

0002

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



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 Utah Coal & Energy, Inc.
2. Proposed type of operation Coal mining
3. (a) Prior Land Use(s) mining
 (b) Current Land Use(s) mining
 (c) Possible or Prospective Future Land Use(s) ?
4. What vegetation exists on the land proposed to be affected none-
all gravel
 (a) Types and Estimated Percent cover or density: see above
5. What is the pH range of soil before mining? +6 pH
 Name of Person or Agency and method of determining pH estimated
by Charles Shannon
6. Site elevation above sea level 6240-6400'
7. In case of coal, oil shale, and bituminous sandstone:
 Principal seam(s) and thickness(es) Wasatch ; 9'
8. Estimated duration of mining operations 20 yrs.
9. Has overburden, waste or rejected materials been classified as acid or alkali producing? () Yes () No
 Does the above material being moved have any other characteristics affecting revegetation? no (gravel)
10. Will any underground workings or aquifers be encountered? () Yes () No
 Describe one was, but was sealed off
 Is there an active discharge of water from abandoned deep mines on or crossing the land affected? () Yes () No If yes, describe the quality of water being discharged. _____

11. Describe specifically a detailed procedure for:
- (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:

- (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.

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

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

fertilizer, as applicable

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

grading to acceptable slope
stds & seeding, as per recommendation

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 Drilling |
| <input type="checkbox"/> Other (specify) _____ | <input checked="" type="checkbox"/> Broadcast and Drag |
| | <input type="checkbox"/> Other _____ |

2. Will Mulch be used? () Yes (✓) No except as prescribed
 Type: _____ Rate/Acre _____ lbs.

3. Revegetation Plan and Schedule - will be as prescribed in letter from James Smith, May 2, 1978.

Species	Rate/Acre	Planting Location	Facing N-S-E-W	Season to be replanted

4. Will affected area be subject to livestock or possible wildlife grazing?
 () Yes (✓) No Will vegetation protection be needed? no

5. Will irrigation be used: () Yes (✓) No Type _____

6. Describe maintenance procedures for revegetation if needed, until surety release is granted. will revegetate as necessary

STATE OF Utah

COUNTY OF Salt Lake

I, C. G. Casarelli, 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: C. G. Casarelli

Taken, subscribed and sworn to before me the undersigned authority
in my said county, this 29th day of December, 19 78

Notary Public: Harold S. Johnson
RESIDING IN SALT LAKE COUNTY,
STATE OF UTAH

My Commission Expires: 9-19-82

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 C. G. C. (Initial)

Sections desired to be maintained as confidential information -

ADDENDUM TO MR-2
Utah Coal & Energy, Inc.
Black Hawk Mine
Summit County, Utah

Sec. 11

a. Mining Sequence.

Underground conventional room and pillar method with entries and cross-entries on 70 foot centers. Three-entry system with portals spaced 100 feet apart. Two entries/portals completed. Third entry access to be constructed. Requires additional excavation of dugway through gravel to reach coal subcrop.

- b. Access road to mining site pre-existing. Maximum grade less than five percent. This road gravel surfaced and maintained with patrol grader. Sprinkled when dusty. Road fill banks will be seeded as necessary to stabilize.

One existing road (unimproved) along east margin of working area is used for access to area of excavation for portal dugways. This road constructed along ridge crest; no cut or fill. Drainage will be controlled by diversion ditching. When no longer needed, will be graded to final restoration slope of disturbed area. Road is maintained with patrol grader to minimize rutting and reduce runoff erosion.

- c. Ninety per cent of working site is devoid of vegetation and consists of a portion of a large, poorly sorted gravel alluvial fan. Ten per cent of the area on the perimeter has a discontinuous cover of brush and sage. This brush will be removed by dozer where necessary and piled on adjacent gravel surface for subsequent prudent disposition.
- d. Topsoil will be scalped off with dozer or FEL and transported to storage area designated on Map, Exhibit A.

Gravel will be spread and compacted as feasible along existing benches of previously excavated gravel.

- e. Upon cessation of mining, portals will be sealed as per MSHA regulations; CFR 30-75.1721 (as per 75.330.1). Disturbed area will then be backfilled with previously stored gravel and contoured to stable slope.

Acid, alkali, and/or toxic substances are not recognized in the disturbed gravels. Any such material which may be produced in future mining activities will be buried and/or treated as required. Such materials when identified and segregated will be protected from water contact.

- f. Final stabilization of disturbed material will be achieved by backfilling and grading to stable slope, utilizing benches where necessary to maintain permissible overall gradient. Seeding will be carried out as per letter recommendation of James W. Smith to Utah Coal & Energy, Inc. dated may 2, 1978.

Grading and Re-grading.

- a. As described in 11-f above, disturbed area will be re-graded to stable slope which will be approximately the 32 degrees of original contours. Typical cross-sections ; north-south and east-west, are appended herewith.
- b. Topsoil to be stored as described in 11-d above will be re-distributed on areas from which removed. Approximate thickness of restored topsoil will be three inches.
- c. Soil treatment will be determined upon consultation with Division of Natural Resources.
- d. Drainage will be controlled as is feasible by retardation of runoff velocity through slope and bench design augmented with seeding of re-graded areas. Re-grading will be designed to re-establish original drainage salients to the extent reasonably possible. All outslopes will be graded to not less than $1\frac{1}{2}:1$.
- e. Maximum gradient of slopes in conjunction with benches will be approximately 33 degrees.

Testing.

1. The stability of fill material which consists entirely of the gravels of the extant alluvial fan can be observed in the cuts and fills produced during the current operations. It can be demonstrated that gravel fill reconsolidates through the cementing action of contained clays to form as stable a mass as can be expected of gravel deposits.
2. What soils are contained within the subject area are conceded to be capable of supporting the type of vegetation which occurs. Any soil testing required will be contracted to reputable soils testing laboratory.

cws/ 1/4/79

UTAH COAL & ENERGY, INC.
 BLACK HAWK MINE
 SEC. 36 - T3N - R6E 9M
 SUMMIT CO., UTAH
 CUSHAMON AUG 1977

TITLE 50 - CHAP 1
 75.200-5 (6) (1)(2)(3)

