

CANYON FUEL COMPANY, LLC

BANNING LOAD OUT

C/007/034

POST MINING LAND USE CHANGE

May 2004

File in:

- Confidential
- Shelf
- Expandable

Refer to Record No. 0002 Date 05/26/2004

In C/007/0034 Succession

For additional information

CANYON FUEL COMPANY, LLC

BANNING LOAD OUT

C/007/034

**June 1, 1998
September 2003
May 2004**

Air Quality Approval Order	State of Utah, Utah Air Conservation Committee, Department of Health Division of Environmental Health	Approved
Water Rights	State Engineer	Approved

The Canyon Coal Company, LLC mining permits and operations are:

Banning Loadout	C/007/034
Dugout Canyon Mine	C/007/039
SUFCO Mine	C/041/002
Skyline Mine	C/007/005
Soldier Canyon Mine	C/007/018

The issuing authority for the Canyon Fuel Company permits is the UDOGM.

Neither Arch Coal, Inc. nor any of its subsidiaries owns or controls any other coal mining or reclamation operation. ITOCHU Corporation does not own or control any interest, direct or indirect, in any other entity having coal mining operations in the United States. None of the executive officers of ITOCHU Corporation are directors or officers of any other entity that owns or controls an interest, direct or indirect, in any entity having coal mining operations in the United States.

The corporate structure is presented on Figure 1-1.

112.500 Legal or Equitable Owner of the Surface and Mineral Properties to be Mined

The legal or equitable owners of the areas to be affected by the surface operations and facilities are:

United States of America
BLM right-of-way Leases U-33855 and U-49763

State of Utah
State Lease 435

~~Denver and Rio Grande Railroad~~ **Union Pacific Railroad**
Lease 16663

East Carbonics Inc

No area within the land to be affected by surface operations and facilities or within the area is under a real estate contract.

Canyon Fuel Company, LLC
Banning Loadout

Mining and Reclamation Plan
May 2004-September 2003

No coal is to be mined on or within the permit area.

The holders of record of any leasehold interest in areas to be affected by surface operations or facilities:

East Carbonics Inc.
P.O. Box 87
Manti, UT 84642

~~Denver and Rio Grande Western Railroad Company~~ Union Pacific Railroad
Post Office Box 5482 1416
~~Denver, CO 80217~~ Omaha, NE 68179

United States of America
Department of Interior
Bureau of Land Management
Price Coal Office
125 South 600 West
Price, Utah 84501

State of Utah
School and Institutional Trust Lands Administration
675 East 500 South, Suite 500
Salt Lake City, Utah 84102-2818

The holders of record of leasehold interests in the area to be affected by surface coal handling operations are East Carbonics Inc, the United States of America, the State of Utah, and the Union Pacific Railroad ~~Denver and Rio Grande Western Railroad Company~~.

112.600 Owners of Record of Property Contiguous to Proposed Permit Area

Owners of record of surface and subsurface areas contiguous to the proposed permit area are shown on Exhibits ~~5-4 and 5-5~~ 1-12-1 and 1-12-2 of the Mining and Reclamation Plan. Names and addresses of the owners are:

Surface: East Carbonics Inc.
P.O. Box 87
Manti, UT 84642

Canyon Fuel Company, LLC
Banning Loadout

Mining and Reclamation Plan
May 2004-September 2003

Lands Covered: T15S. R12E. SLB&M
Sec 16; E1/2 E1/2 NE1/4 SE1/4
Containing: 10.0 ac, more or less

Expiration: October 31, 1998

Supporting Document:

1. Working agreement established between applicant and Savage Coal Service Corporation.

Denver and Rio Grande Western Railroad Company (Union Pacific Railroad) Lease Agreement
16663

(Railroad Spur)

Dated: May 24, 1976

Grantee: California Portland Cement Company

Lands Covered: T15S. R12#. SLB&M
Secs. 15 and 22
Strip of Land 91.5 ft. wide,
8.5 ft. westerly of the
centerline of the main Sunny
Side Branch track

Containing: 155.6 ac, more or less

Supporting Documents:

1. Assignment of Lease Agreement 16663 from California Portland Cement Company to Soldier Creek Coal Company on November 26, 1985.

Surface Owner: East Carbonics Inc

Lands Covered: T15S, R12E, SLB&M
Sec. 16: SE1/4 SE1/4
Sec. 21: E1/2 NE1/4
Containing: 120 ac, more or less

Supporting Documents:

1. Deed for the purchase of property by and between Kaiser Coal Corporation ("Grantor") and Soldier Creek Coal Company ("Grantee").
2. Purchase and sale agreement between Canyon Fuel Company, LLC and East Carbonics Inc.

conducive to greater productivity. Nor is it practicable to install extensive remedial programs because of the severe limitations of the soils capability.

R645-301-223. Soil Characterization

The survey will meet the standards of the National Cooperative Soil Survey as incorporated by reference in R645-302-314.100.

The information present is a result of field investigations and a perusal of existing data obtained from the USDA-Soil Conservation Service (SCS). Soil studies were conducted in accordance with current guidelines issued by the Utah Division of Oil, Gas, and Mining (DOG M), and according to the standards of the National Cooperative Soil Survey and the procedures set forth by the USDA (Handbooks No. 436, Soil Taxonomy, 1975 and No. 18, Soil Survey Manual, 1951). Locations for soil test pits were predetermined by DOGM and the Applicant (Exhibit 3-1).

This study was initiated by garnering all available, pertinent data including geologic, topographic, climatic, vegetative and edaphic information. SCS field sheets were compared to aerial photographs.

Delineated soils mapping units were field verified at the Banning Loadout and map unit boundaries modified where required to reflect on-site conditions.

This work was authorized by Soldier Creek Coal Company and completed by Randolph B. Gainer, EarthFax Engineering, Inc., Salt Lake City, Utah.

R645-301-224. Substitute Topsoil

Where the applicant proposes to use selected overburden materials as a supplement or substitute for topsoil, the application will include results of analyses, trials, and tests as described under R645-301-232.100 through

The Banning site was constructed pre-law and as such no original topsoil was stockpiled.

A Maps showing the location of soil resources ~~is given as~~ are Exhibits 3-1 and 5-2. Any further stockpiling or other distribution of topsoils will be in accordance with R645-301-234.100 through R645-301-320.

R645-301-240. Reclamation Plan

R645-301-241. General Requirements

Each permit application will include plans for redistribution of soils, use of soil nutrients and amendments and stabilization of soils.

The first step in the reclamation plan is removal of loose coal material. This will begin a year prior to the closure of the operation. The operator will start to scrape the outlying areas removing as much coal as possible and will continue inward toward the area above the vibrating feeders. The coal will be loaded out and the surface will be left relatively free of debris. The soil will then be ripped to a depth of 18 inches and subsequently disced to eliminate the deleterious effects of compaction. The resulting mixture of coal to soil will not exceed 50% coal. The tillage will continue until the average soil clods on the surface are less than one inch in size.

Soils previously used in grading to achieve desired elevations for specific needs and/or structure requirements, along with soils stored as noted in R645-301-231.400 and detailed in Chapter 5, will be redistributed to achieve final reclamation contours (Exhibit 5-6).

