0004

State of Utah

Department of Natural Resources

MICHAEL R. STYLER
Executive Director

Division of Oil, Gas & Mining

JOHN R. BAZA
Division Director

JON M. HUNTSMAN, JR.
Governor

GARY R. HERBERT
Lieutenant Governor

ok

February 27, 2006

Erwin Sass, General Manager
Canyon Fuel Company, LLC
P.O. Box 1029
Wellington, Utah 84542

Subject: Conditional Approval of Post Mining Land Use Change, Canyon Fuel Company, LLC, Banning Loadout, C/007/0034, Task ID #2391, Outgoing File

Dear Mr. Sass:

The above-referenced amendment is conditionally approved upon receipt of five clean copies prepared for incorporation. Please submit these copies by March 27, 2006. Once we receive these copies, final approval will be granted, at which time you may proceed with your plans.

A stamped incorporated copy of the approved plans will also be returned to you at that time, for insertion into your copy of the Mining and Reclamation Plan. A CD of our Technical Analysis is enclosed.

If you have any questions, please call me at (801) 538-5268 or Dana Dean at (801) 538-5320.

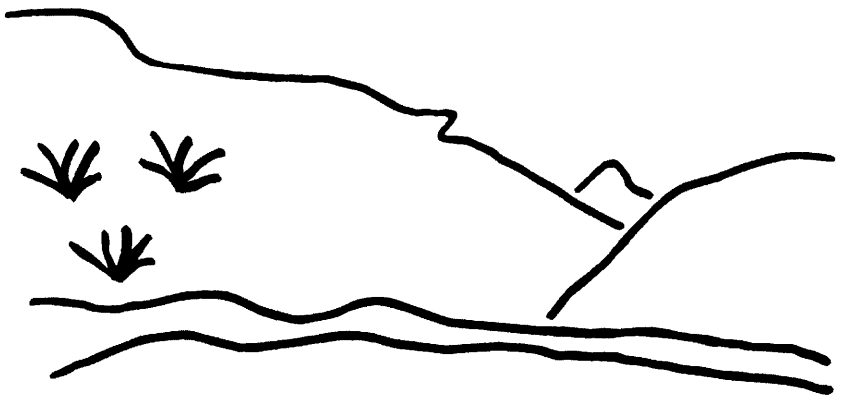
Sincerely,

for D. Wayne Hedberg
Pamela Grubaugh-Littig
Permit Supervisor

an
Enclosure
O:\007034.BAN\FINAL\WG2391\CONDAPP2391.DOC

1594 West North Temple, Suite 1210, PO Box 145801, Salt Lake City, UT 84114-5801
telephone (801) 538-5340 • facsimile (801) 359-3940 • TTY (801) 538-7458 • *www.ogm.utah.gov*

State of Utah



Utah Oil Gas and Mining

Coal Regulatory Program

Banning Loadout
C/007/0034
Technical Analysis
February 27, 2006

TABLE OF CONTENTS

TECHNICAL ANALYSIS DESCRIPTION

The Division ensures that coal mining and reclamation operations in the State of Utah are consistent with the Coal Mining Reclamation Act of 1979 (Utah Code Annotated 40-10) and the Surface Mining Control and Reclamation Act of 1977 (Public Law 95-87). The Utah R645 Coal Mining Rules are the procedures to implement the Act. The Division reviews each permit or application for permit change, renewal, transfer, assignment, or sale of permit right for conformance to the R645-Coal Mining Rules. The Applicant/Permittee must comply with all the minimum regulatory requirements as established by the R645 Coal Mining Rules.

The regulatory requirements for obtaining a Utah Coal Mining Permit are included in the section headings of the Technical Analysis (TA) for reference. A complete and current copy of the coal rules can be found at http://ogm.utah.gov

The TA is organized into section headings following the organization of the R645-Coal Mining Rules. The Division analyzes each section and writes findings to indicate whether or not the application is in compliance with the requirements of that section of the R645-Coal Mining Rules.

REQUIREMENTS FOR PERMITS FOR SPECIAL CATEGORIES OF MINING

COAL PREPARATION PLANTS NOT LOCATED WITHIN THE PERMIT AREA OF A MINE

Regulatory Reference: 30 CFR Sec. 785.21, 827; R645-302-110, R645-302-260, et seq.

Analysis:

As outlined in the subsequent sections of this technical analysis, the application was reviewed under the Utah Rules for Coal Processing Plants Not Located Within the Permit Area of a Mine, R645-**302-260**. All provisions of R645-300 and R645-301 apply to this category of mining unless otherwise specified under R645-302.

Findings:

The information provided meets the Coal Processing Plants Not Located Within the Permit Area of a Mine requirements of the Regulations.

SPECIAL CATEGORIES

GENERAL CONTENTS

IDENTIFICATION OF INTERESTS

Regulatory Reference: 30 CFR 773.22; 30 CFR 778.13; R645-301-112

Analysis:

Canyon Fuel Company, LLC was issued the permit to operate the Banning Loadout (Permit Number C/007/0034) on December 20, 1996 (see correspondence folder and MRP, Section 111).

Volume 1 of the Banning MRP refers the reader to the General Chapter 1, dated February 2005 legal and financial information for Arch Coal. (This information was reviewed and approved under Task # 2069.) The applicant and operator is Canyon Fuel Company, LLC (Section 112.200). The Resident Agent is C.T. Corporation Systems (50 W. Broadway; SLC UT 84104). Canyon Fuel has offices in Colorado, a contact is provided in Section 112.200.

Ownership and control information for Canyon Fuel Company, LLC was recently updated (February 11, 2005) and is presented in Figure 1-1 and in Sections 111 and 112 of the General Chapter 1 Volume. The Permittee, Canyon Fuel Co., LLC, is owned by Arch Coal and its subsidiaries. Figure 1A outlines the corporate structure. And section 112.100 indicates that Delta Housing Inc has a minor (1%) interest in the Arch Western Resources, LLC.

Officers and directors of Canyon Fuel Co., LLC, Arch Western Bituminous Group, LLC, Arch Western Resources, LLC and Arch Coal, Inc are found in Appendix 1-1.
Coal mining and reclamation operations related through corporate structure are listed in Table 1-1 and include the active sites: Dugout, SUFCO, Skyline and Soldier Canyon mines and the reclaimed sites: Gordon Creek No 3 & 6, Gordon Creek No. 2, 7, & 8, and Huntington No. 4 mines in Utah.

