0008

JON M. HUNTSMAN, JR.
Governor

GARY R. HERBERT
Lieutenant Governor

State of Utah
DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER
Executive Director

Division of Oil, Gas and Mining
JOHN R. BAZA
Division Director

COPY

Outgoing
C0070045
#3349
OK

August 31, 2009

Gina Rau, Environmental Manager
Covol Engineered Fuels, LC
10653 South River Front Parkway, Suite 300
South Jordan, Utah 84095

Subject: Decision Document and Permit, COVOL Engineered Fuels, LC, Wellington Dry-Coal Cleaning Facility, C/007/0045, Task ID #3349, Outgoing File

Dear Ms. Rau:

The Decision Document and Permit for the Wellington Dry-Coal Cleaning Facility are enclosed. Please have both copies of the permit signed by an authorized COVOL representative and return one to the Division. Thank you for your diligence in completing this permitting action.

A copy of your approved (stamped incorporated) Operation and Reclamation Plan is also enclosed for your records. If you have any questions, please call me at (801) 538-5334 or Daron Haddock, Coal Program Manager at (801 538-5325.

Sincerely,

John R. Baza
Director

JRB/DRH/sqs
Enclosures
cc: Jim Fulton, OSM
Dave Ariotti, DEQ
Marc Stilson, Water Rights
Price Field Office
O:\007045.COV\FINAL\PERMIT\2009\Coverltrpermit.doc

File in:
❑ Confidential
❑ Shelf
X Expandable
Refer to Record No 0008 Date 08312009
In C/0070045 2009, Outgoing
For additional information

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

UTAH DNR OIL, GAS & MINING

UTAH DIVISION OF OIL, GAS AND MINING
STATE DECISION DOCUMENT
PERMIT

COVOL Engineered Fuels, LC
Wellington Dry-Coal Cleaning Facility
C/007/0045
Carbon County, Utah

August 31, 2009

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COVOL Engineered Fuels, LC
Wellington Dry-Coal Cleaning Facility
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Carbon County, Utah

August 31, 2009

PROPOSAL

COVOL Engineered Fuels, LC is applying for a permit to conduct coal cleaning operations at its Wellington Utah site located in an industrial area on Ridge Road. The Applicant is using an air-jig method to process coal-bearing materials. COVOL will charge a toll for processing materials received from its off-site clients. Material received and processed by COVOL is considered coal. Material that is accepted by COVOL is processed to generate one of two products: high-quality coal and /or low-quality (low BTU) coal. This coal is then shipped off site in accordance with contract requirements. None of the material processed or generated is considered coal mine waste or coal processing waste.

BACKGROUND

The Division was contacted by COVOL in July of 2004 regarding plans to install a coal cleaning and blending facility near the city of Wellington. Initially, the Division considered this site to be a coal loading facility not "in connection with" a mine and did not require the site to be permitted under the SMCRA regulations. Later as more information became available, it was apparent that this site was conducting physical processing of coal and thus was a surface coal mining operation. On March 17, 2006, Mary Ann Wright, Associate Director at the time, issued a determination to permit the COVOL site under the Surface Mining Control and Reclamation Act. COVOL was required to submit an application to permit the site, however on April 3, 2006 they appealed the decision to the Board of Oil, Gas & Mining. On October 18, 2006 COVOL and the Division filed a "Stipulation and Joint Motion for Continuance" to attempt an amicable resolution of the matter. It was agreed that permitting the site would be advantageous to both parties. COVOL proceeded to post a reclamation bond on the site and commence the permitting process. On January 15, 2008, the Division received an application to permit the COVOL facility. On March 15, 2008 the application was determined to be administratively complete. Public notification, through the Sun Advocate, occurred from April 1, 2008 to April 22, 2008. No public comments were received. The review process consisted of the Division identifying deficiencies in the application and the applicant (COVOL) providing responses. Numerous meetings were held to discuss the results. COVOL provided additional information on October 15, 2008, October 30, 2008, March 30, 2009, and July 13, 2009. Finally on August 18, 2009 the last submittal was made which incorporated all of the updates made throughout the review process and the application was considered to be complete and accurate.

An OSM-AVS recommendation was requested on August 20, 2009, which indicated that an outstanding violation was connected to the applicant through Jim Walter Resources Inc. in Alabama. After contacting the Alabama Surface Mining Commission and COVOL regarding this violation, it was determined that COVOL had nothing to do with the violation issued to Jim Walters Resources and should not be blocked from obtaining a permit. See correspondence from Carla D. Lightsey, Alabama Surface Mining Commission dated August 26, 2009.

RECOMMENDATION

All of the information submitted by COVOL Engineered Fuels, LC has been found adequate to issue a new permit for the Wellington Dry-Coal Cleaning Facility. This permitting action was published in the Price Sun Advocate on April 1, 8, 15, & 22, 2008. No comments were received.

Adequate liability insurance was posted by Headwaters Energy Services Corp., the parent of COVOL Engineered Fuels, LC and a cash reclamation bond has been posted in the amount of $165,000. The Reclamation Agreement was signed and submitted on November 1, 2007.

It is, therefore, recommended that approval for the permit for COVOL Engineered Fuels. LC for the Wellington Dry-Coal Cleaning Facility be approved.

