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

355 West North Temple
3 Triad Center, Suite 350
Salt Lake City, Utah 84180-1203
801-538-5340
801-359-3940 (Fax)
801-538-5319 (TDD)

January 16, 1996

Paige B. Beville
Manager
Environmental, Health & Safety
ARCO Coal Company
555 17th Street, Room 2170
Denver, Colorado 80202

Re: Seedmix Timing Amendment, Mountain Coal Company, Gordon Creek #2, #7 & #8 Mines, ACT/007/016-95A, Folder #2, Carbon County, Utah

Dear Ms. Beville:

The referenced amendment for the Gordon Creek #2, #7 & #8 facility is denied. The basis for denial is supported in the attached Technical memo. The Division will consider an early spring planting as meeting favorable conditions.

Sincerely,

Joseph C. Helfrich
Permit Supervisor

mt
Enclosure
cc: Dan Guy
H:007016.ltr

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January 16, 1996

TO: Joe Helfrich, Permit Supervisor

FROM: Susan M. White, Senior Reclamation Biologist

Re: Seed Timing Amendment, Mountain Coal Company, Gordon Creek 2, 7, & 8 Mines, ACT/007/016-95A, Folder #2, Carbon County, Utah

SYNOPSIS

A permit amendment (95A), dated received October 31, 1995, for the Gordon Creek No. 2, 7, & 8 Mines was reviewed. The amendment proposes to change the requirement of no seeding prior to September 1 to seeding whenever the topsoil is prepared. The analysis of the amendment is outlined below in a Technical Analysis format. The amendment must be denied.

REVEGETATION

Regulatory Reference: R645-301-244, 301-353, 301-355, 301-356

Analysis:

General requirements.

The revegetation portion of the plan is found on pages 3-52 thru 3-65. The revegetation seed mixture is specified on page 3-54 and 55. The mixture contains grasses, forbs, and shrubs which are known to be palatable to big game animals. Cicer milkvetch and alfalfa are the only nonnative species proposed in the mixture. Cicer milkvetch is used because it is a legume and also known for its palatability to big game animals. Alfalfa is desirable for its quick establishment and nitrogen fixing capabilities. Alfalfa usually does not persist on these sites for more than a few years. Five other native forb species are included in the mixture. Besides five shrubs species to be seeded the riparian areas will also be transplanted with containerized stock of Salix, Elderberry, Serviceberry and Chokecherry (page 3-55). Seeps and springs will be planted at 25 foot intervals, and the main drainage will be planted at 50 foot intervals (each side). The riparian areas will have an augmented seeded mixture applied which includes additional grass and forb species.

All seeding will be done by broadcast methods. Either hydroseeding or hand broadcasting methods and followed by light raking (page 3-53). This method has been found to be effective for this area from past interim seeding efforts. A commitment is made to limit the amount of time the seed is in the hydroseeder to 30 minutes. Amendment 95A proposes to eliminate the requirement for light raking. Proper seed/soil contact is essential for germination. Light raking provides for this contact especially after soil has set or crusted.

Revegetation: Timing.

The plan commits to seeding no sooner than September 1 (page 3-53) and to complete the seeding in the fall of the year with seeding occurring as soon as possible after final site preparation. This is the normally accepted time of year for seeding with this particular seed mixture and for this area. Several of the proposed forb and shrub species seed require a cold stratification prior to germination. Seeding as soon as possible after final site preparation is important to insure a good seedbed while not allowing a seed bank of weed seed to develop which will compete with the desired species.

The revegetation schedule is outlined on page 3-57. Preliminary work will begin in May such as seed orders and soil sampling in June. Recontouring will begin in July with final seedbed preparation occurring in September. A new schedule has been proposed with the amendment to allow for all revegetation work to be done as the earth work is completed.

Amendment 95A deletes the requirement for fall seeding and allows seeding anytime after site preparation. The amendment fails to recognize the problems with seeding during unfavorable planting times such as: requirement for seed stratification; rodent and bird predation; seed soil moisture requirements; and weed competition. The Division and other experts agree that seeding during early spring can meet the stratification and moisture requirements for seed germination if done early. However, this seeding window is limited to conditions usually to wet for equipment and ends by mid April. The amendment proposes to commit to an evaluation of seeding success in the fall of 1996 and to reseed and plant containerized stock if indicated by the evaluation. However, the Division cannot make a finding of compliance that the performance standard of R645-301-354 is met. This performance standard requires that the disturbed areas will be planted during the first normal period for favorable planting conditions. The normal period for favorable planting is that planting time generally accepted locally for the type of plant materials selected.

FINDINGS:

Amendment 95A is denied in accordance with the requirements of:

R645-301-354 disturbed areas will be planted during favorable planting conditions after the replacement of the plant-growth medium. The amendment proposes to seed at any time after site preparation. Conditions specific to the Gordon Creek area limit the favorable time of seeding to fall and early spring. The Division will consider an early spring planting as meeting favorable conditions.

