mine (Dog Valley)

7. Mineral to be mined: Mining method:  
( X ) Coal ( ) Flagstone Conventional , Underground  
( ) Copper ( ) Gravel  
( ) Manganese ( ) Shale Room and Pillar  
( ) Iron Ore ( ) Uranium  
( ) Phosphate ( ) Gilsonite  
( ) Potash ( ) Bituminous Sandstone  
( ) Fluorspar ( ) Tungsten  
( ) Other (specify) \_\_\_\_\_

8. Have you or any person, partnership or corporation associated with you received an approved Notice of Intention to Commence Mining Operations by the State of Utah for operations other than described herein?  
( ) Yes ( X ) No  
If yes, list all approval numbers now under surety:  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

9. Owner/Owners of record of the surface area within the land to be affected:  
State of Utah Address \_\_\_\_\_  
Address \_\_\_\_\_  
Address \_\_\_\_\_  
Address \_\_\_\_\_

10. Owner/Owners of record of minerals to be mined:

<u>State of Utah</u>	Address _____
_____	Address _____
_____	Address _____
_____	Address _____

11. Owner/Owners of record of all other minerals within any part of the land affected:

<u>NA</u>	Address _____
_____	Address _____
_____	Address _____

11a. Have the above owners been notified in writing?  
( x ) Yes ( ) No

12. Source of Operator's legal right to enter and conduct operations on land to be covered by the Notice State of Utah Leases

13. Approximate acreage to be disturbed:

A) Mining Operation Area -	<u>16.5</u>	acres
(include operations, storage, & disposal area)		
B) Access Road or Haulageway -	<u>5</u>	acres
C) Drainage System -	<u>5</u>	acres
TOTAL ACRES:	<u>26.5</u>	

14. Give the names and post office addresses of every principal Executive, Officer, Partner, (or person performing a similar function) of Applicant:

Name:	Title:	Address:
a. <u>Gary L. Hutchinson</u>	<u>President</u>	<u>7475 W. 5th Ave, Lakewood 80226</u>
b. <u>Al Cerny</u>	<u>Secretary</u>	<u>" " " " "</u>
c. <u>M.P. Tiege</u>	<u>Asst. Sec.</u>	<u>PO Box 1267, Minneapolis, Minn 55440</u>
d. _____		

15. Has Applicant, any subsidiary or affiliate or any person, partnership, association, trust, or corporation controlled by or under common control with Applicant, or any person required to be identified by Item 14, ever had an approval of a Notice of Intention withdrawn or has surety relating thereto ever been forfeited? ( ) Yes ( x ) No

If yes, explain:

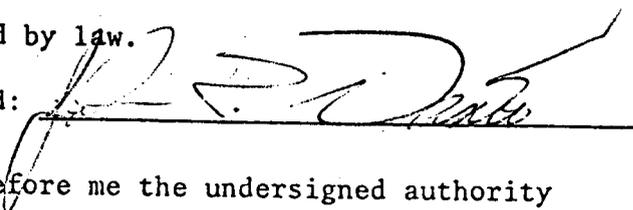
STATE OF COLORADO

COUNTY OF JEFFERSON

I, JOHN R. DANIO, having been duly sworn

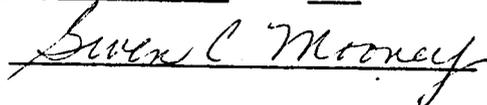
depose and attest that all of the representations contained in the foregoing application are true to the best of my knowledge; that I am authorized to complete and file this application on behalf of the Applicant and this application has been executed as required by law.

Signed: \_\_\_\_\_



Taken, subscribed and sworn to before me the undersigned authority in my said county, this 5th day of March, 1979.

Notary Public: \_\_\_\_\_



My Commission Expires: NOV. 16, 1980

PLEASE NOTE:

Section 40-8-13(2) of the Mined Land Reclamation Act provides as follows:

"Information relating to the location, size, or nature of the deposit and marked confidential by the operator, shall be protected as confidential information by the Board and the Division and not be a matter of public record in the absence of a written release from the operator, or until the mining operation has been terminated as provided in subsection (2) of section 40-8-21."

Is confidential information contained herein?