PERMITTING CHRONOLOGY

COVOL Engineered Fuels, LC
Wellington Dry-Coal Cleaning Facility
C/007/0045
Carbon County, Utah

August 31, 2009

July 2004	COVOL contacts the Division regarding plans to operate a dry-coal cleaning facility
March 17, 2006	The Division (Mary Ann Wright) issues a determination to permit the COVOL site
April 3, 2006	COVOL files an appeal of the determination to the Board of Oil, Gas & Mining
October 18, 2006	COVOL and the Division filed a "Stipulation and Joint Motion for Continuance" to attempt an amicable resolution of the matter.
November 1, 2007	COVOL posts bond in the amount of $165,000 and submits a Reclamation Agreement
January 15, 2008	The Division received an application from COVOL to permit the Wellington Dry-Coal Cleaning Facility
March 15, 2008	The application is determined to be administratively complete
April 1, 8, 15, & 22, 2008	Notice of permit application was published in the Sun Advocate for four consecutive weeks.
May 22, 2008	Thirty-day comment period ends. No comments received.
October 15 & 30, 2008 March 30, 2009 July 13, 2009 August 18, 2009	COVOL submits supplemental information in order to complete the application process.
August 26, 2009	The Division received information from Alabama Surface Mining Commission clearing COVOL of an outstanding AVS violation. COVOL is now cleared to receive a permit.
August 31, 2009	CHIA and Technical Analysis are completed. Permit issued.

FINDINGS

COVOL Engineered Fuels, LC
Wellington Dry-Coal Cleaning Facility
C/007/0045
Carbon County, Utah

August 31, 2009

1. The permit application for the Wellington Dry-Coal Cleaning Facility is accurate and complete and all requirements of the Surface Mining Control and Reclamation Act, and the approved Utah State Program (the "Act") are in compliance. See Technical Analysis dated August 31, 2009 (R645-300-133.100)

2. The applicant proposes acceptable practices for the reclamation of disturbed lands. The Division has determined that reclamation, as required by the Act can be feasibly accomplished following the approved plan with the attached permit condition. The site will primarily be returned to its pre-mining land use as an industrial site. (R645-300-133.710)

3. An assessment of the probable cumulative impacts of all anticipated coal mining and reclamation activities in the general area on the hydrologic balance has been conducted by the Division and no significant impacts were identified. See CHIA dated August 31, 2009. The Mining and Reclamation Plan (MRP) proposed under the revised application has been designed to prevent damage to the hydrologic balance in the permit area and in associated off-site area (R645-300-133.400 and UCA 40-10-11 (2)(c).

4. The proposed lands to be included within the permit area are:

    a. not included within an area designated unsuitable for underground coal mining operation (R645-300-133.220);

    b. not within an area under study for designated land unsuitable for underground coal mining operations (R645-300-133.210);

    c. not on any lands subject to the prohibitions or limitation of 30 CFR 761.11 {a} (national parks, etc), 761.11 {f} (public buildings, etc.) and 761.11 {g} (cemeteries);

    d. is within 100 feet of a public road, however public notice and opportunity for a public hearing were provided in the newspaper notice, to determine whether the interests of the public were protected. No requests for a hearing were received (R645-300-133.220); and

e. not within 300 feet of any occupied dwelling (R645-300-133.220).

5. The operation would not affect the continued existence of any threatened or endangered species or result in the destruction or adverse modification of their critical habitats as determined under the Endangered Species Act of 1973. See Technical Analysis dated August 31, 2009 (16 USC 1531 et seq.) (R645-300-133.500).

6. The Division's issuance of a permit is in compliance with the National Historic Preservation Act and implementing regulations (36 CFR 800). See Technical Analysis dated August 31, 2009. (R645-300-133.600)

7. The applicant has the legal right to enter and complete mining activities in the permit area through purchase of the property from Terra Systems and Price City. COVOL also has a Conditional Use permit to operate at this industrial location issued by Wellington City. (R645-300-133.300)

8. A 510 (c) report has been run on the Applicant Violator System (AVS), which shows that: prior violations of applicable laws and regulations have been corrected; neither COVOL Engineered Fuels, LC nor any affiliated company, are delinquent in payment of fees for the Abandoned Mine Reclamation Fund; and the applicant does not control and has not controlled mining operations with demonstrated pattern of willful violations of the Act of such nature, duration, and with such resulting irreparable damage to the environment as to indicate an intent not to comply with the provisions of the Act (A 510 (c) report was run on August 20, 2009, see memo to file dated August 31, 2009. (R645-300-133.730)

9. This operations to be performed under the permit will not be inconsistent with other operations anticipated to be performed in areas adjacent to the proposed permit area.

10. The applicant has posted treasury securities for the Wellington Dry-Coal Cleaning Facility in the amount of $165,000 (R645-300-134).

11. No lands designated as prime farmlands or alluvial valley floors occur on the permit area. See Technical Analysis dated August 31, 2009 (R645-302-313.100 and R645-302-321.100)

12. The proposed postmining land-use of the disturbed area is the same as the pre-mining land use and has been approved by the Division and Wellington City.

13. The Division has made all specific approvals required by the Act, the Cooperative Agreement, and the Federal Lands Program.

14. All procedures for public participation required by the Act, and the approved Utah State Program are in compliance. The public advertisement was published on April 1, 8, 15, 22,

2009 in the Sun Advocate. (R645-300-120)

15. The applicant has demonstrated that all existing structures will comply with the applicable performance standards. (See Technical Analysis dated August 31, 2009) (R645-300-133.720).

