

Appendix 5-9
Correspondence

CORRESPONDENCE

October 3, 1985
8185 S. Willow St
Englewood, CO 80110

Mr. Wayne Hedberg
Department of Natural Resources
Division of Oil, Gas and Mining
355 West North Temple
3 Triad Center
Suite 350
Salt Lake City, Utah 84180-1203

Dear Wayne:

This letter is in response to your letter dated September 12, 1985 regarding the Revised Subsidence Control Plan for Genwal Coal Company's Crandall Canyon Mine Tract I and Tract II permit applications. I have addressed each item of concern in this cover letter as well as in the enclosed permit inserts. I have enclosed eighteen copies of each item which should be sufficient for both applications.

Plate XII-3 has been redrawn to include a detailed legend, the permit boundaries for each application and the mine development has been labeled according to the mining sequence presented on page XII-3. The permit and lease boundaries shown on this map were obtained from actual field surveys of the section corners and were not obtained from USGS topographic maps which are slightly inaccurate. Please destroy former Plate XII-3 and insert the enclosed copy.

Areas of questionable roof support have not been encountered in the mine are not expected to occur within Tract II.

Item XII-13 is to be replaced with the aerial photographs numbered XII-13a and XII-13b which are of better quality. Please replace page 7 with the revised page 7 which references these photographs.

The SME Engineering reference to page 13-104 states that as the ratio of width to height approaches 12, the pillars are regarded as being able to bear any load. The statement is included as a limiting factor for the Holland-Gaddy formula but still remains applicable to any pillar which is designed and was referenced as a consideration to be used in the Obert Formula design within the permit. No changes have been made within the permit text as the reasoning is correct for any pillar design regardless of the initial formula used.

A statement has been added to page XII-11 under section 12.4.3

Original Permit 12-20-85

regarding the possible impact of subsidence on the grazing potential of the permit area. Please replace pages 11 and 12 with the revised pages XII-11 and XII-12 included within this submittal.

The water rights owned by the US Forest Service are not affected whether subsidence occurs or not as the USFS is entitled to the quantity of water granted by these rights within the Crandall Creek drainage basin. The applicant is not using nor transporting this water out of the drainage basin. Springs 93-1407 and 93-1409 are not within the limits of anticipated subsidence and will not require monitoring. Spring 93-1408 was not found in the location shown on Figure 7-3 in the Tract II permit application during the Spring and Seep Survey as described by Item XII-13. This apparent discrepancy can be explained after referring to the spring description in Appendix 7-1 which only gives a general location in a 40 acre area. Due to the even questionable occurrence of subsidence this distance from the active workings and the failure of locating the spring during a field survey the applicant does not propose monitoring spring 93-1408. Please remove pages XII-9 and XII-10 and replace them with the enclosed revised pages.

Quantity of discharge of Spring SP-30 will be monitored as described in Chapter VII on Page VII-22.

If additional information is needed ~~please~~ do not hesitate to call me at 303-799-1045.

Sincerely,

Leonard Witkowski

August 15, 1985
8185 S. Willow St.

Original Permit 12-20-85

The enclosed letter dated 10-3-85 refers to a spring monitoring commitment for SP-30 on Page 7-22. The correct page number should be 7-30.

Insert this page after the October 7, 1985 letter in Item 12-7.

Englewood, CO 80112

Mr. Wayne Hedberg
Department of Natural Resources
Division of Oil, Gas and Mining
355 West North Temple
3 Triad Center
Suite 350
Salt Lake City, Utah 84180-1203

Dear Wayne:

This letter is in response to the letter dated July 17, 1985 from Mr. Lowell Braxton regarding the Revised Subsidence Control Plan for Genwal Coal Company's Crandall Canyon Mine. Thank you for extending the deadline from July 31, 1985 to this week. I have addressed the questions, errors and deletions itemized in the aforementioned letter within this letter as well as in the attached report.

I have included the area north of the currently permitted area known as Tract II within this submittal. I hope this will avoid confusion and inconsistency.

The location of the anticipated maximum vertical movement of 3.9 feet is now shown on Item XII-5 as well as described within the text. The possible vertical movement of surface subsidence in feet is shown as contour lines on Item XII-5 in one foot increments. The thickness of the Hiawatha seam varies from 5.5-6.5 feet throughout the mine area except for the area shown in the shaded region on Item XII-2. No coal isopach lines are shown on any map.