All areas affected by the loadout facilities within the permit area, except the designated portion of the haulage

R645-301-342.200. *Where fish and wildlife habitat is to be a postmining land use, the plant species to be used on reclaimed areas will be selected on the basis of the following criteria:*

R645.301.342.210. *Their proven nutritional value for fish or wildlife; and*

R645-301-342.220. *Their use as cover for fish or wildlife; and*

R645-301-342.230. *Their ability to support and enhance fish or wildlife habitat after the release of performance bonds. The selected plants will be grouped and distributed in a manner which optimizes edge-effect, cover, and other benefits to fish and wildlife.*

Rangeland is the primary intended postmining land use with wildlife habitat as a secondary land use. Plant species appropriate for enhancing the wildlife habitat were selected on the basis of known wildlife requirements including nutritional value for fish and wildlife, use as cover for fish and wildlife and ability to support and enhance fish and wildlife habitat. The grouping of the plants will be in a manner which optimizes edge effect, cover, and other benefits to fish and wildlife. R03/28/95

R645-301-342.300. *Where cropland is to be the postmining land use, and where appropriate for wildlife- and crop- management practices, the operator will intersperse the fields with trees, hedges, or fence rows throughout the harvested area to break up large blocks of monoculture and to diversify habitat types for birds and other animals.*

N/A

R645-301-342.400. *Where residential, public service, or industrial uses are to be the postmining land use, and where the consistent with the approved postmining land use, the operator will intersperse reclaimed lands with greenbelts utilizing species of grass, shrubs, and trees useful as food and cover for wildlife.*

N/A Refer to Section R645-301-342.230.

R645-301-350. *Performance Standards.*

R645-301-351. *General Requirements.*

All coal mining and reclamation operations will be carried out according to plans provided under R645-301-330 through R645-301-340.

BANNING LOADOUT PERMIT
Canyon Fuel Co., LLC - Soldier Canyon

CHAPTER 4

LAND USE AND AIR QUALITY

R645-301-400. Land Use and Air Quality

The Rules in R614-301-400 present the requirements for information related to Land Use and Air Quality which are to be included in each permit application.

R645-301-410. Land Use.

Each permit application will include descriptions of the premining and proposed postmining land use(s).

R645-301-411. Environmental Description

R645-301-411.100. Premining Land-Use Information. The application will contain a statement of the condition and capability of the land which will be affected by coal mining and reclamation operations within the proposed permit area, including:

R645-301-411.110. A map and supporting narrative of the uses of the land existing at the time of the filing of the application. If the premining use of the land was changed within five years before the anticipated date of beginning the proposed operations, the historic use of the land will be described;

The facilities are located within the Mud Springs grazing allotment as designated by the BLM (A small portion may extends into the east pasture of the Mounds Oil Well Draw Allotment). Within the Mud Springs grazing allotment, there are 27,859 acres of federal land, 4,800 acres of state land and 1,220 acres of private land. Banning Loadout is situated in the western most part of the allotment and the period of use is from October 20 to June 10. The Mounds allotment contains 22,352 acres of federal land, 2,646 acres of state land and 280 acres of private land, the period of use is from November 16 through April 30 each year.

The proposed permit area for Banning Loadout is within 100 ft. of the Right-Of-Way for U.S. Highway 6-50, which is north of the facilities. State Highway 123 is also within the general area of the facilities, but neither road will be affected by Banning Loadout. ~~Denver and Rio Grande Western~~ Union Pacific Railroad have a main line railroad which

runs along the eastern boundary of Banning Loadout. The Applicant holds a lease agreement with the railroad D&RGW to use a portion of their land and to load on a spur adjacent to the main line.

The land uses in this area are mining, railroad, industrial (CO² Plant, ECDC, etc.) roads, grazing and wildlife habitat. These land uses (except industrial) were present for a period of at least 5 years prior to the Applicant's operation and will continue to be present after the closure and reclamation of Banning Loadout. See Exhibits 4-1 and 5-2 for maps detailing described land use at and adjacent to the site in question.

R645-301-411.120 A narrative of land capability which analyzes the land-use description in conjunction with other environmental resources information required under R645-301-411.100, and R645-301 and R645-302. The narrative will provide analyses of the capability of the land before any coal mining and reclamation operation to support a variety of uses, giving consideration to soil and foundation characteristics, topography, vegetative cover and the hydrology of the area proposed to be affected by coal mining and reclamation operations;

The condition and capability of the land within the permit area is addressed in a letter from George S. Cook of the SCS, which documents the condition and productivity of the site, in Appendix 3-1

R645-301-411.130. A description of the existing land uses and land-use classifications under local law, if any, of the proposed permit and adjacent areas.

Carbon County zone designations for the area within and adjacent to the Banning Loadout is M&G-1 Zone (Mining and Grazing). A letter confirming this zone designation is included in Appendix 4-1.

R645-301-411.140. Cultural and Historic Resources Information.
The application will contain maps as described under R645-301-411.141 and a supporting narrative which describe the nature of cultural and historic resources listed or eligible for listing in the National Register of Historic Places and known archeological sites within the permit and adjacent areas. The description will be based on all available information, including, but not limited to information from the State Historic Preservation Officer and from local archeological, historic, and cultural preservation agencies.

Information regarding archeological sites within the permit and adjacent areas was obtained from Liz Manion, Archeological Data Manager for the Division of State History of the Utah State Historical Society, and is shown in Appendix 4-4.

Further information was obtained by a study contracted by Soldier Creek Coal Company, and performed by the Archeological Environmental Research Corporation. A narrative statement describing the results of that study is included in Appendix 4-3.

R645-301-411.141. Cultural and Historic Resources Maps. These maps will clearly show:

A map showing cultural and historic resources is included as Figure 4-1.

R645-301-411.141.1. The boundaries of any public park and locations of any cultural or historical resources listed or eligible for listing in the National Register of Historic Places and known archeological sites within the permit and adjacent areas;

There are no public parks or cultural or historical resources listed or eligible for listing in the National Register of Historic Places within the permit or adjacent area. The locations of the two archeological sites found are shown in Figure 4-1.

R645-301-411.141.2. Each cemetery that is located in or within 100 feet of the proposed permit area; and

There are no cemeteries located in or within 100 feet of the proposed permit area.

R645.301.411.141.3. Any land within the proposed permit area which is within the boundaries of any units of the National System of Trails or the Wild and Scenic Rivers System, including study rivers designated under section 5(a) of the Wild and Scenic Rivers Act.

There is no land within the permit area which is within the boundaries of any units of the National system of Trails or the Wild and Scenic Rivers System, including study rivers designated under section 5(a) of the Wild and Scenic Rivers Act.

R645-301-411.142. Coordination with the State Historic Preservation Officer (SHPO). The narrative presented under R645-301-411.140 will also describe coordination efforts with and present evidence of clearances by the SHPO. For any publicly owned parks or places listed on the National Register of Historic Places that may be adversely affected by the proposed coal mining and reclamation operations, each plan will describe the measures to be used:

The results of the archeological survey performed by Archeological-Environmental Research Corporation, as described above, were provided to; the BLM office in Price, Utah; the State Archeologist in Salt Lake City, Utah; the BLM State Archeologist in Salt Lake City, Utah; the BLM District Manager in Moab, Utah; and the BLM District Archeologist in Moab, Utah, in a report shown in Appendix 4-2.

R645-301-411.142.1. To prevent adverse impacts; or

R645-301-411.142.2. If valid existing rights exist or joint agency approval is to be obtained under R645-103-236, to minimize adverse impacts.