The Permittee's registered agent is listed as CT Corporation in the MRP.

[August 9, 2005]

Findings:

The information provided meets the Identification of Interests requirements of the Regulations.

VIOLATION INFORMATION

Regulatory Reference: 30 CFR 773.15(b); 30 CFR 773.23; 30 CFR 778.14; R645-300-132; R645-301-113

Analysis:

General Chapter 1 provides a three year violation history in Table 1-2 for mines related by corporate structure (listed in Table 1-1).
[3/21/2005]

Findings:

The information provided meets the Violation Information requirements of the Regulations.

RIGHT OF ENTRY

Regulatory Reference: 30 CFR 778.15; R645-301-114

Analysis:

Right of way information is described in the text, Section 114 pages1-31 through 1-33 and Appendix 1-5. The Rights of Way are illustrated on Exhibit 4-1. Rights of way have been obtained from the BLM, the State of Utah, and the Railroad.

The disturbed area at Banning Siding Loadout is approximately 26 acres (p.5-9). The most complete legal description of the area to be reclaimed is found in Exhibit B of the Purchase and Sale Agreement between Canyon Fuel Company L.L.C and East Carbonics, Inc., dated May 9, 2003, found in Appendix 1-5 of the MRP.

The Purchase and Sale Agreement between Canyon Fuel Company, L.L.C. and East Carbonics Inc., dated May 7, 2003, is included in Appendix 1-5. This agreement indicates the Buyer's willingness to retain the substation for post-mining land use. The agreement does not transfer the State Lease or BLM Right of Ways. No water rights are conveyed with this agreement.
[3/21/2005]

Findings:

The information provided meets the Right of Entry requirements of the Regulations.

LEGAL DESCRIPTION AND STATUS OF UNSUITABILITY CLAIMS

Regulatory Reference: 30 CFR 778.16; 30 CFR 779.12(a); 30 CFR 779.24(a)(b)(c); R645-300-121.120; R645-301-112.800; R645-300-141; R645-301-115.

Analysis:

Information is provided in Section 115 of the MRP.
[3/21/2005]

Findings:

The information provided meets the Legal Description and Status of Unsuitability Claims requirements of the Regulations.

PERMIT TERM

Regulatory References: 30 CFR 778.17; R645-301-116.

Analysis:

The Mining and Reclamation Plan (MRP) for the Banning Loadout was originally approved by the Division of Oil, Gas and Mining on October 24, 1988 and renewed subsequently on October 24, 1993, October 24, 1998, and on October 24, 2003. The permit term expires October 2008.

The Loadout went into Temporary Cessation on March 7, 2000.
[3/21/2005]

Findings:

The information provided meets the Permit Term requirements of the Regulations.

PUBLIC NOTICE AND COMMENT

Regulatory References: 30 CFR 778.21; 30 CFR 773.13; R645-300-120; R645-301-117.200.

Analysis:

In accordance with R645-301-414 *et seq*, the post mining land use change application is subject to the requirements of R645-300-120 public participation. The notice was published in the Sun Advocate (Price, Utah) on consecutive Tuesdays from August 31 through September 21, 2004. No comments were received.

An Affidavit of Publication was provided to the Division and placed in Appendix 1-2. this appendix has been moved to the General Contents Volume One.
[3/21/2005]

Findings:

The information provided meets the Public Notice and Comment requirements of the Regulations.

PERMIT APPLICATION FORMAT AND CONTENTS

Regulatory Reference: 30 CFR 777.11; R645-301-120.

Analysis:

Exhibit 5-4 and 5-5 in the MRP provide information on surface ownership. Exhibit 5-4 is being revised with this application . Exhibit 5-5 provides information on coal/subsurface ownership.
[3/21/2005]

Findings:

The information provided meets the Permit Application Format and Contents requirements of the Regulations.

MAPS AND PLANS

Regulatory Reference: 30 CFR 777.14; R645-301-140.

Analysis:

Exhibit 5-4 shows the location of the Banning Siding Loadout and surrounding surface ownership. Exhibit 5-1 shows the Banning Siding disturbed area and the location of the acreage to be transferred to adjacent surface owner, East Carbonics Inc.

[3/21/2005]

Findings:

The information provided meets the Maps and Plans requirements of the Regulations.

ENVIRONMENTAL RESOURCE INFORMATION

Regulatory Reference: Pub. L 95-87 Sections 507(b), 508(a), and 516(b); 30 CFR 783., et. al.

PERMIT AREA

Regulatory Requirements: 30 CFR 783.12; R645-301-521.

Analysis:

The permit and disturbed areas are shown on Exhibit 5-1. The disturbed area and area of postmining land use change is shown on Exhibit 5-2. The surface ownership is shown on Exhibit 5-4. The permit area (36 acres) and disturbed area (26.3 acres) are described in Section R645-301-521. The facilities occupy 21.6 acres. The haul road accounts for 4.7 acres.

The Division's bond file indicates the permit area is 36.42 acres and the disturbed area is 21.6 acres.

The Reclamation Agreement indicates that the legal description of the permit area is all or portions of sections 15, 16, 21, 22 in T 15 S, R 12 E, and "described more precisely in the Banning Mining and Reclamation Permit." The legal description of the disturbed area is found in Appendix 5-4, as well as in the Purchase Agreement between Canyon Fuel Company, L.L.C. and Carbonics Inc. included in Appendix 1-5 of the MRP.

The acreage undergoing post mining land use change is 0.41 acres of pad area associated with the substation within the disturbed area and 0.83 acres of the permit area (pp 4-6 and 4-7). [3/21/2005]

Findings:

The information provided meets the Permit Area requirements of the Regulations.

SOILS RESOURCE INFORMATION

Regulatory Reference: 30 CFR 783.21; 30 CFR 817.22; 30 CFR 817.200(c); 30 CFR 823; R645-301-220; R645-301-411.

Provide adequate soil survey information on those portions of the permit area to be affected by surface operations or facilities consisting of a map delineating different soils, soil identification, soil description, and present and potential productivity of existing soils.