The anticipated effects of planned subsidence is described within the text. The Spring and Seep Inventory completed by Earthfax Engineering, Inc. on June 12, 1985 is incorporated within the report. Slope failure is not expected to occur within the permit area. The mitigation of subsidence effects will be minimal as described within the text as no diminution of value or foreseeable use of lands is expected to occur.

The Statement of Fact has been removed from this submission as it becomes unnecessary when the permit in total must be submitted with an officer's acknowledgment of permit content. The information contained within the Statement has been incorporated within the text.

Extended description, revised calculations and factor of safety justification have been provided within the text in greater detail as requested. The success in removing the pillars in the First South Panel area without premature pillar failure is evidence of prudent and satisfactory pillar design. The

Original Permit 12-20-85

results obtained from the equations used form a basis to design pillars of extended life.

The discrepancy between the text and Item XII-8 has been corrected in regards to the vertical distance between Crandall Creek and the lease boundary.

A 50 foot barrier pillar has been left intact along the southern boundary increasing to 80 feet at the northern boundary of the permit area covered in Tract I. The angle of draw will initiate from the bleeder pillars position as shown on Item XII-8.

As described within the text, the 115 foot radius drawn from the southwest corner of the lease area can not be used on Item XII-5 because of the declining topography as the creek is approached as shown on Item XII-8.

If I can be of further assistance or if additional information is needed please feel free to contact me directly at 303-799-1045. Upon approval, send notification to the address on file for the mine. Thank you for your time and consideration.

Sincerely,

Leonard Witkowski

May 15, 1985
8185 S. Willow St.
Englewood, CO 80112

Mr. Wayne Hedberg
Department of Natural Resources
Division of Oil, Gas and Mining
355 West North Temple
3 Triad Center
Suite 350
Salt Lake City, Utah 84180-1203

Dear Wayne:

It was a pleasure meeting with you and Mr. Lowell Braxton last week in regards to the subsidence monitoring plan for Genwal Coal Company, Inc. Enclosed is the revised plan for your review and approval.

As you are aware, Mr. Andrew King and I have been working with Genwal Coal Company in organizing and compiling the currently approved Mining and Reclamation Plan as well as in preparing an updated version of the permit which will encompass the previously permitted area plus the recently leased 80 acre area for your review. We anticipate that a reorganized version of the currently approved package will be completed within the next two months.

It has been determined from the recently completed drilling program that the coal in the upper seams is not of mineable thickness. These unexpected results have changed the conclusions reached in the Subsidence Control Plan For Genwal Coal Company, Inc. as prepared by Mr. David Skidmore and L.G. Manwaring of COAL SYSTEMS, INC. and which is currently approved within the Mining and Reclamation Plan. Please accept the enclosed report as a modification to the existing permit and discard the original report in its entirety. This report is to be resubmitted in the reorganized permit to be filed within the next two months.

If I can be of further assistance or if additional information is needed please feel free to contact me directly at 303-799-1045. Upon approval, send notification to the address on file for the mine. Thank you for your time and consideration.

Sincerely,

Leonard Wickowski

Original Permit 12-20-85



STATE OF UTAH
NATURAL RESOURCES
Oil, Gas & Mining

Norman H. Bengtson, State
Dee C. Hansen, Executive Director
Dianne R. Nielson, Public Director

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November 12, 1985

CERTIFIED RETURN RECEIPT REQUESTED
(P402 457 255)

Mr. Leonard Witkowski
Genwal Coal Company, Inc.
8185 South Willow Street
Englewood, Colorado 80112

Dear Mr. Witkowski:

RE: Revised Subsidence Control Plan, Genwal Coal Company,
Inc., Crandall Canyon Mine, ACT/015/032, #3, Emery County,
Utah

The Division has completed its review of Genwal's latest (October 3, 1985) response to our September 12, 1985 letter which identified deficiencies in the Revised Subsidence Control Plan for the Crandall Canyon Mine. The following concerns still exist and must be addressed prior to completion of the review and approval of this proposal:

UMC 817.52(a), 817.124(a) - DC

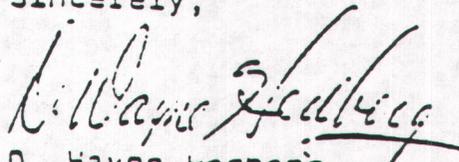
The location of springs 93-1408 and 93-1407 must be accurately defined in order to determine if they are located within the limits of anticipated subsidence. The U. S. Forest Service water rights associated with these springs, apply to the springs specifically and are not a basin wide appropriation. If the springs are located within the limits of anticipated subsidence, a commitment from the operator to mitigate any contamination, interruption or diminution of these springs due to subsidence must be submitted.