No publicly owned parks or places listed on the National Register of Historic Places exists within the permit or adjacent areas.

R645-301-411.143. The Division may require the applicant to identify and evaluate important historic and archeological resources that may be eligible for listing on the National Register of Historic Places through:

R645-301-411.143.1. Collection of additional information;

R645-301-411.143.2. Conducting field investigations; or

R645-301-411.143.3. Other appropriate analyses.

The results of the archeological survey conducted by the Archeological-Environmental Research Corporation are given in Appendix 4-3.

R645-301-411.144. The Division may require the applicant to protect historic or archeological properties listed on or eligible for listing on the National Register of Historic Places through appropriate mitigation and treatment measures. Appropriate mitigation and treatment measures may be required to be taken after permit issuance provided that the required measures are completed before the properties are affected by any mining operation.

Recommendations regarding the protection of archeological properties found on or adjacent to the permit area have been made and forwarded to federal and state archeologists as noted in Appendix 4-2.

The Soldier Creek Coal Company has agreed to adhere to those recommendations and stipulations, as noted, as concerns on archeological sites.

R645-301-411.200. Previous Mining Activity. The application will state whether the proposed permit area has been previously mine, and, if so, the following information, if available:

R645-301-411.210. The type of mining method used;

R645-301-411.220. The coal seams or other mineral strata mined;

R645-301-411.230. The extent of coal or other minerals removed;

R645-301-411.240. The approximate dates of past mining; and

R645-301-411.250. The uses of the land preceding mining.

The permit area has not been used for coal mining activities other than the use as a loadout. Previous to use by the Soldier Creek Coal Company, it was operated as a coal loadout facility in adherence to DOGM standards.

R645-301-412. Reclamation Plan.

R645-301-412.100. Postmining Land-Use Plan. Each application will contain a detailed description of the proposed use, following reclamation, of the land within the proposed permit area, including a discussion of the utility and capacity of the reclaimed land to support a variety of alternative uses, and the relationship of the proposed use to existing land-use policies and plans. The plan will explain:

The land uses within and adjacent to the permit area include mining, roads, railroads, rangeland and wildlife habitat. The operation of Banning Loadout will have no effect on these land uses or any other uses, except for the rangeland and wildlife uses.

Following final reclamation of the site, the affected lands will be returned to a state similar to that of the premining environment. This will be accomplished by adherence to the reclamation plan contained within Sections R645-301-240, 340, 540, and 760. The postmining land use within what was the permit area will return to rangeland, wildlife and road uses with the exception of the area purchased by East Carbonic Inc. for a CO² plant (Exhibits 5-2 and 5-4). ~~These uses are identical to the existing land use policies and plans.~~ All other land uses in the area will not be affected by the operation and will remain as they now exist.

A portion of the Banning permit and disturbed area have been sold to East Carbonic Inc., a Utah corporation. The sales agreement describes the land as SE1/4SE1/4 of Section 16, and E1/2NE1/4 of Section 21 Township 15 South, Range 12 East in Carbon County, Utah (Appendix 1-5, Exhibit A). The sale of this land compels a change in post mining land use for the area. East Carbonic plans to construct and operate a CO² plant. In the operation of the CO² plant East Carbonics plans to use the substation previously used to operate the Banning Loadout. The substation resides in SE1/4SE1/4 of Section 16 on land belonging to East Carbonics (Exhibits 5-4 and 5-2).

Canyon Fuel Company, LLC has reserved (Purchase and Sales Agreement, Appendix 1-5, Section 2.2 and Exhibit B) a tract of land in SE1/4SE1/4 of Section 16 for the purpose of conducting reclamation activities. Excluding the substation and associated pad, reclamation activities will be performed as described in Chapter 2 and 3 of the M&RP on the remainder of the disturbed area in Section 16 (see Exhibit 5-4). The reclaimed area will meet the success standards outlined under regulation R645-301-356.240 prior to being released from the bond. Upon approval for change in post mining land use of the substation and it's associated pad area, area will be excluded from the disturbed area

(approximately 0.41 acres). The permit area has been reduced by approximately 0.83 acres, which included the 0.41 acres in the disturbed area.

The SCS has determined that there are no prime or important farmlands within or adjacent to the permit area, so no special contingency will be made during reclamation. Soils within the reclaimed land will be redistributed, regraded and revegetated. This will insure the stability and productivity of the land along with maintaining all of the land uses within the area. All reclamation plans will be certified by a professional engineer.

R645-301-412.110. How the proposed postmining land use is to be achieved and the necessary support activities which may be needed to achieve the proposed land use;

Plans for the restoration of land to the pre-mining uses of rangeland and wildlife uses, along with the necessary support activities, are detailed in sections R645-301-240, 340, 540, and 760, which are, the Soils Reclamation Plan, the Biology Reclamation Plan, the Engineering Reclamation Plan, and the Hydrology Reclamation Plan.

R645-301-412.120. For the purposes of SURFACE COAL MINING AND RECLAMATION ACTIVITIES, where range or grazing is the proposed postmining use, the detailed management plans to be implemented;

Banning Loadout is a coal loading facility and as such, this regulation is non applicable.

R645-301-412.130. Where a land use different from the premining land use is proposed, all materials needed for approval of the alternative use under R645-301-413.100 through R645-301-413.334, R645-302-270, R645-302-271.100 through R645-302-271.400, R645-302-271.600, R645-302-271.800, and R645-302-271.900; and

R645-301-412.140. The consideration which has been given to making all of the proposed coal mining and reclamation operations consistent with surface owner plans and applicable Utah and local land-use plans and programs.

With the exception of the area purchased by East Carbonic Inc. for a CO² plant (Exhibits 5-2 and 5-4), the proposed post-mining land use is

rangeland, wildlife and roads which is identical to the pre-mining land use and consistent with the use of land adjacent to the permit area, and consistent with surface owner plans and applicable Utah and local land-use plans and programs.

R645-301-412.200. *Land Owner of Surface Manager Comments.* The description will be accompanied by a copy of the comments concerning the proposed use by the legal or equitable owner of record of the surface of the proposed permit area and Utah and local government agencies which would have to initiate, implement, approve, or authorize the proposed use of the land following reclamation.

~~See~~ Appendix 4-5, contains a letter from BLM stating Post-Mining Land Use. Appendix 1-5, contains information pertaining to the purchase and intended use of the land purchased by East Carbonics Inc.

R645-301-412.300. *Suitability and Compatibility.*

Assure that final fills containing excess spoil are suitable for reclamation and revegetation and are compatible with the natural surroundings and the approved postmining land use.

Refer to Section R645-301-512.210. The Soldier Creek Coal Company will insure, through testing prior to final reclamation, of fills containing excess spoils, that are suitable for reclamation and are compatible with the natural surroundings and the postmining land use.

R645-301-413. *Performance Standards.*

Soldier Creek Coal agrees to implement and abide by all performance standards; R645-301-413.110 through R645-301-413.334.