R645-301-341 accepted methods for broadcast seeding require raking or other type of method to ensure soil/seed contact.

mt
cc: Dave Darby
H:GC278.95C

Mountain Coal Company
West Elk Mine
Post Office Box 591
Somerset, Colorado 81434
Telephone 303 929-5015

October 26, 1995

Mr. Dave Darby
Reclamation Specialist
Utah Division of Oil, Gas and Mining
355 West North Temple
3 Triad Center, Suite 350
Salt Lake City, Utah 84180-1203

Re: Amendment of Seeding Time
Gordon Creek 2/7/8 Mines
ACT /007/016
Carbon County, Utah

Dear Dave:

Enclosed are 8 copies of a proposed amendment for the seeding times for the Gordon Creek 2/7/8 Mines Permit. Since the reclamation will likely be temporarily stopped during the winter and restarted next spring, this change will allow for seeding to occur as soon as possible after final soil preparation as the reclamation moves down the canyon.

As indicated in the Permit, the revegetation success will be monitored, and any areas requiring additional seeding will be hand planted using the appropriate seed mix or containerized stock.

It is our hope that this proposal will meet with your approval. If you have any questions, or need any further information, please contact me.

Respectfully,

Dan W. Guy

Dan W. Guy,
for Paige B. Beville

cc: Scot Anderson
Paige Beville
File

RECEIVED
OCT 30 1995
DIV. OF OIL, GAS & MINING

Form DOGM - C1 (Last Revised 6/93) File Folder # 3

APPLICATION FOR PERMIT CHANGE

Title of Change: AMENDMENT OF SEEDING TIME

Permit Number: ACT 007016

Mine: Gordon Creek 2/7/8

Permittee: Mountain Coal Co.

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

To allow seeding to take place as soon as possible after final soil preparation during reclamation.

☐ Yes	☑ No	1. Change in the size of the Permit Area? _____ acres ☐ increase ☐ decrease.
☐ Yes	☑ No	2. Change in the size of the Disturbed Area? _____ acres ☐ increase ☐ decrease.
☐ Yes	☑ No	3. Will permit change include operations outside the Cumulative Hydrologic Impact Area?
☐ Yes	☑ No	4. Will permit change include operations in hydrologic basins other than currently approved?
☐ Yes	☑ No	5. Does permit change result from cancellation, reduction or increase of insurance or reclamation bond?
☐ Yes	☑ No	6. Does permit change require or include public notice publication?
☐ Yes	☑ No	7. Permit change as a result of a Violation? Violation #
☐ Yes	☑ No	8. Permit change as a result of a Division Order? D.O.#
☐ Yes	☑ No	9. Permit change as a result of other laws or regulations? Explain:
☐ Yes	☑ No	10. Does permit change require or include ownership, control, right-of-entry, or compliance information?
☐ Yes	☑ No	11. Does the permit change affect the surface landowner or change the post mining land use?
☐ Yes	☑ No	12. Does permit change require or include collection and reporting of any baseline information?
☐ Yes	☑ No	13. Could the permit change have any effect on wildlife or vegetation outside the current disturbed area?
☐ Yes	☑ No	14. Does permit change require or include soil removal, storage or placement?
☑ Yes	☐ No	15. Does permit change require or include vegetation monitoring, removal or revegetation activities?
☐ Yes	☑ No	16. Does permit change require or include construction, modification, or removal of surface facilities?
☐ Yes	☑ No	17. Does permit change require or include water monitoring, sediment or drainage control measures?
☐ Yes	☑ No	18. Does permit change require or include certified designs, maps, or calculations?
☐ Yes	☑ No	19. Does permit change require or include underground design or mine sequence and timing?
☐ Yes	☑ No	20. Does permit change require or include subsidence control or monitoring?
☐ Yes	☑ No	21. Have reclamation costs for bonding been provided or revised for any change in the reclamation plan?
☐ Yes	☑ No	22. Is permit change within 100 feet of a public road or perennial stream or 500 feet of an occupied dwelling?
☐ Yes	☑ No	23. Is this permit change coal exploration activity ☐ inside ☐ outside of the permit area?

☑ Attach 8 complete copies of proposed permit change as it would be incorporated into the Mining and Reclamation Plan.

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.

Dan W. Guy for Paige B. Beville 10/26/95

Signed - Name - Position - Date

Subscribed and sworn to before me this 26 day of OCTOBER, 1995

Notary Public

My Commission Expires: 9/27/, 1997

Attest: STATE OF UT

COUNTY OF CARBON

DANA BALLARD
NOTARY PUBLIC - STATE of UTAH
865 EAST 2800 SOUTH
PRICE, UTAH 84501
COMM. EXP. 9-27-97

Received by Oil, Gas & Mining

RECEIVED
OCT 30 1995
DIV. OF OIL, GAS & MINING

ASSIGNED PERMIT CHANGE NUMBER

Form DOGM - C2 (Last Revised 6/93)

File Folder #

Application for Permit Change
Detailed Schedule of Changes to the Permit

Title of Change: AMENDMENT OF SEEDING TIME

Permit Number: ACT/007/016

Mine: Gordon Creek 2/7/8

Permittee: Mountain Coal Co.