Where selected overburden materials are proposed as a supplement or substitute for

topsoil, provide results of the analysis, trials and tests required. Results of physical and chemical analyses of overburden and topsoil must be provided to demonstrate that the resulting soil medium is equal to or more suitable for sustaining revegetation than the available topsoil, provided that trials and tests are certified by an approved laboratory. These data may be obtained from any one or a combination of the following sources: U.S. Department of Agriculture Soil Conservation Service published data based on established soil series; U.S. Department of Agriculture Soil Conservation Service Technical Guides; State agricultural agency, university, Tennessee Valley Authority, Bureau of Land Management or U.S. Department of Agriculture Forest Service published data based on soil series properties and behavior; or, results of physical and chemical analyses, field site trials, or greenhouse tests of the topsoil and overburden materials (soil series) from the permit area. If the permittee demonstrates through soil survey or other data that the topsoil and unconsolidated material are insufficient and substitute materials will be used, only the substitute materials must be analyzed.

Analysis:

At Banning Loadout, the precipitation is seven to nine inches annually. The climate regime is aridic or torric.

Soil resource information for the Banning Loadout is provided in Chapter 2, Volume 1 of the MRP. The native soil is the Ravola series. The site was disturbed pre-law and no topsoil was salvaged. Appendix 2-3 provides an SCS Map Unit description of the Ravola-Slickspot Complex. An excerpt is rewritten below:

The Ravola soil is very deep and well drained. It formed in alluvium derived dominantly from sandstone and shale. The present vegetation in most areas is mainly greasewood, alkali sacaton, pricklypear, Russian thistle, galleta, and Indian ricegrass. Typically, the surface layer is light brownish gray loam about 8 inches thick. The underlying layer to a depth of 60 inches or more is light brownish gray loam. This soil is strongly alkaline below a depth of 20 inches.

Slickspots are barren or nearly barren areas. They have a very strongly alkaline, nearly impervious surface layer of loam about 4 inches thick. The underlying layer is light grayish brown loam and silt loam. This layer is strongly saline and is moderately alkali or strongly alkali.

Test pits and laboratory analysis are found in Appendix 2-2. Three soil pits were dug to a depth of 54 inches. Sample locations are shown on Exhibit 3-1. Test Pit 1 in the vicinity of the equipment storage area seems to represent the native Ravola soils. The pH of the soil in TP-1 ranges from 8.3 to 8.5; the Electrical Conductivity of TP-1 is 0.8 to 0.9 mmhos/cm; the SAR of TP-1 is 1.4 in the surface six inches and from 3.1 to 3.7 from six to 54 inches. The soil texture was reported as a loam.

Test Pits 2 and 3 were dug in soils below the coal storage area and conveyor and seem to

represent the native Slickspots. These soils were very high in pH (from 9.0 to 9.8) and have very high SAR values (from 37 to 78). The soil was sampled down to a depth of 54 inches. Sample locations are shown on Exhibit 3-1. The texture of these in-place sodic soils was described as silt loam (predominantly).

The SCS concludes their discussion of the Ravola soil in Appendix 2-3 with the statement, "It is not practical to revegetate large areas of the Ravola soil because of the low annual precipitation and the content of alkali in the soil."

Section R645-301-231.200 of the MRP describes using Dugout Mine pond clean-out sediments as a top-dressing over the sodic Slickspot soils represented by TP-2 and TP-3 on Exhibit 3-1 (approximately 0.86 acres). These sediments have a pH of 7.4 and an SAR of 2.34. (Laboratory analysis of composite samples of the sediments are found in Appendix 2-2.)

Reclamation test plots at Banning Loadout were monitored from 1991 through 1998 to evaluate the use of organic matter to alleviate extremely harsh soil conditions (Appendix 3-4). One of the conclusions from test plot monitoring was that the most successful treatment was to rip and gouge the surface then seed and mulch. None of the other treatments, such as applying manure, sawdust, or fertilizer, appeared to increase the amount of vegetation.

The practice of discing was used in preparation of the 1991 test plots, but has been removed from the reclamation plan. Discing may have skewed the 1991 test plot results, as the creation of a powdery surface would only compound the impervious nature of alkaline clay soils.

In about 1993, an area near the substation was gouged, seeded with Gardner saltbush (probably *Atriplex gardneri* Var. *tridentata*) and crested wheatgrass (*Agropyron desertorum*), and mulched. This revegetation effort was successful. However, stunted plants may have been due to the Slickspot soils underlying the substation location.

Findings:

The information provided meets the Soils Resource requirements of the Regulations.

OPERATION PLAN

MINING OPERATIONS AND FACILITIES

Regulatory Reference: 30 CFR 784.2, 784.11; R645-301-231, -301-526, -301-528.

Analysis:

The change in the postmining land use to allow the construction of a CO_2 plant did not change the approved use of the Banning Loadout or how operations were conducted. The change in the postmining land use would allow CFC to leave the facilities that East Carbonics Inc. would need such as the substation intact after Phase III bond release.

Findings:

The information provided meets the Mining Operations and Facilities requirements of the Regulations.

TOPSOIL AND SUBSOIL

Regulatory Reference: 30 CFR Sec. 817.22; R645-301-230.

Topsoil Removal and Storage

All topsoil shall be removed as a separate layer from the area to be disturbed, and segregated. Where the topsoil is of insufficient quantity or of poor quality for sustaining vegetation, the selected overburden materials approved by the Division for use as a substitute or supplement to topsoil shall be removed as a separate layer from the area to be disturbed, and segregated. If topsoil is less than 6 inches thick, the operator may remove the topsoil and the unconsolidated materials immediately below the topsoil and treat the mixture as topsoil.

The Division may choose not to require the removal of topsoil for minor disturbances that occur at the site of small structures, such as power poles, signs, or fence lines; or, will not destroy the existing vegetation and will not cause erosion.

All materials shall be removed after the vegetative cover that would interfere with its salvage is cleared from the area to be disturbed, but before any drilling, blasting, mining, or other surface disturbance takes place.

Selected overburden materials may be substituted for, or used as a supplement to, topsoil if the operator demonstrates to the Division that the resulting soil medium is equal to, or more suitable for sustaining vegetation than, the existing topsoil, and the resulting soil medium is the

best available in the permit area to support revegetation.