R645-301-414. *Interpretation of R645-301-412 and R645-301-413.100 through R645-301-413.334, R645-302-207, R645-302-271.100 through R645-302-271.400, R645-302-271.600, R645-302-271.800, and R645-302-271.900 for the purposes of UNDERGROUND COAL MINING AND RECLAMATION ACTIVITIES, Reclamation Plan: Postmining Land Use.* The requirements of R645-301-412-130, for approval of an alternative postmining land use, may be met by requesting approval through the permit revision procedures of R645-303-220 rather than requesting such approval in the original permit application. The original permit application, however, must demonstrate that the land will be returned to its premining land-use capability as required by R645-301-413.100. An application for a permit revision of this type:

~~There are no current plans to request approval for an alternative postmining land-use.~~ Any future Requests for alternate post-mining land-use will be through permit revision procedures of R645-303-220 and

~~the R645-301 regulations. and as such R645-301-414.100 through R645-301-414-300 are not applicable.~~

R645-301-420. *Air Quality*

R645-301-421. *Coal mining and reclamation operations will be conducted in compliance with the requirements of the Clean Air Act (42 U.S.C. Sec. 7401 et seq.) and any other applicable Utah or federal statutes and regulations containing air quality standards.*

The Soldier Creek Coal Company will conduct coal mining and reclamation operations at the Banning Loadout facility in compliance with the requirements of the Clean Air Act and any other applicable Utah or federal statutes and regulations containing air quality standards.

R645-301-422. *The application will contain a description of coordination and compliance efforts which have been undertaken by the applicant with the Utah Bureau of Air Quality.*

An Air Quality Approval Order has been obtained by the Applicant for Banning Loadout from the Utah Department of Health, Division of Environmental Health, Bureau of Air Quality (see Appendix 4-6, DEH letter dated 07/16/80). Operations at the loadout have not changed since the acquisition of the approval order and will continue to comply with the order.

R645-301-423. *For all SURFACE COAL MINING AND RECLAMATION ACTIVITIES with projected production rates exceeding 1,000,000 tons of coal per year, the application will contain an air pollution control plan which includes the following:*

R645-301-423.100. *An air quality monitoring program to provide sufficient data to evaluate the effectiveness of the fugitive dust control practices proposed under R645-301-423.200 to comply with federal and Utah air quality standards; and*

See Appendix 4-7 *Air Quality Monitoring Plan*

R645-301-423.200. *A plan for fugitive dust control practices as required under R645-301-244.100 and R645-301-244.300.*

See Appendix 4-8 *Fugitive Dust Control Plan*

R645-301-424. *All plans for SURFACE COAL MINING AND RECLAMATION ACTIVITIES with projected production rates of 1,000,000 tons of coal per year or less, will include a plan for fugitive dust control practices as required under R645-301-244 and R645-301.244.300.*

The Applicant applied for and received an Air Quality Approval Order for Banning Loadout on July 16, 1980. The facilities are operated in

accordance to the approval order given in Appendix 4-6. ~~Each year,~~
While active, the emission inventory for the operation is submitted to the Utah Division of Environmental Health, Bureau of Air Quality. A copy of this emission inventory will be included in the annual report.

The only significant emission to be produced by the operation is particulates. In accordance with the Air Quality approval Order, the emission is partially controlled by the following means:

1. Enclosed truck dump area;
2. Enclosed crusher and water sprays;
3. Water sprays on conveyor belts;
4. Covered conveyor belts;
5. Compaction of long-term coal storage.

Additional fugitive dust control measures are outlined in the Fugitive Dust Control Plan, Appendix 4-8.

BANNING LOADOUT PERMIT
SOLDIER CREEK COAL COMPANY Canyon Fuel Co., LLC - Soldier Canyon

CHAPTER 5
ENGINEERING

R645-301-500 Engineering

The rules in R645-301-500 present the requirements for engineering information which is to be included in a permit application.

This chapter will provide engineering information as required to be included in a permit application.

R645-301-510 Introduction

The engineering section of the permit application is divided into the operation plan, reclamation plan, design criteria, and performance standards. All of the activities associated with the coal mining and reclamation operations must be designed, located, constructed, maintained and reclaimed in accordance with the operation and reclamation plan. All of the design criteria associated with the operation and reclamation plan must be met.

This engineering chapter is divided into the following sections: Introduction; Operation Plan; Operational Design Criteria and Plans; Reclamation Plan; Reclamation Design Criteria and Plans; and Performance Standards. All of the activities associated with this operation will be designed, located, constructed, maintained and reclaimed in accordance with the approved plan. All of the design criteria associated with the operation and reclamation plan will also be met.

R645-301-511 General Requirements

Each permit application will include descriptions of:

The following sections will provide descriptions of the proposed operation, potential impacts and reclamation.

R645-301-511.100 Proposed Operation

N/A There are no plans to dispose of excess spoil at this site.

R645-301-512.220 Durable Rock Fills

The professional engineer experienced in the design of earth and rock fills must certify that the durable rock fill design will ensure the stability of the fill and meet design requirements according to R645-301-535.100 and R645-301-535.300.

N/A There are no plans for durable rock fills at this site.

R645-301-512.230 Coal Mine Waste

The professional engineer experienced in the design of similar earth and waste structures must certify the design of the disposal facility according to R645-301-536.

N/A There are no plans to dispose of coal mine waste at this site. Any coal mine waste will be blended with the coal and shipped as product, ~~or returned to the Soldier Creek Mine waste rocks site for disposal.~~ (See Section R645-301-513.300).

R645-301-512.240 Impoundments

The professional engineer will use current, prudent, engineering practices and will be experienced in the design and construction of impoundments and certify the design of the impoundments according to R645-301-743.

Exhibits 7-2 and 7-3 of Chapter 7.

R645-301-512.250 Primary Roads

The professional engineer will certify the design and construction or reconstruction of primary roads as meeting the requirements of R645-301-534.200 and R645-301-742.420.

Exhibits 5-2 and 5-7 of this chapter.

R645-301-512.260 Variance from Approximate Original Contour

The professional engineer will certify the design for the proposed variance from the approximate original contour, as described under R645-301-270, in conformance with professional standards established to assure the stability, drainage and configuration necessary for the intended use of the site.

N/A As shown on Exhibit 5-6 and described in Section R645-301-540, the area will be returned to Approximate Original Contour.

R645-301-513 Compliance with MSHA Regulations and MSHA Approvals

R645-301-513.100 *Coal Processing Waste Dams and Embankments*
will comply with MSHA 30 CFR 77.216-1 and 30 CFR 77.216-2 (see R645-301-528.400 and R645-301-536.820).

N/A There will be no coal processing waste dams or embankments at this site.

R645-301-513.200 *Impoundments and sedimentation ponds meeting the size or other qualifying criteria of MSHA, 30 CFR 77.216(a) will comply with the requirements of MSHA, 30 CFR 77.216 (see R645-301-533.600, R645-301-742.222, and R645-301-742.223).*

N/A There are no sediment ponds or impoundments at this site which meet the requirements of MSHA 30 CFR 77.216(a).

R645-310-513.300 *Underground development waste, coal processing waste and excess spoil may be disposed of in underground mine workings, but only in accordance with a plan approved by MSHA and the Division (see R645-301-528.321).*

N/A There are no plans to return underground development waste or excess spoil to underground mine workings. Coal processing waste is not being produced at the present time or foreseeable future; however, should it be produced, it would be disposed by blending back into the product for retail sale ~~or by placement in the Soldier Canyon Mine waste rock disposal site~~. It would only be returned to underground mine workings if it met all MSHA and other requirements, and the above alternatives were no longer available.

R645-301-513.400 *Refuse Piles*

permittee, the permittee will work with the Division to comply with any reasonable remedial measures required by the Division.

