

Appendix X - Mine Ventilation Plan

The mine ventilation plan in effect at the time of the accident was submitted January 5, 2006, and approved on July 27, 2006. The plan superseded all previously approved ventilation plans with exception of amendments for pillar recovery in South Mains, sealing of 1st South Mains and South Mains, and the ventilation map accepted on July 6, 2007. At the time of the accident, pillar recovery in South Mains had been completed. The approved plan to seal 1st South Mains and South Mains had not been implemented.

The plans to develop and recover pillars in the Main West barrier pillars consisted of five separate plan amendments. Separate plans were submitted for the development and recovery of each barrier and a site specific plan for the drilling of drainage boreholes into an adjacent sealed area. An amendment to permanently seal the North Barrier section was also submitted. A description of each amendment follows.

The amendment to the ventilation plan for the development of the North Barrier section dated November 10, 2006, was received by MSHA on November 15, 2006, and was approved on November 21, 2006. The plan states that a separate roof control plan amendment would be submitted. Four entries were projected into the North Barrier. Entries were numbered from left to right with Nos. 1 and 2 entries projected to be intake air courses, No. 3 entry was projected as the isolated section belt, and No. 4 entry was projected as the return air course. The intake air split ventilated the Main West seals prior to ventilating the working section. The seals were to be examined in accordance with 30 CFR 75.360(b)(5).

The ventilation plan amendment to recover pillars in the North Barrier section was dated and received by MSHA on February 3, 2007, and was approved February 9, 2007. The plan required a measurement point location (MPL) to be established at the deepest point of penetration or at the edge of accumulated (roofed) water. The mine map provided after the accident indicated that mining was stopped short of the location shown on the approved plan. Pillar recovery was initiated approximately 92 feet in by crosscut 158. Measurements indicating the quantity, quality, and direction of air at the MPL were not recorded in the weekly examination record book as required by 30 CFR 75.364.

A ventilation plan amendment to drill boreholes between the North Barrier section and the sealed portion of Main West dated February 8, 2007, was approved February 14, 2007. The stated intent of the boreholes was to drain any water that may accumulate in the North Barrier section into the sealed portion of Main West.

The ventilation plan amendment to seal the North Barrier section dated March 14, 2007, was received by MSHA on March 15, 2007, and provisionally approved on March 16, 2007. The plan specifies that cementitious foam alternative seals would be installed in the four entries of the North Barrier section between crosscuts 118 and 119. The stoppings in crosscut 118 were removed to establish ventilation across the seal line.

The ventilation plan amendment to develop entries in the Main West South Barrier was received by MSHA on March 22, 2007, and approved on March 23, 2007. Four entries were projected into the Main West South Barrier. The No. 1 entry was projected to be an intake air course, Nos. 2 and 3 entries were projected as the section belt and common entries, and No. 4 entry was projected as the return air course.

The ventilation plan amendment to recover pillars in the South Barrier section dated May 16, 2007, was received by MSHA on May 21, 2007, and approved on June 1, 2007. The plan allowed pillar recovery between the Nos. 1 and 3 entries, and slabbing of the barrier south of the No. 1 entry (except between crosscuts 139 and 142). The ventilation plan depicted pillar recovery between the No. 1 and No. 2 entries and slabbing of the barrier to the south between crosscuts 139 to 142. However, the approved roof control plan was revised to afford additional protection to the bleeder system by not permitting any pillar recovery between crosscuts 139 and 142, including slab cuts from the barrier (refer to *South Barrier Section - Pillar Recovery Plan*).

The plan amendment approved June 1, 2007, shows an MPL location at the inby end of the bleeder entry as well as an alternate MPL location if water was allowed to accumulate. A copy of this amendment is included at the end of this appendix. The alternate location was to be at “the edge of accumulated (roofed) water.” The plan also states that “Entries will be maintained to keep the entries free of standing water in excessive depths which would prevent safe travel.” Mining was conducted approximately 40 feet inby crosscut 149.

Mining conducted inby the last crosscut did not provide for an MPL to be established at the deepest point of penetration as required in the approved plan. The bleeder entry did not extend to the deepest point of penetration. Measurements indicating the quantity, quality and direction of the MPL were not recorded in the weekly examination record book as required by 30 CFR 75.364.