Materials removed shall be segregated and stockpiled when it is impractical to redistribute such materials promptly on regraded areas. Stockpiled materials shall: be selectively placed on a stable site within the permit area; be protected from contaminants and unnecessary compaction that would interfere with revegetation; be protected from wind and water erosion through prompt establishment and maintenance of an effective, quick growing vegetative cover or through other measures approved by the Division; and, not be moved until required for redistribution unless approved by the Division.

Where long-term surface disturbances will result from facilities such as support facilities and preparation plants and where stockpiling of materials would be detrimental to the quality or quantity of those materials, the Division may approve the temporary distribution of the soil materials so removed to an approved site within the permit area to enhance the current use of that site until needed for later reclamation, provided that: such action will not permanently diminish the capability of the topsoil of the host site; and, the material will be retained in a condition more suitable for redistribution than if stockpiled.

The Division may require that the B horizon, C horizon, or other underlying strata, or portions thereof, be removed and segregated, stockpiled, and redistributed as subsoil in accordance with the above requirements if it finds that such subsoil layers are necessary to comply with the revegetation.

Analysis:

Removal and Storage

Exhibit 3-1 of the MRP shows the soil resources for the Banning Loadout. No stockpiled soil is identified on the map. Approximately 700 cu yds of sediments brought to the site (in August 2001) from the Dugout Mine are stored in the equipment storage area and/or within the disturbed area of ASCA Area #2 (Exhibit 5-2). The MRP page 2-9A describes the placement of these sediments in a two foot thick layer, surrounded by a berm, gouged for water retention, and seeded with the reclamation mix presented in Table 3-3 of the MRP. Laboratory analysis of this soil is found in Appendix 2-2.

Findings:

The information provided meets the Topsoil and Subsoil requirements of the Regulations.

RELOCATION OR USE OF PUBLIC ROADS

Regulatory Reference: 30 CFR 784.18; R645-301-521, -301-526.

Analysis:

CFC will not relocate or use any additional public roads in connection with the change in the postmining land use.

Findings:

The information provided meets the Relocation or Use of Public Roads requirements of the Regulations.

SPOIL AND WASTE MATERIALS

Regulatory Reference: 30 CFR Sec. 701.5, 784.19, 784.25, 817.71, 817.72, 817.73, 817.74, 817.81, 817.83, 817.84, 817.87, 817.89; R645-100-200, -301-210, -301-211, -301-212, -301-412, -301-512, -301-513, -301-514, -301-521, -301-526, -301-528, -301-535, -301-536, -301-542, -301-553, -301-745, -301-746, -301-747.

Analysis:

Disposal of Noncoal Mine Wastes

CFC modified the disposal plan for noncoal mine waste by eliminating the specific contractor that picking up the waste and the specific waste disposal facility in the MRP. CFC replaced the specific contractor and disposal facility with the commitment to use a licensed contractor who would haul the noncoal mine waste to a licensed disposal facility. The Division approved the change in order to give CFC more flexibility. CFC is still required to comply with all regulations for disposal of noncoal mine waste.

Coal Mine Waste

In several sections of the amendment, CFC removed the commitment to ship all coal mine waste to the refuse pile at the Soldier Canyon Mine. CFC recently changed the operation plan for the Soldier Canyon Mine by removing the proposed refuse pile. CFC removed the proposed refuse pile at the Soldier Canyon Mine because they removed the proposed wash plant from the MRP.

The Banning Loadout is in temporary cessation and CFC plans to reclaim the site. In addition, no coal mine waste is on site and CFC has no plans to ship any coal mine waste to the loadout.

Some coal is on site when CFC submitted the amendment. The Division was told by Vicky Miller that CFC is negotiating with third party who is interested in buying the coal. No coal would be on site during reclamation if the sale East Carbonics Inc goes through.

The lack of an approved plan to dispose of coal mine waste from the Banning Loadout is a potential problem. Because the site is in temporary cessation and CFC plans to reclaim the site the Division decided not to take any action at that time. If CFC shipped coal mine waste to the loadout or if coal mine waste was present when reclamation began the Division would require CFC to have plans for dealing with coal mine waste approved. Since CFC has an approved refuse site associated with the Dugout Mine the disposal of coal mine waste at the Banning Loadout should not be a problem.

Findings:

The information provided meets the Spoil and Waste Materials requirements of the Regulations.

HYDROLOGIC INFORMATION

Regulatory Reference: 30 CFR Sec. 773.17, 774.13, 784.14, 784.16, 784.29, 817.41, 817.42, 817.43, 817.45, 817.49, 817.56, 817.57; R645-300-140, -300-141, -300-142, -300-143, -300-144, -300-145, -300-146, -300-147, -300-147, -300-148, -301-512, -301-514, -301-521, -301-531, -301-532, -301-533, -301-536, -301-542, -301-720, -301-731, -301-732, -301-733, -301-742, -301-743, -301-750, -301-761, -301-764.

Sediment Control Measures

Appropriate sediment control measures shall be designed, constructed, and maintained using the best technology currently available to: prevent, to the extent possible, additional contributions of sediment to stream flow or to runoff outside the permit area; meet the more stringent of applicable State or Federal effluent limitations; and, minimize erosion to the extent possible.

Sediment control measures include practices carried out within and adjacent to the disturbed area. The sedimentation storage capacity of practices in and downstream from the disturbed areas shall reflect the degree to which successful mining and reclamation techniques are applied to reduce erosion and control sediment. Sediment control measures consist of the utilization of proper mining and reclamation methods and sediment control practices, singly or in combination. Sediment control methods include but are not limited to: disturbing the smallest practicable area at any one time during the mining operation through progressive backfilling, grading, and prompt revegetation; stabilizing the backfilled material to promote a reduction of the rate and volume of runoff; retaining sediment within disturbed areas; diverting runoff away from disturbed areas; diverting runoff using protected channels or pipes through disturbed areas so as not to cause additional erosion; using straw dikes, riprap, check dams, mulches, vegetative sediment filters, dugout ponds, and other measures that reduce overland flow velocity, reduce runoff volume, or trap sediment; treating with chemicals; and, treating mine drainage in underground sumps.