R645-301-515.200 Impoundment Hazards

The permit application will incorporate a description of notification when potential impoundment hazards exist. The requirements for the description are: If any examination or inspection discloses that a potential hazard exists, the person who examined the impoundment will promptly inform the Division of the finding and of the emergency procedures formulated for the public protection and remedial action. If adequate procedures cannot be formulated or implemented, the Division will be notified immediately. The Division will then notify the appropriate agencies that other emergency procedures are required to protect the public.

If any examination or inspection of an impoundment discloses a potential hazard exists, the permittee will promptly inform the Division of the finding and of the emergency procedures formulated for public protection and remedial action. If adequate procedures cannot be formulated or implemented, the Division will be notified immediately.

R645-301-515.300 *The permit application will incorporate a description of procedures for temporary cessation of operations as follows:*

The following procedures will be taken for a temporary cessation of operations:

R645-301-515.310 *Temporary abandonment will not relieve a person of his or her obligation to comply with any provisions of the approved permit.*

The conditions of the approved permit will continue to be met during the period of temporary cessation;

R645-301-515.311 *Each person who conducts UNDERGROUND COAL MINING AND RECLAMATION ACTIVITIES will effectively support and maintain all surface access openings to underground operations, and secure surface facilities in areas in which there are no current operations, but operations are to be resumed under an approved permit.*

There are no underground operations associated with this facility.

and kind of reclamation of those areas which will have been accomplished; and identification of the backfilling, regrading, revegetation, environmental monitoring and water treatment activities that will continue during the temporary cessation.

R645-301-516 Prevention of Slides in SURFACE COAL MINING AND RECLAMATION ACTIVITIES. An undisturbed natural barrier will be provided beginning at the elevation of the lowest coal seam to be mined and extending from the outslope for such distance as may be determined by the Division as is needed to assure stability. The barrier will be retained in place to prevent slides and erosion.

N/A This is a surface loadout facility only. There are no surface or underground mines at this site.

R645-301-520 Operation Plan

R645-301-521 General. The applicant will include a plan, with maps, cross sections, narrative, descriptions, and calculations indicating how the relevant requirements are met. The permit application will describe and identify the lands subject to coal mining and reclamation operations over the estimated life of the operations and the size, sequence, and timing of the subareas for which it is anticipated that individual permits for mining will be sought.

Banning Loadout began operations in 1976 when the Applicant received permission from the BLM to upgrade the existing road and to receive, stockpile and load coal at the site. ~~The total area of surface disturbance at the site is approximately 27.97 acres. This area includes the loadout facilities (23.27 acres) and the haulage road (4.70 acres) within sections 15 and 16, T 15S, R12E (Exhibit 5-1).~~ The total permit area is approximately 36.0 acres and is also illustrated on Exhibit 5-1. Surface disturbance area will be marked by perimeter markers, red reflectors attached to fence posts and/or steel pins securely set into the ground. Identification signs will be placed at access points from public

roads into the disturbed area. Locations for the signs and markers are shown on Exhibit 5-1.

The operation at Banning Loadout is run by Soldier Canyon Mine. Savage Coal Service Corporation (Coal Service) under an agreement with the Applicant. Coal Service is responsible for the transportation of the coal to the site and for the complete operation of the loadout. Exhibit 5-2 details the surface facilities at Banning Loadout. Coal is shipped from the loadout by rail cars, using a spur adjacent to the ~~Denver and Rio Grande~~ Western Railroad Company's main line track, and by trucks.

Bonding for the facilities is described in Section R645-301-800 (Chapter 8) and plans and associated costs are given in Section R645-301-540 of this Chapter. The permit area and adjacent area are in the Price River drainage system which is not within the boundaries of any Wild or Scenic Rivers System. Also, the permit area and adjacent area are not within or adjacent to the boundaries of any public park, NRHP site, cemetery, burial ground or units of the National System of Trails.

The permit area is shown on Exhibit 5-1. It is not anticipated that this area will require enlargement during the life of the operation.

Materials Handling

Construction at Banning Loadout did not include the separating and segregation of topsoil material. The soils were graded throughout the site to achieve desired elevations for specific needs or specific structure requirements. Analyses of the soils at the

loadout indicate that the soil resources have not been lost or otherwise destroyed. Except for compaction, the capability and potential productivity are equal to that of the contiguous Ravola soil.

Soil that will be disturbed during the construction of drainage control structures will be used as part of the berms, dikes or sedimentation pond. Topsoil will be removed and used as the outslope material for the berms and dikes. The outslopes of the sedimentation pond and all disturbed area associated with pond construction will be revegetated as stated in Section R645-301-540. This will protect the soils from wind and water erosion and lessen the chance of deterioration.

Coal processing wastes are not being produced by the Applicant's Banning Loadout at the present or, foreseeable, future time. Coal processing wastes that could be produced at the site would be a screen rock-coal mixture. Disposal of this type of waste would be by blending it back into the coal for retail sale, ~~transporting the waste to Soldier Canyon Mine's waste rock disposal site,~~ or if the waste meets MSHA's and other requirements, returning the waste to underground mine workings. There are no plans to use any coal processing waste as construction material at the site, although some coal and/or rock may be mixed into the berms, dikes or pond during construction. The reasons for this are because it would be virtually impossible to exclude all of this material due to the existing soil environment at Banning Loadout. All sediment removed from the sedimentation pond will be blended into the coal for retail sale.

The Applicant will provide DOGM with a 30 day notice prior to transporting coal waste or sedimentation pond waste to Soldier

Canyon Mine. The notification will include the estimated quantity and the final location and disposition of the material. Coal that is transported to the mine site for final disposal will be reported to DOGM, but coal for retail sale will not be reported.

Disposal methods for noncoal wastes will depend upon the specific type of noncoal waste. All salvageable equipment will be sold to local scrap dealers, along with all tramp iron recovered from the belt magnets. Garbage and paper products will be collected in large trash "dumpsters" and disposed of by a licensed contractor ~~M & P Enterprises out of Huntington, Utah.~~ The contract garbage hauling service will collect the trash and haul it to a licensed disposal facility. ~~the Carbon County landfill or East Carbon landfill.~~

Petroleum by-products, such as oil and grease wastes, will be collected in barrels at the site by the operator and sold or returned for recycling to the distributors. Use of any by-product wastes on site is per state and federal regulations (50 CFR 49164; 11/29/85). Spills will be hauled as stated in the spill control plan. (See Appendix 5-2, Spill Prevention Control and Countermeasure Plan).

Temporary storage locations for waste disposal are shown on Exhibit 5-2.

Environmental Impacts and Mitigations

Environmental impacts caused by the Applicant's operation will be kept to a minimum by following environmentally sound practices. The major effect on the environment will be the loss of ~~approximately 26.1 acres of~~ ground to surface disturbance. This

loss will be mitigated at the end of the operation, when the Applicant reclaims the lands as stated in Section R645-301-540. Additional impacts to the environment will be avoided through careful planning and adherence to this Permit Application Package.

Impacts to the wildlife in the area will be minimized by maintaining the small disturbance area and by avoiding contact with all wildlife. Since there are no perennial streams within or adjacent to the permit area, there will be little if any impact to fisheries. Banning Loadout does have above the ground electrical power lines which could become potential contacts with eagles or other large birds. These lines, however, are designed and constructed in accordance with the guidelines set forth in Environmental Criteria for Electric Transmission Systems or as approved by DOGM.