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Mr. Leonard Witkowski
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November 12, 1985

Additionally, the Division of Wildlife Resources has ranked the seeps and springs associated with the mine plan area as being of critical value to local wildlife. The operator must submit a monitoring plan that will be representative of all springs within the limits of anticipated subsidence. The operator must also commit to mitigation of any contamination, interruption or diminution of any springs that are affected due to subsidence.

Please provide a response to these remaining concerns by December 12, 1985. As before, please provide your response in a format which would reference and allow direct insertion by replacement page and date to those sections of the most recent plans on file with this office. Should you have questions, please contact me or Dave Cline of the technical staff.

Sincerely,



D. Wayne Hedberg
Permit Supervisor/
Reclamation Hydrologist

bcb

cc: Allen Klein
Reed Christensen
Andy King
Lowell Braxton
Dave Cline
Dave Lof

8992R-66 & 67



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Norman H. Bangert, Governor
Dee C. Hansen, Executive Director
Dianne R. Nielson, Ph.D., Division Director

September 12, 1985

CERTIFIED RETURN RECEIPT REQUESTED
P-592-429-564

Mr. Leonard Witkowski
Genwal Coal Company, Inc.
8185 South Willow Street
Englewood, Colorado 80112

Dear Mr. Witkowski

Re: Revised Subsidence Control Plan, Genwal Coal Company, Inc., Crandall Canyon Mine, LACT/015/032, #3, Emery County, Utah

The Division has completed its review of Genwal's latest (August 16, 1985) response to our July 17, 1985 letter which identified deficiencies in the Revised Subsidence Control Plan for the Crandall Canyon Mine. The following concerns still exist and must be addressed prior to completion of the review and approval of this proposal:

UMC 771.23 - PGL

1. There should be a detailed legend clearly explaining all appropriate distinguishing items on the map (e.g., permit boundary, development, recovery, mined out areas, etc.). Plate XII-3 is difficult to easily understand. The permit boundary must be indicated. It is difficult to follow items #21-23 on Plate XII-3, as stated on page 3.
2. The text states that proper supports will be placed in areas of questionable roof control. These areas should be delineated on the appropriate map (page 2).
3. Please label Item XII-13 more clearly. It is difficult to identify any feature (or lack thereof) on this item. A recent photo (more recent than June 4, 1980) would be best to include in the report.

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UMC 784.20 - PGL

1. "Occurance of subsidence will not produce material damage or diminution of value or foreseeable use of land", is concluded on page 7 of the report. The narrative continues and states that "land is used for domestic grazing in the areas of gentle slope and wildlife habitat over the total acreage". Grazing could be negatively impacted by subsidence. A statement should be included stating that if the grazing is impacted by subsidence, the operator will compensate the owner or other appropriate party for the damages.
2. Page 5 justified the lower factor of safety by stating that the "SME Engineering Handbook (pg 13-104) states that as this ratio approaches 12 that the pillars are regarded as being able to bear any load". This rationale related to use of the Holland-Gaddy formula not the Obert Formula. Please modify the reasoning.

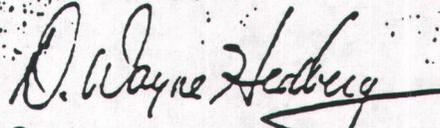
UMC 817.52(a), 817.124(a) - DC

1. The permit application for the Tract 2 lease, Crandall Canyon Mine submitted by Genwal on August 15, 1985 indicates that three springs in the area adjacent to the mine permit area have water rights owned by the U.S. Forest Service (Vol. 2, Table 7-2 and Figure 7-3). The operator must state what measures will be taken to insure that these water rights will not be affected. The operator should incorporate these springs into a monitoring program in order to identify any interruption or diminution to the springs caused by subsidence. Additionally, the operator must address any mitigation of these water rights should they become affected by the mining activities.
2. Page 10 of the Subsidence Control Plan states that spring SP-30 will be monitored as described in this permit. Please clarify how the quantity of discharge from this spring will be monitored.