Analysis:

The Permittee has met the requirements of R645-301-731 by planning the operation of the Banning Loadout facility to:

- Minimize disturbance to the hydrologic balance inside the permit and adjacent areas;
- Prevent material damage to the hydrologic balance outside of the permit area; and
- Support approved post-mining land uses.

Details of the Permittee's hydrologic operation and reclamation plans are found in Chapter 7 of the MRP, and are discussed below.

The Division has not required any additional preventive, remedial, or monitoring measures. [2/24/06]

Groundwater Monitoring

The Permittee has met the requirements of R645-301-731.100-112, and 731.210-215 by planning the operation of the Banning Loadout to protect ground-water quality, and by having an adequate plan to monitor ground water quality.

The plans to protect ground-water quality include the taking an initial grab sample of coal from the Soldier Canyon Mine and testing it for acid/toxic properties, and repeating coal samples quarterly during 1989, and yearly after 1989, or when warranted by a change in mining location (Section 731.110). This quality data would allow the Permittee to realize if/when any coal with acid/toxic forming potential will be at the loadout, and they may then plan to handle it differently to avoid any ground-water effects. All raw data and accompanying reports were included in the Annual Reports until 2000, when the loadout went into temporary cessation. Since the Banning Loadout has been in "temporary cessation" for a number of years, no coal has been actively stored on site, or brought to the site. No operations that would affect ground-water quality have occurred since 2000.

The ground-water monitoring plan is located in Section 731.210. The plan calls for sampling the "Truck Dump Sump," once each year (in the late fall) for a full suite of parameters. The data shall then be submitted to the Division within 90 days of the end of the quarter in which the sampling takes place. Previous data from the sampling program can be found in the Division's Coal Water Quality Database (http://linux1.ogm.utah.gov/cgi-bin/appx-ogm.cgi.) [2/24/06]

Surface Water Monitoring

The Permittee has met the requirements of R645-301-731.120-122, and 731.220-225 by planning the operation of the Banning Loadout to protect surface-water quality, and by having an

adequate plan to monitor the quality of water discharged to local surface-waters.

The PHC determination (Section 728) concludes "the ephemeral nature of stream flow in the vicinity of the Banning Loadout and the naturally high salinity of the Mancos Shale on which the site is situated suggests that local stream flow has the potential of containing high suspended sediment and total dissolved solids concentrations. As a result, background surface-water quality is considered poor and beneficial use of the water is non-existent." The requirements of R645-301-731.120-122 are that the Permittee develop a surface-water monitoring plan based on the PHC determination. The PHC determination is that any water that exists in or near the permit area is ephemeral in nature, and of poor quality. The only possible effect the Loadout will have on the surface water in the area is from potential sediment pond discharges; therefore the only surface-water monitoring the plan includes is that of discharge from the sedimentation pond (in accordance with R645-301-731.222.2). This will ensure that any water discharged from the site meets appropriate effluent values. The data shall then be submitted to the Division within 90 days of the end of the quarter in which the sampling takes place. Previous data from the sampling program can be found in the Division's Coal Water Quality Database (http://linux1.ogm.utah.gov/cgi-bin/appx-ogm.cgi.)

All water from the site is directed to the sediment pond, or treated by an alternative sediment control area (ASCA), so that no water that comes into contact with the site will leave without being treated. [2/24/06]

Acid- and Toxic-Forming Materials and Underground Development Waste

The Permittee has met the requirements of R645-301-731.300 by sampling coal to identify any acid/toxic properties, and having an adequate plan to store (temporary) and bury (permanent) any acid/toxic materials encountered (see Section 731.310-731.320).

An initial grab sample of coal was taken from the Soldier Canyon Mine and tested for acid/toxic properties in 1989. Additional coal samples were taken quarterly during 1989, and yearly after 1989, or when warranted by a change in mining location (Section 731.110). All raw data and accompanying reports were submitted Annual Report until 2000, when the loadout went into temporary cessation.

There is no underground development waste at the Banning Loadout. [2/24/06]

Transfer of Wells

There are no wells or exploratory boreholes at the Banning Loadout (Section 731.400). [2/24/06]

Discharges Into An Underground Mine

There are no underground mining operations at the Banning Loadout, or in the general vicinity. No water from the Banning Loadout will be discharged anywhere near an underground mine. [2/24/06]

Gravity Discharges From Underground Mines

There are no underground mining operations at the Banning Loadout, or in the general vicinity. No water from underground will be encountered at the Banning Loadout. [2/24/06]

Water-Quality Standards And Effluent Limitations

The Permittee has met the requirements of R645-301-751 by having a valid Utah Pollutant Discharge Elimination System (UPDES) permit for the Banning Loadout at all times, and complying with that permit. The UPDES permit for the Banning Loadout was UT0023817 until changed to a general permit (UTG04011) in 1990. There are two permitted outfalls, one for the primary spillway at the sediment pond, and one for the emergency spillway at the sediment pond. [2/24/06]

Diversions: General

The Permittee has met the requirements of R645-301-742.310-314 by designing all diversions to:

- Minimize adverse impacts to the hydrologic balance within the permit and adjacent areas,
- Prevent material damage outside the permit area and to assure the safety of the public,
- Be stable,
- Provide protection against flooding and resultant damage to life and property,
- Prevent, to the extent possible using the best technology currently available (BTCA), additional contributions of suspended solids to stream flow outside the permit area, and
- Comply with all applicable local, Utah, and federal laws and regulations.

There are no underground mines near the Banning Loadout, and no diversions will be used to divert water into underground mines. [2/24/06]

Diversions: Perennial and Intermittent Streams

There are no Perennial or intermittent streams in or near the Banning Loadout permit area. [2/24/06]

Diversions: Miscellaneous Flows

The only flow diverted at the Banning Loadout is any runoff from rainfall.

Berms constructed around the site where the runoff would otherwise flow offsite keep it

contained and prevent untreated runoff from leaving the site. The berms direct the flow toward two diversion channels, along portions of the south and west fences. These channels lead to the sediment pond.

Culverts direct runoff collecting along the access road to natural drainages below.