There are no prime or important farmlands that occur within or adjacent to the permit area. A copy of the SCS's investigation for prime farmlands included in Appendix 2-1 ~~Chapter 1~~. No special provisions for prime or important farmlands were made in the application.

The Applicant will notify DOGM of any slide within the permit area that may have a potential adverse effect on public property, health, safety or the environment. Also, the Applicant will comply with all remedial measures by DOGM. (See Section R645-301-515).

Operational Monitoring Plans

Water monitoring at Banning Loadout will consist of sampling for UPDES parameters monthly when we discharge from the sedimentation

operated in accordance to the approval order. Each year, the emission inventory for the operation is submitted to the Utah Division of Environmental HealthQuality, BureauDivision of Air Quality. A copy of this emission inventory will be included in the annual report. Also, a copy of the approval order is shown in Chapter 1.

The sedimentation pond for Banning Loadout, along with all berms and embankments, will be constructed in accordance to the design criterion in Chapter 7 and Appendices. Inspections of the pond will be done quarterly for structure weakness, erosion and any other hazardous conditions. Also, following the construction, the pond embankment was inspected and certified by a registered professional engineer. The first inspection was the first quarter following construction of the pond. These inspection will be submitted to DOGM as a part of the annual report. Along with the inspections, a general report on the condition of all runoff control structures and any repairs to them will be sent yearly to DOGM (See Section R645-301-514.300).

DOGM will be notified within 30 days or as soon as it is known that Banning Loadout will temporary cease operations for more than 30 days. The notice will include a statement of the exact number of effected surface acres in the permit area and all activities that will cease and those that will continue during the temporary cessation. (See Section R645-301-515.300).

The intent of all monitoring programs for Banning Loadout is to insure that no additional degradation of the environment occurs due to the Applicant's operation. As stated throughout this section, all monitoring information will be submitted to DOGM in

minimizes impacts to the fish and wildlife. The Applicant reserves the right to amend the fish and wildlife plan.

The major emphasis of the FWCP is the restoration of the wildlife habitat destroyed by Banning Loadout. Reclamation of the area will be as outlined in Chapter 3 and will return the land to an environment similar to the premining condition. This environment will be capable of supporting the approved postmining land uses. Other measures included in the FWCP are:

1. Employee education program to minimize the potential negative impact of employees upon wildlife (See Chapter 3).
2. Reporting of threatened or endangered plant or wildlife species.
3. Timing any major disturbances during May and June so that blasting or major earthwork is avoided, whenever possible, from one hour before and two hours after sunrise or sunset.
4. Regulation of the use of pesticides or chemicals that have serious consequences to plants or wildlife.
5. Prevention of fires and their spreading outside the permit area.

R645-301-521.100 Cross Sections and Maps

The application will include cross sections, maps and plans showing all the relevant information required by the Division, to include, but not be limited to:

Required maps and cross-sections are included in this Chapter as Exhibits. The following information is shown on these maps:

R645-301-521.110 Previously Mined Areas

These maps will clearly show:

R645-301-521.123 Each public road located in or within 100 feet of the proposed permit area;

The haulage road used to transport coal to the site splits off of U.S. Highway 6-50 just after the Sunnyside Junction. The road parallels the highway for approximately 1200 feet, then curves toward the loadout facilities. Parts of the permit area lie within 100 feet of the U.S. Highway 6-50 Right-of-Way. Location of the permit and U.S. Highway 6-50 are shown on Exhibit 5-1. There are no other public roads within 100 feet of the permit area.

R645-301-521.124 The location and size of existing areas of spoil, waste, coal development waste, and noncoal waste disposal, dams, embankments, other impoundments, and water treatment and air pollution control facilities within the proposed permit area. The map will be prepared and certified according to R645-301-512; and

All other facilities are shown on Exhibit 5-2. This map is prepared and certified according to R645-301-512.

R645-301-521.125 The location of each sedimentation pond, permanent water impoundment, coal processing waste bank and coal processing waste dam and embankment in accordance with R645-301-512.100, R645-301-512.230, R645-301-521.143, R645-301-521.169, R645-301-528.340, R645-301-531, R645-301-533.600, R645-301-533.700, R645-301-535.140 through R645-301-535.152, R645-301-536.600, R645-301-536.800, R645-301-542.500, R645-301-732.210, and R645-301-733.100.

The location of the sediment pond is shown on Exhibit 7-1 and 5-2.

There are no permanent water impoundment, coal processing waste banks or coal processing waste dams or embankments associated with this operation.

R03/28/95

R645-301-521.130 *Landowners and Right-of-Entry and Public Interest Maps.* These maps and cross sections will clearly show:

R645-301-521.123 Each public road located in or within 100 feet of the proposed permit area;

The haulage road used to transport coal to the site splits off of U.S. Highway 6-50 just after the Sunnyside Junction. The road parallels the highway for approximately 1200 feet, then curves toward the loadout facilities. Parts of the permit area lie within 100 feet of the U.S. Highway 6-50 Right-of-Way. Location of the permit and U.S. Highway 6-50 are shown on Exhibit 5-1. There are no other public roads within 100 feet of the permit area.

R645-301-521.124 The location and size of existing areas of spoil, waste, coal development waste, and noncoal waste disposal, dams, embankments, other impoundments, and water treatment and air pollution control facilities within the proposed permit area. The map will be prepared and certified according to R645-301-512; and

All other facilities are shown on Exhibit 5-2. This map is prepared and certified according to R645-301-512.

R645-301-521.125 The location of each sedimentation pond, permanent water impoundment, coal processing waste bank and coal processing waste dam and embankment in accordance with R645-301-512.100, R645-301-512.230, R645-301-521.143, R645-301-521.169, R645-301-528.340, R645-301-531, R645-301-533.600, R645-301-533.700, R645-301-535.140 through R645-301-535.152, R645-301-536.600, R645-301-536.800, R645-301-542.500, R645-301-732.210, and R645-301-733.100.

The location of the sediment pond is shown on Exhibit 7-1 and 5-2.

There are no permanent water impoundment, coal processing waste banks or coal processing waste dams or embankments associated with this operation.

R03/28/95

R645-301-521.130 *Landowners and Right-of-Entry and Public Interest Maps.* These maps and cross sections will clearly show:

R645-301-521.165 Each topsoil, spoil, coal preparation waste, underground development waste, and noncoal waste storage area. The map will be prepared and certified according to R645-301-512;

There are no ~~topsoil piles~~, spoil piles, coal preparation waste or underground development waste storage areas associated with this site. Temporary storage areas for both coal and noncoal waste is shown on Exhibit 5-2.

throughout the life-of-operations. All existing structures are shown on Exhibit 5-2. The structures meet the performance standards of the ACT and provide adequate compliance so that no significant harm to the environment, public health or the safety will result from the use of the structures.

The design and construction of the haulage road was submitted to and approved by the BLM prior to construction. The road was constructed as per BLM requirements and preconstruction conference between Authorized Officer and Applicant. The road was resurfaced during 1988 as part of the regular maintenance to insure adherence to the original design. All drainage control devices originally installed during construction are being maintained free from debris that could impair the functions of the devices.