16. COVOL Engineered Fuels, LC agrees to pay all reclamation fees as required by 30 CFR Part 870. (R645-300-133.730)

Permit Supervisor

Associate Director of Mining

Director

O:\007045.COV\FINAL\PERMIT\2009\DECISION DOCUMENT 08312009.DOC

NON-FEDERAL | PERMIT C/007/0045 | August 31, 2009

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING
1594 West North Temple, Suite 1210
P.O. Box 145801
Salt Lake City, Utah 84114-5801
(801) 538-5340

This permit, C/007/0045, is issued for the state of Utah by the Utah Division of Oil, Gas and Mining (DOGM) to:

COVOL Engineered Fuels, LC
10653 South River Front Parkway, Suite 300
South Jordan, Utah 84095
(801) 984-9400

for the Wellington Dry-Coal Cleaning Facility. COVOL Engineered Fuels, LC is the owner of the entire surface parcel included within the permit area. A performance bond is filed with the DOGM in the amount of $165,000.00, payable to the state of Utah, Division of Oil, Gas and Mining. DOGM must receive a copy of this permit signed and dated by the permittee.

Sec. 1 **STATUTES AND REGULATIONS** - This permit is issued pursuant to the Utah Coal Mining and Reclamation Act of 1979, Utah Code Annotated (UCA) 40-10-1 et seq, hereafter referred to as the Act.

Sec. 2 **PERMIT AREA** - The permittee is authorized to conduct coal mining and reclamation operations on the following described lands within the permit area at the Wellington Dry-Coal Cleaning Facility situated in the state of Utah, Carbon County, and located:

Township 15 South, Range 10, East, SLBM

Section 14: Portion of the NE 1/4

More accurately described as:

Beginning at the Northwest corner of the Southwest Quarter of the Northeast Quarter of Section 14, Township 15 South, Range 10 East, of the SLB&M; and running thence South 00 deg. 26' 51" East 469.62 feet along the Quarter section Line; thence North 89 deg. 30' 07" East 1020.02 feet; thence North 00 deg. 26' 51" West 397.84 feet to the Southerly Right of Way Line of an existing county Road known as Ridge Road; thence along said line the following two (2) calls, South 89 deg. 23' 40" West 293.93 feet; thence 464.66 feet along the arc of a

1456.39 foot radius curve to the right and concave to the South, (chord bears North 81 deg. 30' 15" West 462.69 feet) to a point on the 40 acre line; thence along said line South 89 deg. 30' 07" West 269.03 feet to the point of beginning. Said parcel contains 10.0 acres.

Beginning at a point which lies South 00 deg. 26' 51" East along the Quarter Section Line 469.62 feet from the Northwest Corner of the Southwest Quarter of the Northeast Quarter of section 14, Township 15 South, Range 10 East, of the SLB&M; and running thence South 00 deg. 26' 51" East 852.51 feet to the North Line of the Southeast Quarter of Section 14; thence along said Line North 89 deg. 40'58" East 1020.02 feet; thence North 00 deg. 26' 51" West 855.73 feet; thence South 89 deg. 30' 07" West 1020.02 feet to the point of beginning. Said parcel contains 20.0 acres.

This legal description is for the permit area (30 acres) of the Wellington Dry-Coal Cleaning Facility and included in the operation and reclamation plan on file at the Division. The permittee is authorized to conduct coal mining and reclamation operations connected with a preparation plant on the foregoing described property subject to the Conditional Use Permit issued by Wellington City, including all conditions and all other applicable conditions, laws and regulations.

Sec. 3 **COMPLIANCE** - The permittee will comply with the terms and conditions of the permit, all applicable performance standards and requirements of the State Program.

Sec. 4 **PERMIT TERM** - This permit becomes effective on August 31, 2009 and expires on September 1, 2014 (5 year term).

Sec. 5 **ASSIGNMENT OF PERMIT RIGHTS** - The permit rights may not be transferred, assigned or sold without the approval of the Director, DOGM. Transfer, assignment or sale of permit rights must be done in accordance with applicable regulations, including but not limited to 30 CFR 740.13(e) and R645-303.

Sec. 6 **RIGHT OF ENTRY** - The permittee shall allow the authorized representative of the DOGM, including but not limited to inspectors, and representatives of OSMRE, without advance notice or a search warrant, upon presentation of appropriate credentials, and without delay to:

A. have the rights of entry provided for in 30 CFR 840.12, R645-400-110, 30 CFR 842.13 and R645-400-220; and,

B. be accompanied by private persons for the purpose of conducting an inspection in accordance with R645-400-100 and 30 CFR 842, when the inspection is in response to an alleged violation reported by the private person.

Sec. 7 **SCOPE OF OPERATIONS** - The permittee shall conduct coal mining and reclamation operations only on those lands specifically designated as within the permit area on the maps submitted in the mining and reclamation plan and permit application and approved for the term of the permit and which are subject to the performance bond.

Sec. 8 **ENVIRONMENTAL IMPACTS** - The permittee shall minimize any adverse impact to the environment or public health and safety through but not limited to:

A. accelerated monitoring to determine the nature and extent of noncompliance and the results of the noncompliance;

B. immediate implementation of measures necessary to comply; and

C. warning, as soon as possible after learning of such noncompliance, any person whose health and safety is in imminent danger due to the noncompliance.

Sec. 9 **DISPOSAL OF POLLUTANTS** - The permittee shall dispose of solids, sludge, filter backwash or pollutants in the course of treatment or control of waters or emissions to the air in the manner required by the approved Utah State Program and the Federal Lands Program which prevents violation of any applicable state or federal law.

Sec. 10 **CONDUCT OF OPERATIONS** - The permittee shall conduct its operations:

A. in accordance with the terms of the permit to prevent significant, imminent environmental harm to the health and safety of the public; and

B. utilizing methods specified as conditions of the permit by DOGM in approving alternative methods of compliance with the performance standards of the Act, the approved Utah State Program and the Federal Lands Program.

Sec. 11 **EXISTING STRUCTURES** - As applicable, the permittee will comply with R645-301 and R645-3023 for compliance, modification, or abandonment of existing structures.