The Permittee has met the requirements of R645-301-742.330 by designing the diversions and culverts to safely pass (and berms to contain) the peak runoff from at least a 2-year, 6-hour storm. [2/24/06]

Stream Buffer Zones

There are no perennial or intermittent streams within 100 feet of the Banning Loadout. [2/24/06]

Sediment control measures

The Permittee has met the requirements of R645-30-752 by designing appropriate sediment control measures. The sediment control plan is located in Sections 732, 742, and 752, of the MRP. The plan includes the use of one sediment pond, berms, diversions, and alternative sediment control areas (ASCAs). [2/24/06]

Siltation Structures: General

The Permittee has met the requirements of R 645-301-732.100 by constructing and maintaining all siltation structures in compliance with the Rules.

The Permittee has met the requirements of R645-301-752.100 by locating, maintaining, constructing, and planning to reclaim all siltation structures according to plans and designs given in the MRP and the Rules.

The Permittee has met the requirements of R645-301-742.211-212 by directing all water from the site to the sediment pond, or treating it with an alternative sediment control area (ASCA), so that no water that comes into contact with the site will leave without being treated.

The Permittee has met the requirements of R645-356.300 and 763.100-200 by leaving all siltation structures in place until reclamation.

There are no point-source discharges of water from underground workings to surface waters. [2/24/06]

Siltation Structures: Sedimentation Ponds

The Permittee uses one sediment pond to treat runoff from the disturbed area. They have met the requirements of R645-301-742.220-221.39 by properly designing and constructing the pond.

The pond is designed to operate individually, and to contain the runoff from a 10-year 24-hour storm.

The Permittee has met the requirements of R645-301-742.222-223 by including a principal and an emergency spillway for the pond that will safely discharge a 25-year, 6-hour storm.

The pond is not designated as an MSHA pond. [2/24/06]

Siltation Structures: Other Treatment Facilities

There are no other treatment facilities at the Banning Loadout. [2/24/06]

Siltation Structures: Exemptions

There is one small area exemption (SAE) at the Banning Loadout. It is located on the south side of the permit area, and encompasses 0.36 acres (see Section 742.240). [2/24/06]

Discharge Structures

The Permittee has met the requirements of R645-301-744 by properly designing a riprap splash apron at the sediment pond discharge to prevent erosion. [2/24/06]

Impoundments

There are no other impoundments at the Banning Loadout. [2/24/06]

Ponds, Impoundments, Banks, Dams, and Embankments

The Permittee has met the requirements of R645-301-733.110-160 by submitting a plan for the sedimentation pond that:

- Was prepared by a Professional Engineer,
- Contains a description, map, and cross-section of its location,
- Contains required hydrologic and geologic information.

Since there is no underground mining at the Banning Loadout, subsidence will not affect

the pond.

There are no other ponds, impoundments, banks, dams, or embankments at the Banning Loadout. [2/24/06]

Findings:

The information provided meets the Hydrologic Information requirements of the Regulations.

MAPS, PLANS, AND CROSS SECTIONS OF MINING OPERATIONS

Regulatory Reference: 30 CFR Sec. 784.23; R645-301-512, -301-521, -301-542, -301-632, -301-731, -302-323.

Mining Facilities Maps aps

Location of each facility used in conjunction with mining operations. Such structures and facilities shall include, but not be limited to: buildings, utility corridors, roads, and facilities to be used in mining and reclamation operations or by others within the permit area; each coal storage, cleaning, and loading area; each topsoil, spoil, coal preparation waste, underground development waste, and noncoal waste storage area; each water diversion, collection, conveyance, treatment, storage and discharge facility; each source of waste and each waste disposal facility relating to coal processing or pollution control; each facility to be used to protect and enhance fish and wildlife related environmental values; each explosives storage and handling facility; location of each sedimentation pond, permanent water impoundment, coal processing waste bank, and coal processing water dam and embankment, and disposal areas for underground development waste and excess spoil; and, each plan or profile, at cross sections specified by the Division, of the anticipated surface configuration to be achieved for the affected areas during mining operations.

Exhibit 5-2, Banning Loadout Surface Facilities, shows the location of the area for which CFC proposes to change the postmining land use and the area that they sold to East Carbonics Inc. The area with the blue hatching marked "Post Mining Land Use Change Area."

Analysis:

Mining facilities maps

The permittee will submit an updated surface facilities map as an as-built drawing. This map will include the storage location of the sediment pond cleanout (substitute topsoil) from the Dugout Mine. This map will be submitted within sixty days upon completion of the project.

Certification Requirements

All maps submitted with the amendment were certified by a registered professional engineer.

Findings:

The information provided meets the Maps, Plans, and Cross-Sections of Mining Operations requirements of the Regulations.

RECLAMATION PLAN

POSTMINING LAND USES

Regulatory Reference: 30 CFR Sec. 784.15, 784.200, 785.16, 817.133; R645-301-412, -301-413, -301-414, -302-270, -302-271, -302-272, -302-273, -302-274, -302-275.

Analysis:

The pre-mining land use of the area was rangeland and wildlife (MRP, Chap. 4, p.4-7). The area is zoned for mining and grazing (Exhibit 4-1). Section 112.500, page 1-11 of the MRP indicates the surface owners of the land within the permit area are United States (Bureau of Land Management), the State of Utah, Union Pacific Railroad, and East Carbonics Inc (ownership is illustrated on Exhibits 5-4 and 5-5).

The postmining land use for the majority of the permit area is a return to rangeland and roadways. The rangeland postmining land use is supported by a letter from the BLM Area Manager, dated February 21, 1989 (Appendix 4-5).

A post-mining land use change from rangeland to industrial use for 0.83 acres was approved in 2006 (Plate 5-2). Within the 0.83 acres there are 41 acres of pad area associated with the substation (within the disturbed area) and an additional 0.42 acres of undisturbed area (within the permit area). East Carbonics is the landowner.

The Purchase and Sale Agreement between Canyon Fuel Company, L.L.C. and East Carbonics Inc., dated May 7, 2003, is included in Appendix 1-5. The agreement transfers ownership of lands in Section 16, SE/4SE/4; and Section 21 E/NE4, Township 15 South, Range 12 East, Carbon County Utah. An acreage figure is not included in the agreement, but as previously noted, the Permittee indicates the area is 0.83 acres. The Purchase agreement indicates the Buyer's willingness to retain the substation for post-mining land use. Based on this information the Division believes that the industrial post mining land use will be achieved.