YES \_\_\_\_\_ (Initial)

NO JD \_\_\_\_\_ (Initial)

Sections desired to be maintained as confidential information -

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

STATE OF UTAH  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING  
1588 West North Temple  
Salt Lake City, Utah 84116

MINING AND RECLAMATION PLAN  
(Other forms may be used in lieu of MR 2, provided  
they contain the same information)

1. Name of Applicant or Company Western States Minerals Corporation
2. Proposed type of operation Underground Mine
3. (a) Prior Land Use(s) Coal Mining and Grazing  
(b) Current Land Use(s) Coal Mining and Grazing  
(c) Possible or Prospective Future Land Use(s) Grazing
4. What vegetation exists on the land proposed to be affected \_\_\_\_\_  
Shadscale - Saltbrush type and minor Pinyon - Juniper  
(a) Types and Estimated Percent cover or density: \_\_\_\_\_  
Shadscale - Saltbrush - 80%, Pinyon - Juniper - 20%
5. What is the pH range of soil before mining? 7.22 - 9.42 pH  
Name of Person or Agency and method of determining pH American Chemical  
Research Labs, SLC, Utah
6. Site elevation above sea level 6,500'
7. In case of coal, oil shale, and bituminous sandstone:  
Principal seam(s) and thickness(es) I Seam. 8-12'
8. Estimated duration of mining operations 15 years
9. Has overburden, waste or rejected materials been classified as acid or alkali producing? ( ) Yes (x) No  
Does the above material being moved have any other characteristics affecting revegetation? No
10. Will any underground workings or aquifers be encountered? ( ) Yes (x) No  
Describe \_\_\_\_\_  
Is there an active discharge of water from abandoned deep mines on or crossing the land affected? ( ) Yes (x) No If yes, describe the quality of water being discharged. \_\_\_\_\_

11. Describe specifically a detailed procedure for: (See Text)
- (a) The mining sequence
  - (b) The procedure for constructing and maintaining access roads, to include a typical cross-section and a profile of the proposed road grades.
  - (c) The procedure for site preparation including removing trees and brush.
  - (d) The method for removing and stockpiling topsoil or disturbed materials.
  - (e) The method for the placement or containment of all disturbed materials, to include the method for handling of all acid or alkali-producing and toxic materials.
  - (f) A procedure for final stabilization of disturbed materials.

GRADING AND REGRADING

Specifically describe: (See Text)

- (a) Typical cross-section of regrading.
- (b) The method of spreading topsoil or upper horizon material on the regraded area and indicate the approximate thickness of the final surfacing material.
- (c) What type of soil treatment will be utilized.
- (d) The method of drainage control for the final regraded area.
- (e) Maximum grading slope.

TESTING

1. Describe method for testing stability of reclamation fill material.

Visual observation

Describe method for the testing of soil that is intended to support vegetation

Std. nutrient test for Nitrogen, Potassium and Phosphorous

2. Describe any soil treatment employed as an aid to revegetation \_\_\_\_\_

Seeding

3. Describe surface preparation of areas intended to support vegetation:

Graded and covered with topsoil

REVEGETATION

1. Revegetation to be completed by:

- |   |  |
|---|--|
| <input checked="" type="checkbox"/> Operator        | <input type="checkbox"/> Hydroseeding                    |
| <input type="checkbox"/> Soil Conservation District | <input type="checkbox"/> Aerial Seeding                  |
| <input type="checkbox"/> Private Contractor         | <input type="checkbox"/> Conventional or Rangeland Drill |
| <input type="checkbox"/> Other (specify) _____      | <input checked="" type="checkbox"/> Broadcast and Drag   |
|   | <input type="checkbox"/> Other _____                     |

2. Will Mulch be used? ( ) Yes (x) No

Type: \_\_\_\_\_ Rate/Acre \_\_\_\_\_ lbs.

3. Revegetation Plan and Schedule -

Species	Rate/Acre	Planting Location	Facing N-S-E-W	Season to be replanted
Agropyron desonorum	3#/acre	Total area	---	Late spring
Agropyron cristatum	3#/acre	" "	"	" "
Oryzopsis hymenoides	1#/acre	" "	"	" "
Elymus junceus	2#/acre	" "	"	" "
Sporobolus cryptandrus	1#/acre	" "	"	" "

4. Will affected area be subject to livestock or wildlife grazing?

( ) Yes (x) No Will vegetation protection be needed? NO

5. Will irrigation be used: ( ) Yes (x) No Type \_\_\_\_\_

6. Describe maintenance procedures for revegetation if needed, until surety release is granted.

Annual reseeding and erosion control until surety release is granted.

STATE OF COLORADO

COUNTY OF JEFFERSON

I, JOHN R. DANIO, having been duly sworn  
depose and attest that all of the representations contained in the foregoing  
application are true to the best of my knowledge; that I am authorized to  
complete and file this application on behalf of the Applicant and this  
application has been executed as required by law.