Sec. 12 **RECLAMATION FEE PAYMENT** - The operator shall pay all reclamation fees required by 30 CFR part 870 for coal produced under the permit, for sale, transfer or use.

Sec. 13 **AUTHORIZED AGENT** - The permittee shall provide the names, addresses and telephone numbers of persons responsible for operations under the permit to whom notices and orders are to be delivered.

Sec. 14 **COMPLIANCE WITH OTHER LAWS** - The permittee shall comply with the provisions of the Water Pollution Control Act (33 USC 1151 et seq,) and the Clean Air Act (42 USC 7401 et seq), UCA 26-11-1 et seq, and UCA 26-13-1 et seq.

Sec. 15 **PERMIT RENEWAL** - Upon expiration, this permit may be renewed for areas within the boundaries of the existing permit in accordance with the Act, the approved Utah State Program and the Federal Lands Program.

Sec. 16 **CULTURAL RESOURCES** - If during the course of mining operations, previously unidentified cultural resources are discovered, the permittee shall ensure that the site(s) is not disturbed and shall notify DOGM. DOGM, after coordination with OSMRE, shall inform the permittee of necessary actions required. The permittee shall implement the mitigation measures required by DOGM within the time frame specified by DOGM.

Sec. 17 **APPEALS** - The permittee shall have the right to appeal as provided for under R645-300.

Sec. 18 **SPECIAL CONDITIONS** - There are special conditions associated with this permitting action as described in Attachment A.

The above conditions (Secs. 1-18) are also imposed upon the permittee's agents and employees. The failure or refusal of any of these persons to comply with these conditions shall be deemed a failure of the permittee to comply with the terms of this permit and the lease. The permittee shall require his agents, contractors and subcontractors involved in activities concerning this permit to include these conditions in the contracts between and among them. These conditions may be revised or amended, in writing, by the mutual consent of DOGM and the permittee at any time to adjust to changed conditions or to correct an oversight. DOGM may amend these conditions at any time without the consent of the permittee in order to make them consistent with any new federal or state statutes and any new regulations.

THE STATE OF UTAH

By: John R. Baza

Date: 9/8/09

I certify that I have read, understand and accept the requirements of this permit and any special conditions attached.

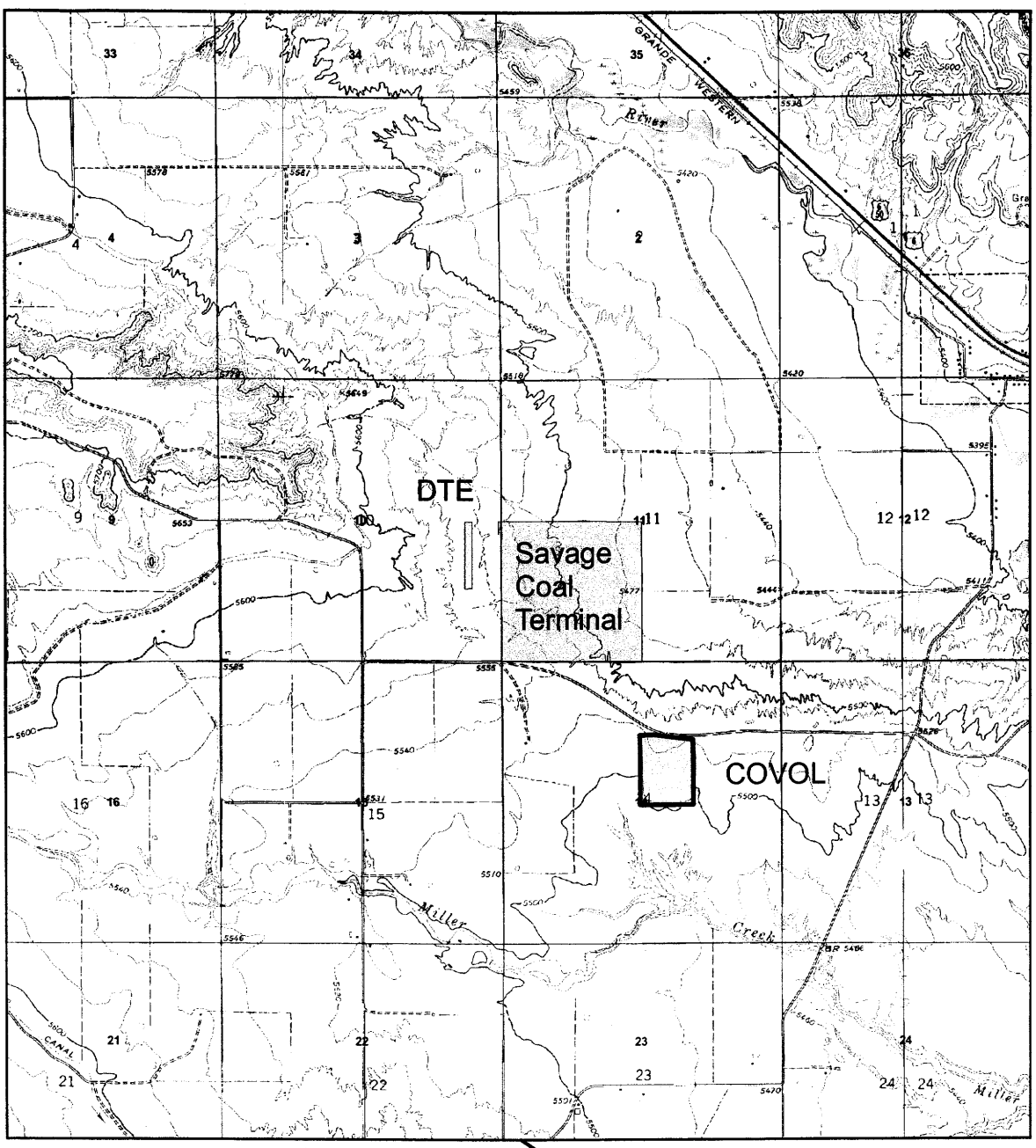
_____

Authorized Representative of the Permittee

Date: _____

ATTACHMENT A
SPECIAL CONDITION

1. COVOL Engineered Fuels, LC will submit water quality data for the Wellington Dry-coal Cleaning Facility in an electronic format through the Electronic Data Input web site, http://linux1.ogm.utah.gov/cgi-bin/appx-ogm.cgi.