The agreement does not transfer the State Lease or BLM Right of Ways. No water rights are conveyed with this agreement. Item 2.2 of the agreement indicates that the entire reclaimed area will be transferred to the buyer after Canyon Fuel Company, L.L.C. receives full bond release.
[03/21/2005]

Findings:

The information provided meets the Postmining Land Uses requirements of the Regulations.

APPROXIMATE ORIGINAL CONTOUR RESTORATION

Regulatory Reference: 30 CFR Sec. 784.15, 785.16, 817.102, 817.107, 817.133; R645-301-234, -301-270, -301-271, -301-412, -301-413, -301-512, -301-531, -301-533, -301-553, -301-536, -301-542, -301-731, -301-732, -301-733, -301-764.

Note: The following requirements have been suspended insofar as they authorize any variance from approximate original contour for surface coal mining operations in any area that is not a steep slope area.

Criteria for permits incorporating variances from approximate original contour restoration requirements.

The Division may issue a permit for non-mountaintop removal mining that includes a variance from the backfilling and grading requirements to restore the disturbed areas to their approximate original contour. The permit may contain such a variance only if the Division finds, in writing, that the applicant has demonstrated, on the basis of a complete application, that the following requirements are met:

1.) After reclamation, the lands to be affected by the variance within the permit area will be suitable for an industrial, commercial, residential, or public post-mining land use (including recreational facilities).

2.) The criteria for the proposed post mining land use will be met.

3.) The watershed of lands within the proposed permit and adjacent areas will be improved by the operations when compared with the condition of the watershed before mining or with its condition if the approximate original contour were to be restored. The watershed will be deemed improved only if: the amount of total suspended solids or other pollutants discharged to ground or surface water from the permit area will be reduced, so as to improve the public or private uses or the ecology of such water, or flood hazards within the watershed containing the permit area will be reduced by reduction of the peak flow discharge from precipitation events or thaws; the total volume of flow from the proposed permit area, during every season of the year, will not vary in a way that adversely affects the ecology of any surface water or any existing or planned use of surface or ground water; and, the appropriate State environmental agency approves the plan.

4.) The owner of the surface of the lands within the permit area has knowingly requested, in writing, as part of the application, that a variance be granted. The request shall be made separately from any surface owner consent given for right-of-entry and shall show an understanding that the variance could not be granted without the surface owner's request.

If a variance is granted, the requirements of the post mining land use criteria shall be included as a specific condition of the permit, and, the permit shall be specifically marked as containing a variance from approximate original contour.

A permit incorporating a variance shall be reviewed by the Division at least every 30 months following the issuance of the permit to evaluate the progress and development of the surface coal mining and reclamation operations to establish that the operator is proceeding in accordance with the terms of the variance. If the permittee demonstrates to the Division that the operations have been, and continue to be, conducted in compliance with the terms and conditions of the permit, the review specified need not be held. The terms and conditions of a permit incorporating a variance may be modified at any time by the Division, if it determines that more stringent measures are necessary to ensure that the operations involved are conducted in compliance with the requirements of the regulatory program. The Division may grant variances only if it has promulgated specific rules to govern the granting of variances in accordance with the provisions of this section and any necessary, more stringent requirements

Analysis:

If the material is used as substitute topsoil, it will add only a maximum of 1,000 cubic yards of material to the reclamation of the entire site. This will have no change to the Approximate Original Contour requirements.

CFC should be able to restore the site to the approximate premining contours. The reason for that is the site is on level ground. The slope ranges from 1% to 2% and no major earthwork occurred during site development, with the exception of sediment ponds. Therefore, the site will be restored to the approximate original contours.

Findings:

The information provided meets the Approximate Original Contour Restoration requirements of the Regulations.

BACKFILLING AND GRADING

Regulatory Reference: 30 CFR Sec. 785.15, 817.102, 817.107; R645-301-234, -301-537, -301-552, -301-553, -302-230, -302-231, -302-232, -302-233.

General

CFC has two backfilling and grading plans. The first plan is based on the approved reclamation plan, which is that CFC would reclaim the site as shown on Exhibit 5-6, Final Contour Map. The second plan is based on how CFC would reclaim the site if the alternative post mining land use was implemented.

Disturbed areas shall be backfilled and graded to: achieve the approximate original contour; eliminate all highwalls, spoil piles, and depressions; achieve a post-mining slope that does not exceed either the angle of repose or such lesser slope as is necessary to achieve a minimum long term static safety factor of 1.3 and to prevent slides; minimize erosion and water

pollution both on and off the site; and, support the approved post-mining land use.

The post-mining slope may vary from the approximate original contour when approval is obtained from the Division for a variance from approximate original contour requirements, or when incomplete elimination of highwalls in previously mined areas is allowed under the regulatory requirements. Small depressions may be constructed if they are needed to retain moisture, minimize erosion, create and enhance wildlife habitat, or assist revegetation.

If it is determined by the Division that disturbance of the existing spoil or underground development waste would increase environmental harm or adversely affect the health and safety of the public, the Division may allow the existing spoil or underground development waste pile to remain in place. Accordingly, regrading of settled and revegetated fills to achieve approximate original contour at the conclusion of underground mining activities shall not be required if: the settled and revegetated fills are composed of spoil or nonacid- or nontoxic-forming underground development waste; the spoil or underground development waste is not located so as to be detrimental to the environment, to the health and safety of the public, or to the approved post-mining land use; stability of the spoil or underground development waste must be demonstrated through standard geotechnical analysis to be consistent with backfilling and grading requirements for material on the solid bench (1.3 static safety factor) or excess spoil requirements for material not placed on a solid bench (1.5 static safety factor); and, the surface of the spoil or underground development waste shall be vegetated in accordance with the revegetation standards for success, and surface runoff shall be controlled in accordance with the regulatory requirements for diversions.

Spoil shall be returned to the mined-out surface area. Spoil and waste materials shall be compacted where advisable to ensure stability or to prevent leaching of toxic materials. Spoil may be placed on the area outside the mined-out surface area in non-steep slope areas to restore the approximate original contour by blending the spoil into the surrounding terrain if the following requirements are met: all vegetative and organic materials shall be removed from the area; the topsoil on the area shall be removed, segregated, stored, and redistributed in accordance with regulatory requirements; the spoil shall be backfilled and graded on the area in accordance with the general requirements for backfilling and grading.