Signed: [Signature]

Taken, subscribed and sworn to before me the undersigned authority  
in my said county, this 5<sup>th</sup> day of March, 1979.

Notary Public: Susan C. Mooney

My Commission Expires: NOV. 16, 1980

PLEASE NOTE:

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"Information relating to the location, size, or nature of the deposit and marked confidential by the operator, shall be protected as confidential information by the Board and the Division and not be a matter of public record in the absence of a written release from the operator, or until the mining operation has been terminated as provided in subsection (2) of section 40-8-21."

Is confidential information contained herein?

YES \_\_\_\_\_ (Initial)

NO JD \_\_\_\_\_ (Initial)

Sections desired to be maintained as confidential information -

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

11.(a) Mining Sequence

Coal is mined underground by conventional methods, transported to the surface using belt conveyors, and mechanically cleaned in a preparation plant. Coal is shipped from the mine in highway trucks.

(b) Access Roads

Access roads are constructed by grading appropriate paths using dozers and graders. Drainage is provided alongside the road and is routed to sediment ponds. All proposed road locations are shown in the mine site map.

(c) Site Preparation

Site preparation will be done by grading selected areas to make them suitable for the intended purpose. All brush and trees will be removed from spoil before it is stockpiled.

(d) Topsoil

Any topsoil removed shall be separately stockpiled and protected from erosion and contaminants. The stockpile area will be located so as to direct runoff into the sediment pond. The topsoil area will be designated by signs, and protected by establishing a vegetative cover.

(e) Disturbed Material

All excess material disturbed at the mine will be stockpiled within the mine site. Runoff from this stockpile will be directed to the sediment ponds, and treated for acid/base conditions if necessary.

(f) Final Stabilization

Disturbed material will be placed so as to create a stable fill. Drainage and protective vegetative cover will be used as necessary to insure long term stability. Slopes will be graded to blend with the undisturbed surroundings.

GRADING & REGRADING

(a) Reclaimed areas will be graded to blend with existing profiles.

(b) Topsoil will be spread using dozers, loaders, and road graders as appropriate. The thickness applied will be approximately the same as the original topsoil thickness.

(c) No soil treatment is projected.

(d) Drainage in the regraded area will be controlled by diversion ditches, vegetative cover and other suitable devices as necessary.

(e) Maximum graded slope will be limited to slopes that will ensure long term stability and also blend with natural contours. A grade at 2:1 will not be exceeded in any case.

14 FEB 79 JRL

## REVISED POND DESIGN

10 hr RETENTION TIME

$$i = \underline{.15 \text{ "/hr}}$$

$$C \text{ factor} = 40\% (.53) + 60\% (.39) = \underline{.33}$$

$$A = \underline{88 \text{ ac.}}$$

$$Q = (.33)(.15)(88) = 4.30 \text{ CFS}$$

$$\begin{aligned} 10 \text{ hr flow} &= 10 \times 60 \times 60 \times 4.30 = 154,915 \text{ ft}^3 \\ &= \underline{3.6 \text{ ac-ft}} \end{aligned}$$

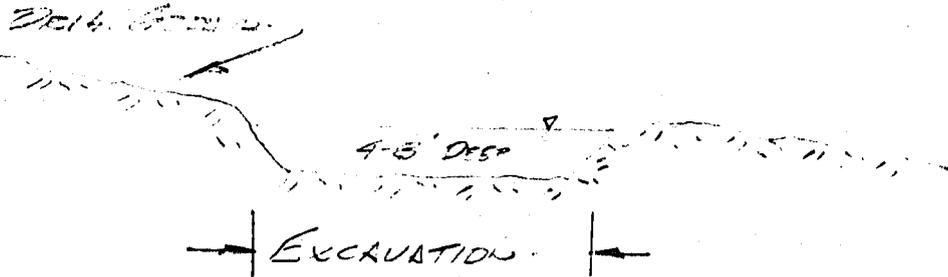
$$.1 \text{ ac-ft/sec} \text{ sec } A_L = 26.5 \times .1 = \underline{2.65 \text{ ac-ft}}$$

$$\text{Total Pond Req'd.} = \underline{6.2 \text{ ac-ft}} \leftarrow$$

14 FEB 79 JED

## POND SECTIONS

POND SIZE = 6.2 AC-FT



- ① 2-30"  $\phi$  CURVE - USED FOR DRAIN
- ② SIDE SLOPE OF 1:1 OR LESS
- ③ OPEN DITCHES USED TO DIVERT WATER TO POND
- ④ POND DESIGNED HASN 80% FULL
- ⑤ SPECIFIC POND LOCATION & SIZE TO BE ENGINEERED IN FIELD