COVOL

C0070045
Carbon County, Utah

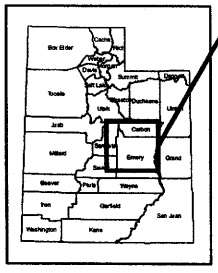
Township 15 South Range 10 East

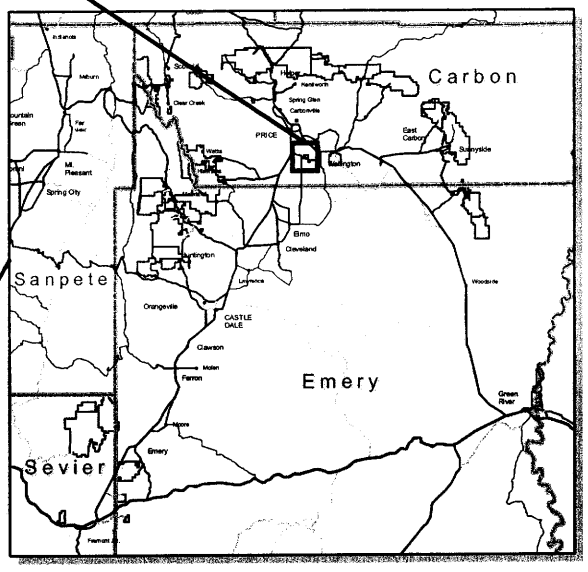
Permit Area
Proposed Mine Plan Modification (If shown)
Proposed State Permit Modification
Active Permit
In Reclamation
Relaimed-Final Bond Release

0 0.15 0.3 0.6 Miles

1:24,000

N:\GIS\coal\coalareamaps\C0070045.mxd
4/2/2008 @ 7:45:01 AM
NAD 1927 UTM Zone 12N





Locator Map

0003

State of Utah
DEPARTMENT OF NATURAL RESOURCES
Division of Oil, Gas & Mining

JON M. HUNTSMAN, JR.
Governor
GARY R. HERBERT
Lieutenant Governor

MICHAEL R. STYLER
Executive Director

JOHN R. BAZA
Division Director

8K

March 14, 2008

Gina Rau, Environmental Manager (801) 984-3770
COVOL Engineered Fuels, LC
10653 South River Front Parkway, Suite 300
South Jordan, Utah 84095

Subject: Determination of Administrative Completeness for Wellington Dry-Coal Cleaning Facility, COVOL Engineered Fuels, LC, C/007/0045, Task ID #2899, Outgoing File

Dear Ms. Rau:

The Division has completed a review of the information received on January 15, 2008. The application is considered to be administratively complete. A copy of our review worksheet is enclosed for your information and records. A technical review of your plan has been initiated. Technical deficiencies will be forwarded to you as reviews are completed.

At this time you should publish a Notice of Complete Application for the Wellington Dry-Coal Cleaning Facility as required by R645-300-121. A copy of the publication should be sent to the Division as soon as it is available. You should also insure that a copy of the application is on file at the appropriate County Courthouse. The Division will complete a technical analysis, which must find that your application is technically complete. We anticipate that additional information may be necessary to make your application technically complete and look forward to working with you throughout the permitting process. Please call Steve Christensen (801) 538-5350 or myself (801) 538-5325 if you have any questions.

Thank you for your help in the permitting process.

Sincerely,

Daron R. Haddock

Daron R. Haddock
Permit Supervisor

skc
Enclosure
cc: Price Field Office
O:\007045.COV\Final\WG2899\ACR_letter_WG2899.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*

ADMINISTRATIVE COMPLETENESS REVIEW WORKSHEET
(R645-100)

DATE: March 15, 2008

REVIEWER(S): Priscilla Burton, Steve Christensen, Joe Helfrich, Wayne Western

APPLICANT: COVOL Engineered Fuels, LC; 10653 South River Front Pkwy, Ste 300; South Jordan UT 84095

MINE NAME: Wellington Dry-Coal Cleaning Facility **FILE NO.:** C/007/0045

"Administratively Complete Application" means an application for permit approval or approval for coal exploration, where required, which the Division determines to contain information addressing each application requirement of the State Program and to contain all information necessary to initiate processing and public review.