Analysis:

General

The Permittee has plans to use the sediment pond cleanout material as substitute topsoil, if approved by the Division. The maximum amount of sediment pond material (substitute topsoil) will be 1,000 cubic yards. This material would be used to cover the coal yard. This is not enough material to affect backfilling and grading.

Findings:

The information provided meets the Backfilling and Grading requirements of the Regulations.

TOPSOIL AND SUBSOIL

Regulatory Reference: 30 CFR Sec. 817.22; R645-301-240.

Redistribution

Topsoil materials shall be redistributed in a manner that: achieves an approximately uniform, stable thickness consistent with the approved post-mining land use, contours, and surface-water drainage systems; prevents excess compaction of the materials: and, protects the materials from wind and water erosion before and after seeding and planting.

Before redistribution of the material, the regraded land shall be treated if necessary to reduce potential slippage of the redistribution material and to promote root penetration. If no harm will be caused to the redistributed material and reestablished vegetation, such treatment may be conducted after such material is replaced.

The Division may choose not to require the redistribution of topsoil or topsoil substitutes on the approved post-mining embankments of permanent impoundments or of roads if it determines that placement of topsoil or topsoil substitutes on such embankments is inconsistent with the requirement to use the best technology currently available to prevent sedimentation, and, such embankments will be otherwise stabilized.

Nutrients and soil amendments shall be applied to the initially redistributed material when necessary to establish the vegetative cover.

The Division may require that the B horizon, C horizon, or other underlying strata, or portions thereof, removed and segregated, stockpiled, be redistributed as subsoil in accordance with the requirements of the above if it finds that such subsoil layers are necessary to comply with the revegetation requirements.

Analysis:

The Banning Loadout has disturbed approximately 20 acres (Exhibit 5-2). Chapter 2 (pages 2-9 through 2-15) and Chapter 3 (pages 3-8 through 3-17) describe the soil reclamation plans for the Banning Loadout. The MRP describes removing surface coal (the surface will not exceed 50% coal); ripping to a depth of 18 inches; gouging the surface (MRP Section R645-301-231.300 and R645-301-233.100 and R645-301-552.100 (page 5-83); grading to contour; and creation of depressions for moisture retention; addition of 40 lbs/acre of sulfur coated urea (45-0-0); incorporation of 2000 lbs of alfalfa or native grass hay; broadcast or drill

seeding according to Table 3-3; and application of 2000 pounds/acre wood fiber mulch with chemical tackifier.

Approximately 700 cu yds of sediment from the Dugout pond was brought to the Banning Loadout site for use as substitute topsoil. Section R645-301-231.200 of the MRP describes using these sediments as a top-dressing over the sodic Slickspot soils represented by TP-2 and TP-3 on Exhibit 3-1. This topdressing may allow seedlings to become established before encountering the alkaline conditions of the Slickspot soils.
[03/21/2005]

Findings:

The information provided meets the Topsoil and Subsoil Redistribution requirements of the Regulations.

HYDROLOGIC INFORMATION

Regulatory Reference: 30 CFR Sec. 784.14, 784.29, 817.41, 817.42, 817.43, 817.45, 817.49, 817.56, 817.57; R645-301-512, -301-513, -301-514, -301-515, -301-532, -301-533, -301-542, -301-723, -301-724, -301-725, -301-726, -301-728, -301-729, -301-731, -301-733, -301-742, -301-743, -301-750, -301-751, -301-760, -301-761.

Analysis:

Hydrologic Reclamation Plan

The Permittee has met the requirements of R645-301-760 by including an adequate hydrologic reclamation plan in the MRP (Sections 760 through 765). [2/24/06]

Findings:

The information provided meets the Hydrologic Reclamation Plan requirements of the Regulations.

STABILIZATION OF SURFACE AREAS

Regulatory Reference: 30 CFR Sec. 817.95; R645-301-244.

Analysis:

Chapter 5 describes soil roughening in section R645-301-552.100 (page 5-83) of the MRP. Chapter 3 pages 3-8 through 3-17 describes incorporation of 2000 lbs of alfalfa or native grass hay into the soil surface. Mulch will be used at the site as described in R645-301-341.230, page 3-13, at a rate of 2000 lbs wood fiber mulch per acre anchored by a chemical tackifier.

[03/21/2005]

Findings:

The information provided meets the Stabilization of Surface Areas requirements of the Regulations.

MAPS, PLANS, AND CROSS SECTIONS OF RECLAMATION OPERATIONS

Regulatory Reference: 30 CFR Sec. 784.23; R645-301-323, -301-512, -301-521, -301-542, -301-632, -301-731.

Analysis:

Reclamation Backfilling And Grading Maps

The Division addressed the changes that are needed for the backfilling and grading map in the backfilling and grading section of the TA. To avoid duplication, the Division will not restate the deficiencies in this section.

Certification Requirements.

The revised backfilling and grading maps must be certified by a registered professional engineer.

Findings:

The information provided meets the Maps, Plans, and Cross Sections of Reclamation Operations requirements of the Regulations.

BONDING AND INSURANCE REQUIREMENTS

Regulatory Reference: 30 CFR Sec. 800; R645-301-800, et seq.

Analysis:

Bond Number 400SA1916 in the amount of $350,000 was issued May 18, 2000. The Permit area described in Exhibit A of the Reclamation Agreement is 36.42 acres and the disturbed area is 21.6 acres. Exhibit 2.1-1 provided as Exhibit B of the Reclamation Agreement illustrates the permit and disturbed area.
[03/21/2005]

Appendix 8-1 contains current bonding information.

Form of Bond

St. Paul Fire & Marine Insurance Company of Knoxville, TN issued a surety bond. [03/21/2005]

Determination of Bond Amount[sm:)31]

Appendix 8-1 of the MRP outlines the bond cost and includes ripping, gouging and seeding of 21.6 acres (p 5-82).
[03/21/2005]

Terms and Conditions for Liability Insurance

Current liability insurance is routinely kept at the Permittee's offices. A copy of the current insurance is found in Appendix 1-2. The Division is named as the Certificate Holder and will be notified if the policy is cancelled.
[03/21/2005]

Findings:

The information provided meets the Bonding and Insurance requirements of the Regulations.