DOG VALLEY MINE

REFUSE DISPOSAL PLAN

Refuse from the cleaning plant will be permanently disposed of by constructing a side hill fill. The disposal area is shown on the mine map. This disposal method will provide a stable fill with moderate slopes. No springs or watercourses will affect the fill. All organic material and topsoil will be removed before constructing the fill. *Analyses?*

The refuse will be transported to the fill using trucks or end loaders. Compaction will be effected by spreading the refuse and operating equipment on it. Necessary compaction will be provided to ensure stability. The fill will be graded to provide drainage compatible with natural surroundings, and to make the reclaimed fill suitable for grazing.

A registered engineer or qualified specialist will inspect and certify the fill during crucial construction stages.

Refuse will be covered by a minimum of 4 feet of non-toxic and noncombustible material. After final grading, topsoil will be evenly distributed and planted with an appropriate seed mixture.

*What spp. & rates  
mulch? Fert? From where?*

# SPELLWAY OR DRAIN SYSTEM

DESIGN FOR 180 YR 24 HR STORM

CONSIDER FLOW AS PROVIDING NO STORAGE/RETENTION

$$T_c = 11.5 \text{ min} \quad (270' \Delta EL, 3500' \text{ WATERSHED})$$

$$A = 88 \text{ Ac.}$$

$$C = 40\% (.55) + 60\% (.68) = \underline{.63}$$

From 6.20 (5)

$$i - 10 \text{ min} = .47 = 2.82 \text{ "/hr}$$
$$15 \text{ min} = .59 = 3.36 \text{ "/hr}$$

$$i @ 11.5 \text{ min} = 2.82 - \left(\frac{1.5}{5}\right) .46 = \underline{2.68 \text{ "/hr}}$$

USE .80 as correction factor

$$i = 2.68 \times .8 = \underline{2.14 \text{ "/hr}}$$

$$Q = (.63)(2.14)(88) = \underline{119 \text{ CFS}} \quad \text{PEAK FLOW!}$$

TRY 30"  $\phi$  CULVERT

$\frac{2}{3}$  Full,  $S = .1 \quad n = .025$

$$Q = \frac{1.49}{.025} 156 \pi \left(\frac{156 \pi}{2.57 \pi^3}\right)^{2.66} \sqrt{.1} = \underline{78 \text{ CFS}}$$

USE 20"  $\phi$  CULVERT FOR SPELLWAY SYSTEM

## DOG VALLEY MINE

### Sediment Disposal Plan

Sediment ponds will be cleaned when sediment volume accumulates to 60% of the required volume. The required volume is 6.20 Acre-feet. Cleanout volume is then  $6.20 \times .60 = 3.7$  A-f.

Sediment removed from the pond is used to cover coal refuse, or sediment will be stockpiled as top soil. ? Analyze first

### Revegetation Plan

On disturbed land that is no longer required for mining activity, topsoil shall be placed and a diverse permanent vegetative plant cover will be established. The operator will work with the local soil conservation service or other appropriate agencies to determine a beneficial vegetative cover.

Submit species?  
also rates, mulch?  
fert? trial plots?

### Topsoil Plan

Any topsoil removed shall be separately stockpiled and protected from erosion and contaminants. The stockpile area will be located so as to direct runoff into the sediment pond. The topsoil area will be designated by signs, and protected by establishing a vegetative cover. Analysis? Location on map?

### Water Monitoring Program

Adequate?  
↓

Water discharging from the sediment pond(s) will be sampled once a month for volume, pH, total iron, total manganese, and suspended solids. Analysis will be forwarded to the proper agencies within 60 days of sample collection, unless permit conditions are exceeded in which case the agency will be immediately notified.

Ground water monitoring is not required for the present mining situation. The "I" seam is located in a plateau, exposed on all sides. All water tables are located below the seam, as evidenced by never encountering ground water in any of the 50 plus exploration holes penetrating the seam.

General Statement - Mining & Reclamation

At the present time, the Dog Valley Mine is being altered by building a coal processing facility, improving the employee bathing and office facilities, and in general, upgrading the surface facilities. The locations of the surface plant are shown on the accompanying map. This map shows essentially all the proposed improvements at the mine.