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Mr. Leonard Witkowski
ACT/G15/032
September 12, 1985

Please provide a response to these remaining questions by October 3, 1985. Thank you for your assistance and cooperation in resolving these permitting matters. If possible, please provide your response in a format which would reference and allow direct insertion by replacement page and date to those sections of the most recent plans on file with this office. Please contact me, Dave Cline, or Pam Grubaugh-Littig should you have questions concerning this review.

Sincerely,



D. Wayne Hedberg
Permit Supervisor/
Reclamation Hydrologist

dwh
cc: Allen Klein
Reed Christensen
Andy King
Lowell Braxton
Pam Grubaugh-Littig
Dave Cline
Dave Lof
8992R-62-64



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July 17, 1985

CERTIFIED RETURN RECEIPT REQUESTED
(P402 457 195)

Mr. Leonard Witkowski
Genwal Coal Company, Inc.
8185 South Willow Street
Englewood, Colorado 80112

Dear Mr. Witkowski:

RE: Revised Subsidence Control Plan, Genwal Coal Company,
Inc., Crandall Canyon Mine, ACT/015/032, #3, Emery County,
Utah

The Division has completed its review of the revised subsidence control plan received May 16, 1985 for Genwal Coal Company's Crandall Canyon Mine. Please accept our apologies for the delay in forwarding our comments to you. The following comments and concerns still must be addressed prior to the Division completing the approval process for this proposal.

UMC 784.20 Subsidence Control Plan

(a)(2) The Division interprets "extent" to mean, "the anticipated maximum vertical movement and lateral incidence of surface subsidence as derived from the calculations." These values should be given in feet and shown on an appropriate map as contours (e.g., Item XII-4).

(b)(2) The subsidence control plan must include the anticipated effects of planned subsidence (e.g., surface cracking, slope failure, etc.). The statement "there appears to be no springs or creeks. . . ." needs more justification. Please include recent spring and seep survey and the associated impacts due to subsidence.

(c) The subsidence control plan must include a detailed description of the measures to be taken to mitigate the effects of any material damage or diminution of value or foreseeable use of lands which may occur.

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July 17, 1985

The statement of fact on page 12 (Item XIII-1) must be signed and notarized in the submittal to the Division.

The equations for the pillar sizing use the Obert Formula (referenced in the SME Mining Engineering Handbook, page 13-104, Volume 1). A factor of safety of at least 4 is suggested in the Handbook. Revised calculations should be submitted for the pillar sizing or justification provided for use of the safety factor provide in the calculations of the subsidence control plan.

UMC 817.121-.126

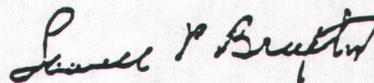
1. Item XII-3 contradicts the statement on page 5 of vertical relationship between Crandall Creek and the lease boundary.
2. The 50 foot barrier pillar designated on Figure 1 is undefined in relation to the lease boundary. The angle of draw should coincide with the position of the barrier pillar.
3. The relationship between the areas of maximum subsidence mentioned on page 9 with Item XII-2 is unclear. Please submit maps of seam thickness and a contour map of anticipated subsidence prepared using the same scale.
4. The depth of overburden used in the calculations used for the northwest corner of the lease area on page 8 does not correspond with the overburden isopachs on Item XII-4.
5. The maximum break line angle of 15.50 at the Geneva Mine mention on Figure 2 is not defined on page 4 or page 34 of U. S. Geological Survey (USGS) Professional Paper 969. Please clarify.
6. The calculations of the subsidence limit for the southwest corner of page 8 delineates a radius of 160 feet from the corner. If this radius is used on Item XII-4, it is within 70 feet of Crandall Creek. Please include the amount of subsidence at all locations from the lease boundary on a contour map.

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Mr. Leonard Witkowski
ACT/015/G32
July 17, 1985

7. The explanation for not calculating the amount and limits of subsidence for the southeast corner on page 8 is unclear. Please clarify and include on an anticipated subsidence contour map.

Please provide a response to these deficiency comments within two weeks of receipt or by July 31, whichever comes first. Thank you for your cooperation in resolving these remaining concerns. Should you have any questions, please feel free to contact me or D. Wayne Hedberg of the permitting staff.

Sincerely,



Lowell P. Braxton
Administrator
Mineral Resource Development
and Reclamation Program

DWH/btb
cc: Allen Klein
Reec Christiansen
Kenneth Rhea
Ron Naten
Andrew King
Dave Cline
Pam Grubaugh-Littig
Wayne Hedberg
Sue Linner
Dave Lof
Rick Smith
Rick Summers

8992R-75-77