All drainage from the railroad company's main line and the spur are kept separate from the surface disturbance drainage. This drainage flows parallel to the main line and toward the south end of the loadout facility (Exhibit 5-2). All other support facilities are maintained and used in a manner which prevents, to the extent possible, damage to the environment.

All facilities will be removed upon final reclamation, except the main line track, substation and a portion of the haul road as shown on Exhibit 5-6.

R645-310-526.111 *Location*

Facilities are shown on Exhibit 5-2

R645-301-536.700 Coal Processing Waste

For the purposes of UNDERGROUND COAL MINING AND RECLAMATION ACTIVITIES, each plan for returning coal processing waste to abandoned underground workings will describe the source and quality of waste to be stowed, area to be backfilled, percent of the mine void to be filled, method of constructing underground retaining walls, influence of the backfilling operation on active underground mine operations, surface area to be supported by the backfill, and the anticipated occurrence of surface effects following backfilling.

Coal processing wastes are not being produced at the Banning Loadout at the present, or foreseeable future time. Coal processing waste that could be produced at the site would be a screen rock-coal mixture. Disposal of this type of waste would be by blending it back into the coal for retail sale, ~~transporting the waste to Soldier Canyon Mine's waste rock disposal site,~~ or if the waste meets MSHA's and other requirements, returning the waste to underground mine workings. There are no plans to use any coal processing waste as construction material at the site, and no disposal will occur on site.

R645-301-536.800 Coal processing waste banks, and embankments will be designed to comply with:

N/A There are no plans to construct coal processing waste banks, dams or embankments at this site, therefore R645-301-536.810 through R645-301-536.824 will not be listed.

R645-301-536.900 Refuse Piles. Refuse piles will meet the requirements of R645-301-210, R645-301-512.230, R645-301-513.400, R645-301-528.320, R645-301-536 through R645-301-536.200, R645-301-536.500, R645-301-536.900, R645-301-542.730, R645-301-553.250, R645-301-746.100 through R645-301-746.200, and the requirements of MSHA, 30 CFR 77.214 and 30 CFR 77.215.

N/A There are no plans for refuse piles at this site.

R645-301-537 Regraded Slopes

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The land uses within and adjacent to the permit area are listed in Chapter 4. ~~and commercial business, roads, railroads, rangeland, wildlife and recreational.~~ An operating oil field, Grassy Trails, and an inactive carbon dioxide field, Farnham Dome, are located within the region. The operation of Banning Loadout will have no effect of these land uses or any other uses, except for the rangeland and wildlife uses.

Following final reclamation of the site, the affected lands will be returned to a state similar to that of the premining environment. This will be accomplished by adherence to the reclamation plan contained within this section. ~~The postmining land use within what was the permit area will return to rangeland, wildlife and road uses. These uses are identical to the premining land uses.~~

The ~~tramroad~~ from U.S. Highway 6-50 to the entrance of the loadout facilities will remain following final reclamation of the site. This is as per the Applicant's BLM Right-of-Way 33855. Ownership of the ~~tramroad~~ shall revert to the United States following reclamation activities at the site. The road from the entrance of the facilities to the truck dump will be removed and the lands will be reclaimed (Exhibit 5-6).

The SCS determined that there are no prime or important farmlands within or adjacent to the permit area, so no special contingency will be made during reclamation. Soils

within the reclaimed land will be redistributed, regraded and revegetated. This will insure the stability and productivity of the land. ~~along with maintaining all of the land uses within the area. All reclamation plans will be certified by a professional engineer.~~

R645-301-541.100 Persons who crease coal mining and reclamation operations permanently will close or backfill or otherwise permanently reclaim all affected areas, in accordance with the R645-301- Rules and the permit approved by the Division.

As noted above, upon final cessation of operations, the area will be permanently reclaimed in accordance with the R645 Rules and the permit approved by the Division.

R645-301-541.200 For the purposes of SURFACE COAL MINING AND RECLAMATION ACTIVITIES, all underground openings, equipment, structures, or other facilities not required for monitoring, unless approved by the Division as suitable for the postmining land use or environmental monitoring, will be removed and the affected land reclaimed.

N/A This is a surface loadout for an underground coal mine.

R645-301-541.300 For the purposes of UNDERGROUND COAL MINING AND RECLAMATION ACTIVITIES, all surface equipment, structures, or other facilities not required for continued underground mining activities and monitoring, unless approved by the Division as suitable for the postmining land use or environmental monitoring will be removed and the affected lands reclaimed.

The existing structures are illustrated on Exhibits 5-1, 5-2 and 7-1. At the conclusion of the operation, all equipment will be removed by the operator to other projects, sold as used equipment or sold to a local scrap dealer. No support structures will be abandoned following final bond release. Refer to Chapter 4 Section R645-301-412.100 for information pertaining to the land purchased by East Carbonics Inc. and the associated post mining land use change. A detailed

The Banning Loadout will be abandoned and permanently closed when the Applicant has no further use of the area. Final reclamation will begin with the abandonment and closure. Closure will be timed so that revegetation can take place in the early fall of the same year. All surface structures will be removed and disposed of, except the haulage road belonging to the BLM, at the conclusion of the operation.

Table 5-2 is a detailed timetable for the completion of each major reclamation step. Table 5-3 presents bond calculations for the disturbed areas, which include a breakdown of labor, equipment and material costs. No equipment salvage values were taken into consideration for this bond calculation.

The following sections will further describe each of the various reclamation activities.

R645-301-542 Narratives, Maps and Plans. The reclamation plan for the proposed permit area will include:

R645-301-542.100 A detailed timetable for the completion of each major step in the reclamation plan;

Table 5-2 is a detailed timetable for the completion of each major step of reclamation.

TABLE 5-2
RECLAMATION TIMETABLE
 Months from Start of Reclamation

Activity	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Coal Removal	■	■	■	■												
Operation Closure		■	■	■												
Structures Removal			■	■	■	■										
Concrete & Asphalt Removal				■	■	■	■									
Backfilling, Grading, Channel Construction					■	■	■	■	■							
Soil Reclamation & Revegetation							■	■	■	■						
Mobilization & Demobilization			■					■	■	■	■					
Sediment Pond Removal										■	■					
Place Topsoil & Revegetation											■	■				

R645-301-552 Permanent Features

The only permanent features proposed to left is the portion of the haul road on the B.L.M. Right-of-Way as shown on Exhibit 5-6. Refer to Chapter 4 Section R645-301-412.100 for information pertaining to the land purchased by East Carbonics Inc. and the associated post mining land use change pertaining to the substation.

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BANNING LOADOUT PERMIT

~~SOLDIER CREEK COAL COMPANY~~ **Canyon Fuel Co., LLC - Soldier Canyon**

CHAPTER 7

HYDROLOGY

R645-301-700 Hydrology

This chapter will provide hydrologic information as required for the permit application.

R645-301-710 Introduction

Chapter 7 of this document presents a discussion of hydrologic conditions in the Banning Loadout permit and adjacent areas. Conclusions drawn herein are based upon a field reconnaissance of the area, published literature, and design calculations as described subsequently. This work was authorized by Soldier Creek Coal Company and completed by Richard B. White, P.E. of EarthFax Engineering, Inc., Salt Lake City, Utah.

R645-301-711 General Requirements. Each permit application will include descriptions of:

The following sections will provide descriptions of the hydrologic resources, proposed operations and potential impacts to the hydrologic balance and methods and calculations utilized to achieve compliance with hydrologic design criteria and plans.

