5M CORPORATION
Hurricane, Utah

RECLAMATION PLAN

John Henry Mine
Kaiparowits Plateau
Kane County, Utah

333 NORTH HIGHWAY 17

P.O.BOX 752, HURRICANE, UTAH, 84737 (801) 635-2572

5M

MINERALS
MINING
MILLING
MELTING

and
MANUFACTURING
of
METAL PRODUCTS - MINI MILLS - MINING EQUIPMENT

INCORPORATED

September 26, 1975

State of Utah
Department of Natural Resources
Division of Oil, Gas, and Mining
1588 West North Temple
Salt Lake City, Utah

Dear Sir:

In accordance with the general provisions of the Utah Mineral Reclamation Act, H. B. No. 323 of 1975, the enclosed Reclamation Plan is submitted in compliance therewith, as pertaining to the reclamation of the area encompassing the John Henry Mine, Kaiparowits Plateau, and the mining operations thereon.

The surface land area within which mining operations will be conducted at the John Henry Mine is defined in our "Notice Of Intentions To Commence Mining Operations" submitted to your office on 9 June 1975, together with our General Mining Plan. The on-site reclamation to be performed is in substance that defined in Section 15(a), (b), and (c) of the Reclamation Act, above.

The Reclamation Plan, attached hereto, follows the format of MR Form 2 to Rule M.

In the interest of expediency, 5M will assist in any way as may be helpful in expediting this application.

Very sincerely,

Jerry Glazier

Jerry Glazier

JG:ts

ENCL

MINING APPLICATION
No. 42-01227

Date: September 26, 1975

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

1. Name of Applicant or Company: 5M CORPORATION
P. O. Box 752
Hurricane, Utah 84737

2. Proposed type of operation: Underground mining of coal
Room and Pillar
Kaiparowits Plateau

3. (a) Prior Land Use(s): Grazing
(b) Current Land Use(s): Grazing
(c) Possible or Prospective Future Land Use(s): Grazing

4. What vegetation exists on the land proposed to be affected:

Vegetation observed to exist on the lands in the application are principally tamarack brush, small sage brush, salt grass (in wash), Russian thistle, and small cacti.

(a) Types and Estimated Percent Cover or Density:

The land use area is classified as partially "wasteland", and partially "barren", having a topography of moderate to very steep rocky incline with sparse vegetation of the mixed desert shrub and sagebrush variety of approximately 2 to 5 percent cover.

5. What is the range pH of soil before mining? ** pH.

Name of Person or Agency and method of determining pH. **

NOTE: ** Soil samples are being submitted for analysis and will be forwarded as an addendum to this report upon receipt.

6. Site elevation above sea level: 4570 feet

7. In case of coal, oil shale, and bituminous sandstone:

   Principal seam(s) and thickness(es):

Principal Coal Zones:	Average Thickness
(1) Rees Coal Zone - - - - - - - -	4 - 7 feet
(2) Christensen Formation - - - -	7 - 25 feet
(3) Smoky Hollow Member - - - - -	5 - 12 feet

8. Estimated duration of mining operations: Thirty years

9. Has overburden, waste or rejected materials been classified as acid or alkali producing? (x) Yes ( ) 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

    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 n/a

11. Describe specifically a detailed procedure for:

    (a) The mining sequence:

    See: (1) 5M, Inc. "General Mining Plan", Enclosure (C), PART's (A) and (B) -- Room & Pillar & Detailed. (Mining Plan submitted under date of 9 June 1975).

    (2) 5M, Inc., MAP "Mining Plan for John Henry Mine", dated 5 August 1975. (Map held by Division of Oil, Gas & Mining).

    (b) The procedure for constructing and maintaining access roads, to include a typical cross-section and a profile of the proposed road grades.

    See: (1) 5M, Inc. "Narration of Proposed Action", Paragraph B. p. 11, and Paragraph R.(3), p. 13.

    (2) 5M, Inc., MAP "Access & Tram Roads", dated 6 January 1975, inserts "Typical Tram Road Cut and Fill Section", and "Grades and Usable Widths". (MAP held by Division of Oil, Gas, and Mining).

(c) The procedure for site preparation including removing trees and brush.

No trees are to be found on the site, and little vegetation (brush) of any consequence. Site preparation is depicted on the Timed Phased Scalar Projection and on the Location Map included in Appendix (A) to the "Narration of Proposed Action" attached to this report.

(d) The method for removing and stockpiling topsoil or disturbed materials.

There is very little topsoil to be found on lands under application. However, all grading and control of grades will comply with the grading specifications set forth by the Bureau of Land Management.

(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.

A coal stockpile area is provided at the mine site for coal storage of up to 250,000 tons. (See Location Map, Appendix (A) to the "Narration of Proposed Action").

Drainage from the coal stockpile area will be contained so as to preclude contamination of any run-off. Inasmuch as all cleaning of coal is to be accomplished in a dry state, it is not contemplated that coal production will entail the use of any acid, alkali-producing, or toxic materials.

For the containment of other materials see "Narration of Proposed Action", Paragraphs M and N, pages 7 thru 10.

(f) A procedure for final stabilization of disturbed materials.

See 5M Inc., "Narration of Proposed Action", Page 12.

GRADING AND REGRADING: **

TESTING: **

REVEGETATION: **

** Land reclamation as pertaining to Grading and Regrading, Testing, and Revegetation, other than has been covered in this report, does not apply to the limiting land

use area in this application for the following reasons:

(1) Since all mining operations are to be conducted underground, only portal entries, service and operating areas are to be exposed at the mine site.

(2) All surface excavations, installations and operations are to be confined to 145 acres in Section 35 - on Federal (Bureau of Land Management) lands. The one exception is the installation of a radio transmitter on top of the mesa plateau near the mine site on Section 2, Utah State Mineral Lease No. 19359. (See "Narration of Proposed Action", Paragraph F., Communications, Page 5).

(3) The area of operations (145 acres) is classified as barren to wasteland, having topsoil ranging from none to meager, and supporting vegetation averaging less than 5% coverage.

(4) The area of operations is steep and inclined and generally not accessible for grazing, or for other land use.

(5) Such reclamation as can be accomplished on the land upon completion of mining operations, is limited in its application to minor grading and revegetation as is possible to reinstate its natural condition.

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 material.
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. a. Describe method for testing stability of reclamation fill material.
**

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

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

**

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

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REVEGETATION

1. Revegetation to be completed by:

(X) Operator
( ) Soil Conservation District
( ) Private Contractor _____ (Name)
( ) Other (Specify) _____
( ) Hydroseeding
( ) Aerial Seeding
( ) Conventional or Rangeland Drilling
( ) Other (Specify) Hand

2. Will Mulch Be Used?
Type No Rate/Acre _____ lbs.

3. Revegetation Plan and schedule -

Species	Rate/ acre	Planting location	Facing N-S-E-W	Season to to be Replanted
**				

4. Will affected area be subject to livestock or wildlife grazing: (X) yes ( ) 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. **

I, the undersigned Operator, hereby submit this to be my Reclamation and Mining plan for the area shown on the attached map. I further understand that the operation will be conducted in accordance with the Mined Land Reclamation Act of 1975, and all rules and regulations currently in effect thereunder.

Signed [signature] Operator, Date 9-26-75

Taken, subscribed and sworn to before me the undersigned authority in my said county, this 26 day of Sept, 19 75.

Notary Public [signature]

My Commission Expires: 8-7-78