Directions: **The categories listed below correspond to the minimum requirements for information necessary to initiate processing and public review. If a category is checked the Applicant has met the Completeness requirement for that category. If a category is not checked, the Completeness requirements have not been met. The comments column will identify the deficiency and what is necessary to correct it.**

			Comments
301-112	Identification of Interests	X	
100	Applicant's Business Structure	X	Applicant is a Limited Liability Corporation.
210	Applicant's Name/Address/Phone	X	Gina Rao, Environmental Mngr. 801-984-3770 COVOL Engineered Fuels, LC; 10653 South River Front Pkwy, Ste 300; South Jordan UT 84095
220	Resident Agent's Name/Address/Phone	X	Contact above is not referred to Resident Agent. Applicant needs to address this rule.
230	Name/Address/Phone of AML Fees Payer	X	The application states in Section 5.3.6 that "'coal processing waste' is converted into a marketable product. Therefore, this material is considered a product, not a waste." AML fees may be required by OSM and this issue is under review by OSM.
300	Corporate Structure & Ownership	X	Organizational chart would be helpful i.e. How are Headwaters Energy Services Corp and Headwaters, Incorporated related ?
400	Identify Other Mining Operations in US	X	AVS check indicates 5 permitted mining operations in AL and IN are operated by COVOL Engineered Fuels, LC. and three permitted sites in KY are operated by affiliated companies. However, the application lists only one pending associated permitted site in KY under affiliated company COVOL Fuels No. 2 and one pending unpermitted site in KY for affiliated company COVOL Fuels No. 3 (Section 1.1.2.4).

500	Surface & Mineral Ownership	X	R645-301-112.600 subsurface ownership not identified, because no subsurface activity to occur on property.
600	Ownership Contiguous to Permit	X	R645-301-112.600 subsurface ownership not identified, because no subsurface activity to occur on property.
700	MSHA Numbers	X	MSHA ID#42-02398
800	Interest in Contiguous Lands	X	NA

301-113	Violation Information	X	NA
100	Suspension or Revocation Information	X	NA
300	List of Violations - **3 Previous Years**	X	none

301-114	Right of Entry	X	Two miles West of Wellington on Ridge Road in Sec. 14, T. 15 S., R. 10 E. SLBM. 30 acres owned by COVOL Engineered Fuels, LC (Sec. 1.1.2 and 1.1.2.5)

301-115	Status of Unsuitability Claims	X	zoned industrial

301-116	Permit Term	X	5 years

301-117	Insurance	X	App. 8-1, liability insurance for parent company, Headwaters Incorporated, covers the permitted site. No blasting coverage (and no blasting to be conducted on site 2007/Incoming/0014.pdf)
	Proof of Publication	X	Upon notice of completeness and prior to publication, a copy of the advertisement as it will appear must be provided to the Division prior to publication (R645-301-112.100).
	Facilities and Structures Used in Common	X	NA

301-118	Filing Fee	X	Fee is outstanding, should be collected upon determination of completeness.

301-123	Notarized Signature of Responsible Official	X	Notorized statement and signature of Keith Thompson, Vice President, COVOL, on C1 form (January 2008 Incoming file 0001.pdf.)

301-130	Information Collection: **Technical Data Accompanied by Names of Persons or Organizations that Collected and Analyzed the Data - Dates of Collections - and Analysis of the Data and Description of the Methodology Used to Collect and Analyze Data**	X	Per management agreement [0070045/Incoming/2007/0005.pdf], no data collected for soil survey.

301-200	Soils	X	Does not meet minimum requirements of R645 Rules, but meets requirements of permitting agreement. [0070045/Incoming/2007/0005.pdf]
211	Description of Pre-mining Soil Resources	X	Sec. 2.2 states elevation of 5,530 ft. Photographs of pre-mining resources would be of benefit in lieu of any survey information.
221	Prime Farmland Investigation	X	Division determined extent of investigation in accordance with R645-302-313. However, the application correctly states there is no farmland on the ridge where the site is located. Prime Farmland and Farmland of Statewide Importance was designated (by the USDA) along the Miller Creek drainage to the south and along the Price River drainage to the north [Utah Agricultural Exp. Sta. Res. Rpt. #76].
222	Soil Survey	X	Soil Map must indicate Map Unit 80 Persayo/Chipeta complex and Map Unit 59 Killpack Clay Loam (green line) based on 1988 Carbon County Soil Survey. Soil Map must designate elevations (the light brown and dark brown lines).
224	Substitute Topsoil Info (When Proposed)	X	none proposed.
230	Operation Plan **Topsoil Handling/Removal/Storage**	X	Section 2.3.1.4 and Sec 2.3.4.2 500 cu. yd. stockpiled in an area 5,500 sq. ft., marked seeded with grasses and forbes in Table 3-1, protected by silt fence. Date of pile construction and seeding required.

240	Reclamation Plan **Soil Redistribution/Stabilization**	X	Sec. 2.40 states limited replacement of soil in 9unspecified) areas to industrial post mining land use and seed with mixture found in Table 3-1. Due to high clays and sodicity, grading work and chiseling when soil is dry must be indicated. Broadcast seeding as described in Sec. 3.40. Pre-disturbance photos indicate that wheat grasses, greasewood, and rabbitbrush do not belong in the seed mix.

301-300	Biology	X	The application includes a section on Biology, Chapter 3.
320	Vegetation Information	X	The application includes a reference to vegetation that is present at the Savage Coal terminal located to the North of the current disturbed area.
322	Fish and Wildlife Information	X	The application includes a reference to wildlife species that are present at the Savage Coal terminal located to the North of the current disturbed area.
323	Maps/Photos **Vegetation-Fish-Wildlife Areas**	X	Chapter 3, section 3.2.3 addresses this section of the regulations.
330	Operation Plan **Vegetation-Fish-Wildlife Protection**	X	The application includes a general description of measures to protect wildlife.
341	Reclamation Plan for Revegetation	X	The application includes a general description of revegetation efforts based on consultation with the future landowner.
342	Fish & Wildlife Plan for Reclamation Phase	X	The application includes a general description of reclamation efforts based on consultation with the future landowner.