R645-301-711.100 Existing hydrologic resources as given under R645-301-720.

Existing hydrologic resources are discussed under Section R645-301-720.

R645-301-711.200 Proposed operations and potential impacts to the hydrologic balance as given under R645-301-730.

Proposed operations and potential impacts to the hydrologic balance are detailed under Section R645-301-730.

R645-301-711.300 The methods and calculations utilized to achieve compliance with hydrologic design criteria and plans given under R645-301-740.

Methods and calculations utilized to achieve compliance with hydrologic design criteria and plan are discussed under Section R645-301-740.

The drive-through shown in Figure 7-3 will be constructed in areas subject to vehicular traffic. These areas include the two exit gates adjacent to the coaling tower and the exit gate along the south fence. An embankment shown in Figure 7-3 will be constructed in the southeast corner of the site. This embankment will direct runoff toward the drainage channel and sedimentation pond.

The runoff originating between the embankment and the fence line, including the test plot area, will not be directed toward the sedimentation pond. This runoff will be directed toward a silt fence on the southern portion of the property. Locations for the embankment and silt fence are shown on Exhibit 7-1. SCCC is requesting a small area exception for this area.

The substation pad area shown in Exhibit 7-1 is graveled to enhance stability. The outslope of the substation area is also graveled. However, runoff flow from the outslope area will not be directed toward the sedimentation pond. Sufficient thickness of gravel will be applied to the outslope area. This will meet the minimum effluent specifications for all drainage flow from the outslope area. SCCC has classified this as a small area exemption for the outslope area. The substation and pad area were removed from the disturbed and permitted area in 2004, when the substation was sold to East Carbonics Inc. The land on which the substation sits was also sold to East Carbonics.

Where straw-bale dikes are **to be** installed **as shown in** (Figure 7-1).

Silt-fence check dams are **to be** installed **as shown in** (Figure 7-2).

All straw-bale dikes and silt fences will be inspected routinely for damage and deterioration. Required repairs and replacements will be made **as soon as possible**.

Three ditch-relief culverts currently exist to convey runoff from undisturbed areas beneath the haulage road to the natural drainage system. These culverts will be inspected at routinely through the life of the loadout facility and repaired as needed.

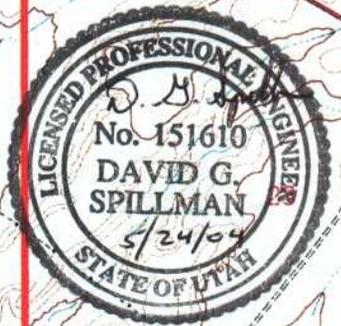
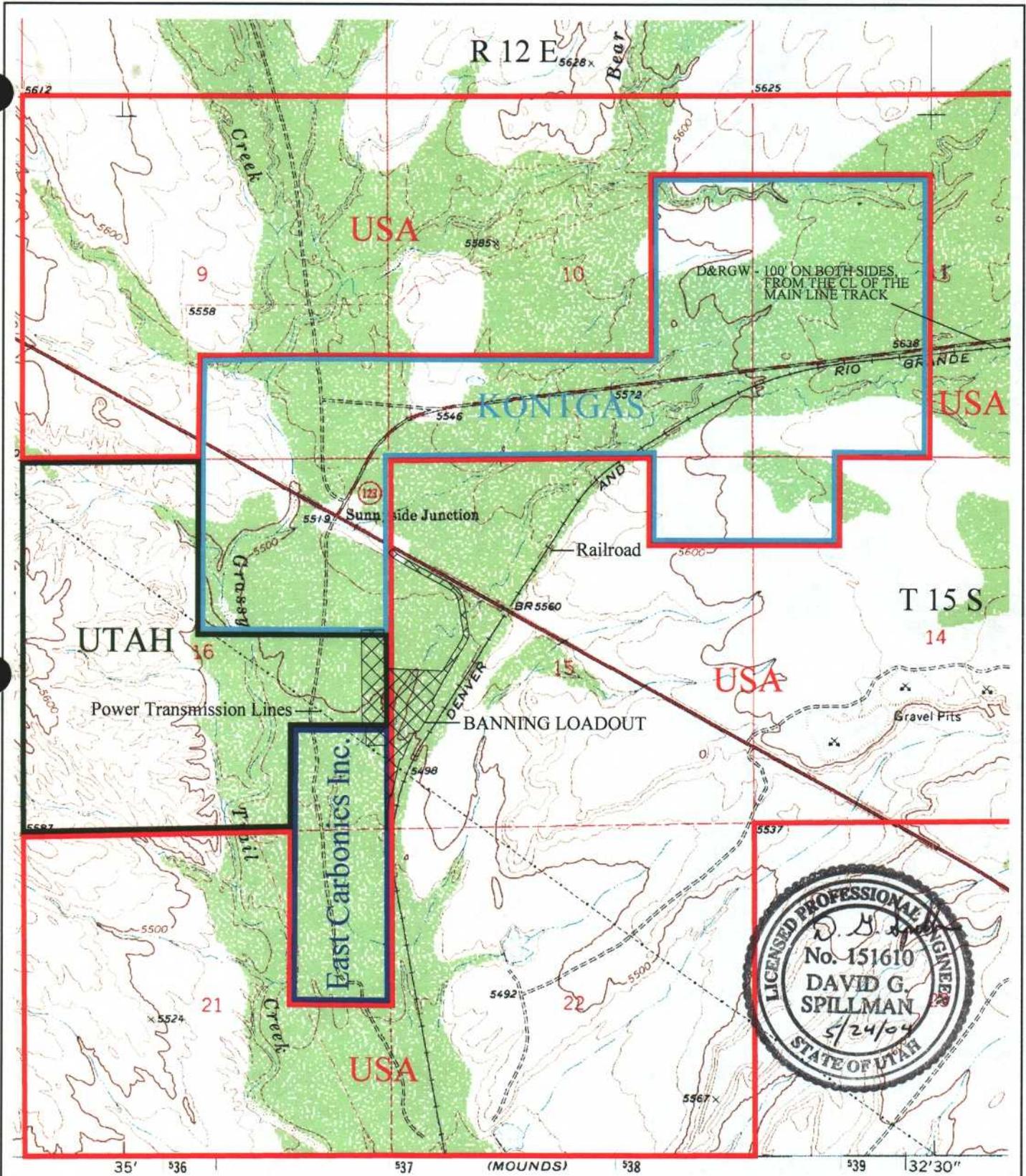
R645-301-742.100 General Requirements

Alternate Sediment Control Areas

The following areas have been identified as alternate sediment control areas and are identified on Exhibit 7-1.

Area 1

This area is located adjacent to ~~and north of~~ the substation. The area contains ~~.43 acres~~ 0.08 acres. The runoff is treated by a silt fence.



35' 36' 37' (MOUNDS) 38' 39' 32'30"



REVISIONS OR UP-DATES			DATE:
NO.	DATE	BY	DESIGNED BY:
1	5/19/04	DGS	DRAWN BY: JKS
			CHECKED BY:
			SCALE: 1"=2000'
FILENAME: Banning Surface.dwg			

Canyon Fuel Company, LLC
Dugout Canyon Mine

Banning Loadout
Surface Ownership

P.O BOX 1029
WELLINGTON, UTAH 84542

DRAWING OR
MAP NUMBER

EXHIBIT 5-4