Provide a detailed listing of all changes to the mining and reclamation plan which will be required as a result of this proposed permit change. Individually list all maps and drawings which are to be added, replaced, or removed from the plan. Include changes of the table of contents, section of the plan, pages, or other information as needed to specifically locate, identify and revise the exiting mining and reclamation plan. **Include page, section and drawing numbers as part of the description.**

			DESCRIPTION OF MAP, TEXT, OR MATERIALS TO BE CHANGED
☐ ADD	☑ REPLACE	☐ REMOVE	Page 3-53
☐ ADD	☑ REPLACE	☐ REMOVE	Page 3-57
☐ ADD	☑ REPLACE	☐ REMOVE	Page 3-64
☐ ADD	☐ REPLACE	☐ REMOVE	
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Any other specific or special instructions required for insertion of this proposal into the Mining and Reclamation Plan?

PERMIT CHANGE CHRONOLOGY

Title of Proposal: AMENDMENT OF SEEDING TIME	PERMIT NUMBER: ACT/007/016
Description:	PERMIT CHANGE #:
	PERMITTEE: Mountain Coal Co.
	MINE NAME: Gordon Creek 2/7/8

DATE		DOCUMENT ALL ACTIVITIES ASSOCIATED WITH THIS PERMIT CHANGE
	☐Sent ☒Recv'd.	Initial Application for Permit Change Received from Permittee
	☐Sent ☐Recv'd.	
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☐ ADDITIONAL SHEET

Seeding Method

The entire area will be hydroseeded and mulched. Seeding will take place as soon as possible after final site preparation. The amount of time seed is in the hydroseeder will be limited to 30 minutes or less, as required by R645-301-341.220.

Enhancement measures will be used for revegetation along areas where seeps, springs or drainages exist. In addition to the regular seed mix, these areas will be supplemented with additional grasses and forbs as described in Table 3-3. Also, such areas will be planted with an even mixture of the following containerized plants: Salix, Elderberry, Serviceberry and Chokecherry. Containerized plants will be placed at 25' intervals along seep/spring areas, and at 50' intervals along restored drainage channels.

3.5.5.4 Revegetation Protection/Schedule

No livestock grazing will be allowed on reclaimed areas until after bond release. The entire reclaimed area will be fenced to prevent livestock access, while allowing for wildlife access, using the fence design as shown on Figure 3-7.

***REVEGETATION SCHEDULE**

Order Seed	Done
Soil Sampling	Done
Final removal of structures	Done
Earthmoving & Recontouring	(See Note)
Order mulch & tackifier	(See Note)
Order fertilizer	(See Note)
Final seedbed preparation	(See Note)
Fertilization	(See Note)
Seeding	(See Note)
Mulching	(See Note)

Note: The revegetation schedule will vary in accordance with the earthwork. Revegetation will take place as soon as possible after final site preparation.

3.5.5.5 Revegetation Monitoring

Revegetated areas will be monitored using qualitative observations as well as quantitative sampling. The areas will be evaluated qualitatively by looking for sites of failed seeding, extensive patches of undesirable weedy species, areas of severe erosion, or areas where rodents have been destroying planted species. The entire seeded area will be examined for apparent success in the Fall of 1996. If areas are found at that time to be in need of additional planting, those areas will be hand seeded or supplemented with hand planting of containerized stock, as required.

3.5.8 Schedule of Reclamation for Gordon Creek No. 2 Mine

3.5.8.1 Detailed Timetable for Completion of Major Reclamation Processes

The following is a proposed schedule of reclamation:

		* Acc. Time
1.	Seal Portals	Done
2.	Remove Structures	Done
3.	Soil Placement (backfilling & grading)	
	a. Upper Pad - 3 weeks (including road)	3 weeks
	b. Channel Restoration - 2 weeks	5 weeks
	c. Lower Pad & Diversion - 3 weeks (including road)	8 weeks
4.	Seedbed Material & Handling-1 week	9 weeks
5.	Reseeding & Fertilizing - 1 weeks	10 weeks
6.	Mulching - 2 weeks	12 weeks
7.	Protective Fencing - 2 weeks	14 weeks

The above reclamation tasks are therefore proposed to be completed within 14 weeks following the start of reclamation activities.

1. Loader - 950B (2 ½ cy bucket)= $ 75.50/hr
   Operator= $ 15.00/hr
   $ 90.50/hr
2. Crane - Groves RT-580
   20 T= $ 62.50/hr
   Operator= $ 15.00/hr
   $ 77.50/hr
3. Truck and Operator= $ 65.00/hr
4. Cat D-7G= $905.00/day
   Operator= $120.00/day
   $1,025.00/day

*Times shown are accumulative task estimates only. The actual reclamation of the site will occur in the Fall of 1995 and Spring of 1996.