301-400	Land Use and Air Quality	X	June 30, 2005 DAQE-AN2952003-05 issued to COVOL Engineered Fuels, LC in App. 4-1, allows process of 1.5 million tons of coal over 12 month period. Equipment: one crusher, one screen, two hoppers, 3 air tables, 3 fabric filter baghouses treating exhaust air from air tables, covered or enclosed conveyors, telescoping discharge tubes. one 200 ton storage silo. Opacity from screens conveyor transfer and baghouse stacks to be 10%, Crushers are allowed 15% opacity. Dust control on operational areas by water sprays Haulroad paved (0.69 miles).

411	Pre-Mining Land Use Information **(Includes Cultural Resources)**	X	The land is zoned for industrial use, Figure 4-1 by Carbon County. According to the premining land use description in Chapter 4 Section 4.1.1.1, page 4-1, the area was undisturbed before COVOL Engineering Fuels LC began their operations. The application includes a general statement to the effect that no cultural resources existed in the permit area prior to construction.
412	Post-Mining Land Use Information	X	Reclamation will support industrial land use (Sec. 4.1.2.1 and Figure 4-1.) Section 4.1.3.2 indicates post mining land use as that which existed before the operation began. [photographs accompanying DOGM Inspection Rpt. #639, dated June 15, 2005 illustrate condition of land just as operation was beginning.]

301-500	Engineering	X	
510 520	General Description of Operation Plan **(Maps, Locations, Cross-Sections, Narrative, Descriptions & Calculations)**	X	
522	Coal Recovery Description	X	No coal mining will occur on the site.
523	Mining Methods	X	No coal mining will occur on the site.
524	Blasting and Explosives Plan	X	No blasting is scheduled on the site.
525	Subsidence Control Plan	X	No underground mining will occur.
526	Mine Facilities Description **(Narrative, Plans, Maps) Including Existing Structures & Support Facilities**	X	The Permittee is permiting the site after construction therefore no pre-disturbed maps were included. Note: the contours must extend 100 feet outside the permit area.
527	Transportation Facilities **(Including Plans & Maps)**	X	The Permittee did include cross sections for the road designs.
528	Coal Mine Waste Plans **(Description & Designs)**	X	Applicant describes creating product out of waste in Section 5.5.2, Sec. 5.2.8.3, Sec. 5.3.6. By-Product stockpiles (#27 and #28) are shown on Plate 5-1. Details of stockpile volumes are requested. Section 5.4.2.2 and Sec. 5.5.3.2 state that coal mine waste will be "properly disposed of at an off-site location." Details of disposal location are requested.

529	Management of Mine Openings **(Design)**	X	No mine openings on site.
531	General Plans for Structures	X	
532	Sediment Control	X	See R645-301-700's (Hydrology Discussion)
533	Impoundments	X	See R645-301-700's (Hydrology Discussion)

301-534	Roads **(Plans, Drawings, Designs, & Specifications)**	X	All roads will be classified as primary.
535	Spoil	X	No spoil will be generated.
536	Coal Mine Waste	X	No coal mine waste will be generated.
537	Regraded Slopes	X	NA
540 541-542	Reclamation Narrative, Maps and Plans	X	The Permittee did not include reclamation maps and cross sections.
551	Casing and Sealing **Underground Openings**	X	There are no underground openings on the site.
553	Backfilling and Grading Description	X	Site will be left for industrial development.

301-600	Geology	X	Geologic information is presented in Chapter 6 of the application.
621	Description of Geology **(Permit & Adjacent Area)**	X	Page 6-3 of the application provides a discussion of the areas stratigraphy.
622	Geologic Cross-Sections, Maps, and Plans	X	Figure 6-1 of the application provides a map and generalized stratigraphic section of the geology of the site area.
630	Plans for Casing and Sealing Holes	X	According to page 6-2 of the application, no oil, gas or water wells are known to exist within a quarter mile of the permit area. In addition, according to page 7-16 of the application, there will not be any groundwater monitoring wells at the facility.

301-700	Hydrology	X	Hydrologic information is presented in Chapter 7 of the MRP.
721	Description of Hydrologic Resources **(Permit and Adjacent Area)**	X	Chapter 7 of the application provides a discussion of the hydrologic resources both within and adjacent to the permit area.
722	Cross-Sections and Maps **Subsurface Water - Surface Water - Monitoring Stations - Wells**	X	Figure 7-1 provides a generalized hydrostratigraphic cross-section of the area. Figure 7-2 depicts the water rights and surface water bodies located adjacent to the proposed permit area.
723	Sampling and Analysis	X	In accordance with the agreement between the Division and the Permittee, ground and surface water sampling was not conducted at the facility.
724	Baseline Information **Ground Water - Surface Water - Geology - Climatological & Supplemental; If Needed**	X	Beginning on page 7-4, the Permittee provides ground and surface water information for both the permit and adjacent area.
728	PHC Determination	X	The Permittee discusses the probable hydrologic consequences from the operation beginning on page 7-7 of the application.
730	General Operation Plan **Minimize Disturbance to Hydrologic Balance & Compliance with Clean Water Act**	X	A UPDES General Permit has been obtained and is presented in Appendix 7-2. The Permittee has also developed a Storm Water Pollution and Prevention Plan (SWPP) and provided it in the application in Appendix 7-3. The SWPP outlines the efforts the Permittee will take to insure that contaminants located at the site do not impact regional hydrologic resources.
731	Ground and Surface Water Protection	X	The Storm Water Pollution Prevention Plan (SWPP) outlines the ground and surface water protection measures to be implemented at the site in order to provide ground and surface water protection. In addition, the Permittee has proposed the construction of two sediment ponds at the site. The sediment ponds will allow for adequate retention time of storm water runoff, thus preventing contaminants from leaving the site.
732	Ground and Surface Water Monitoring	X	As part of the agreement between the Division and the Permittee, ground water will not be monitored at the site. As no streams exist within the permit or adjacent areas, only storm water will be monitored as outlined in the UPDES permit.