A revised ventilation map dated June 2007 was received by MSHA on July 2, 2007. Mining development was shown to crosscut 141 of the South Barrier section. The map depicted the section as being ventilated with 51,546 cubic feet per minute (cfm) of intake air at crosscut 121. The section regulator between crosscuts 107 to 108 is shown with an air quantity of 60,687 cfm. The return air includes 11,980 cfm of belt air being dumped through a regulator adjacent to the number 6 belt drive. The intake and return quantities on the map are also recorded in the weekly examination book for the week ending June 23, 2007 under the location “*Main West #139-#39.*”

UNDERGROUND MINE FILE
DATE FWD. 6-5-07
INITIALS Am

Coal Mine Safety and Health
District 9

pl

Surname	Date
F. L. ...	5-28-07
[Signature]	5-29-07
[Signature]	5/30/07
[Signature]	5-29-07
[Signature]	5/31

JUN 01 2007

Gary Peacock
General Manager
Genwal Resources, Inc.
P.O. Box 1077
Price, UT 84501

RE: Crandall Canyon Mine
ID No. 42-01715
Ventilation Plan Amendment

Dear Mr. Peacock:

The enclosed plan amendment, dated May 16, 2007, consisting of a cover letter and Plate Nos. 5 and 6, addressing retreat mining in the Main-West South-Barrier Panel, is approved in accordance with 30 CFR §75.370(a)(1). This amendment will be incorporated into the Ventilation Plan approved on July 27, 2006.

This approval supersedes the following:

1. The Ventilation Plan amendment approved on February 9, 2007, addressing pillar extraction in the North Barrier of main west.
2. The Ventilation Plan amendment approved on February 14, 2007, addressing drilling boreholes between the north block of Main West and the sealed portion of Main West.

This approval is site specific and will terminate upon completion of the project.

A copy of this approval shall be made available to the miners and reviewed with all miners affected by this plan.

Sincerely,

/s/ Allyn C. Davis

Allyn C. Davis
District Manager

Enclosure

cc: Tom Hurst

APPROVED
JUN - 1 2007
CMSH

bcc: EC Plan File (Original Surname w/Original Plan)
McAlester Dust (Copy of Surname w/Copy of Plan)
Price #2 FO (Copy of Surname w/Copy of Plan)
Price #2 UMF (Copy of Surname w/Copy of Plan)
(Copy of Surname w/Copy of Plan)
VG - Plan File (Copy of Surname w/Copy of Plan)
VG - Chron V* (Copy of Surname)
D-9 Chron * (Copy of Surname)
Lan/coal/vent/jf/4201715/8660-B4-A14





Crandall Canyon Mine
a subsidiary

Hwy31 MP 33, Huntington, UT 84528
PO Box 1077, Price, UT 84501
Phone: (435) 888-4000
Fax: (435) 888-4002

8660 B4-A14
RECEIVED
MAY 21 2007

May 16, 2007

USDOL - MSHA - CMS&H
DISTRICT 9

Mr. Allyn C. Davis
District Manager
Coal Mine Safety and Health
P.O. Box 25367
Denver, Colorado 80225

Re: Crandall Canyon Mine ID# 42-01715 Ventilation Plan for Pillaring Main West South Barrier

Dear Mr. Davis:

Please find attached for your review and approval, a ventilation plan for mining the South Barrier of Main West at our Crandall Canyon Mine. The plan consists of one page of text and 2 Plates.

Please contact me with any questions at 435.888.4023.

Sincerely,

Tom Hurst
Mining Engineer
435.888.4023



Crandall Canyon Mine
MSHA ID Number 42-01715
Main West South Barrier Pillar Ventilation

The mine is currently developing entries in the south barrier block of the Main West Area. This plan is for the ventilation for the pillar recovery of the developed area of the south barrier block.

The bleeder system proposes is a wrap around bleeder type. The bleeder measurement point location (MPL) will be located at the deepest point of penetration or the edge of accumulated (roofed) water. The pillar recovery proposed by this plan will be done in accordance with the approved Roof Control Plan. Examinations of the bleeder will be conducted in accordance with 30 CFR Part 75.364. The MPL proposed for the #4 entry of the Main West south barrier would be moved outby if water accumulations were to occur. In conjunction with the retreating MPL, the stopping immediately inby the newly established MPL will be removed to insure sufficient airflow in the bleeders. Plate 5, Pillar Ventilation, shows the ventilation after pillaring has began. Plate 6, Continuing Pillar Ventilation, shows the ventilation with water accumulations sufficient to require an alternate MPL because of roofed water inby the pillar line.

The elevations in this area of the mine are down dip to the beginning of the pillar line. This proposal is to conduct weekly examinations in accordance with 30 CFR Part 75.364 at the toe of any accumulated water (roofed) on the return side of the bleeders. It is not anticipated that accumulations of water will be a significant problem in this area. The alternate MPL is proposed in the event water accumulates, preventing travel inby in the bleeder entry.