301-740	Plans and Designs **Operation and Reclamation Plan** **Sediment Control Measures**	X	The application discusses sediment control measures and sediment pond designs beginning on page 7-12 of the application. Plate 7-2, *Site Watershed and Drainage Map Wellington Dry Coal Cleaning Facility* provides a plan view depicting the locations of the sediment ponds and sediment control structures.
	Siltation Structures	X	The Permittee proposes utilizing two sediment ponds to control sedimentation and silt laden runoff from leaving the site.
	Sediment Ponds	X	Two sediment ponds will be utilized to control storm water runoff from leaving the site. Two UPDES permits have been obtained for the discharge from each of the sediment ponds. Appendix 7-5 provides the hydrologic designs/calculations for the sediment ponds as well as the other sediment control measures to be utilized at the site.
	Other Treatment Facilities	X	NA
	Diversions	X	Sections 4.0 and 5.0 of Appendix 7-5 provide the design calculations for the diversion structures to be utilized at the site.
	Road Drainage	X	Road drainage is discussed on page 7-14 of the application. Road drainage facilities will include diversion ditches, culverts and containment berms. The design calculations/criteria for the road's drainage components are provided in Appendix 7-5.
	Impoundments	X	NA
	Discharge Structures	X	The discharge structures to be utilized at the site consist of the two spillways on the sedimentation ponds. Detailed information for each sediment pond (including their respective spillways) is provided in Sections 7.3.2.2 and 7.4.2.2 of the application.
	Disposal of Excess Spoil	X	The application states on page 7-15, "There is no excess spoil generated at the facility."
	Coal Mine Waste	X	The application states on page 7-15, "No coal mine waste is stored at the facility."
	Disposal of Non-Coal Mine Waste	X	According to page 7-16 of the application, non-coal mine waste will not be stored nor disposed of on site.
	Casing and Sealing of Wells	X	According to page 7-16 of the application, there will not be any groundwater monitoring wells at the facility.

301-800	Bonding and Insurance	X	
820	Applicant **Have Adequate Bond at Permit Issuance**	X	Once permit application is approved, bond must be submitted to the Division prior to work commencing at the site.
830	Bond Estimate and Calculations Provided	X	
890	Certificate of Insurance Provided	X	Can be provided before permit issued.

302-200	Special Categories of Mining	X	NA
210	Experimental Practices Mining	X	NA
220	Mountaintop Removal Mining	X	NA
230	Steep Slope Mining	X	NA
240	Auger Mining	X	NA
250	In Situ Processing Activities	X	NA

302-260	Coal Processing Plants **(Not Located Within Permit Area of Mine)**	X	Permittee is requesting a SMCRA permit.
270	Variances From Approximate Original Contour Restoration Requirements	X	Permittee is not requesting a variance from the approximate original contour restoration requirements.
280	Variances for Delay in Contemporaneous Reclamation Requirement in Combined Surface and Underground Coal Mining Activities	X	NA
290	Small Operator Assistance Program **(SOAP)**	X	Permittee is not applying for Small Operator Assistance.

302-300	Special Areas of Mining	X	NA
301	Prime Farmland	X	NA

302	Alluvial Valley Floors	X	1979 USDA aerial photos show an irrigation canal running through the property and agricultural land immediately to the west.

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State of Utah

Coal Regulatory Program

Wellington Dry-Coal Cleaning Facility

COVOL Engineered Fuels
Headwaters Energy Services Corporation
Technical Analysis
August 31st, 2009

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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 Plan is in compliance with the requirements of that section of the R645-Coal Mining Rules.

GENERAL CONTENTS

IDENTIFICATION OF INTERESTS

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

Analysis:

Section 1.1.2.2 of the Covol Facility's Mining and Reclamation Plan (the Plan) identifies the applicant and operator as COVOL Engineered Fuels, LC. (COVOL). The federal ID numbers and list of officers and directors for the applicant, and parent entities, Headwaters Energy Services Corporation; Headwaters Inc.; and Earnest Partners are provided. A note indicates that the addresses and phone numbers for both parent entities are the same as the West Jordan address of the applicant. The ownership and control relationship is illustrated on Figure 1-1. The AVS system corroborates that the all Headwater Energy Services Corp. derivative companies are headquartered in Utah, as indicated in Figure 1-1.

Gina Rau, Environmental Manager for Headwaters, Inc., has also been identified as the contact for the applicant, COVOL. However, Section 1.1.2.2 specifies that the President and Manager of COVOL, Kenneth R. Frailey, will be responsible for payment of the Abandoned Mine Land fee. The Division understands that COVOL Engineered Fuels, LC is not responsible for AML fees on material received from Savage Services Corp. (see January 2, 2008 letter from Jennifer Smith, OSM, to Commonwealth Coal Services of Virginia.). An OSM inspection report (2008/Incoming/0003.pdf) indicates that R.O.M. coal is a source of raw material. In this case, the coal mine would have already paid the royalty on the R.O.M. coal. As the source of raw material continually changes, the Applicant should document all communication with OSM concerning AML fees.

Table 1-1 lists sites under the control of Headwaters, Inc, either as The Plan or the Operator. The applicant, COVOL Engineered Fuels, LC, has four permitted sites in Alabama. Related entities under the control of Headwaters hold nine additional permits in Kentucky, Indiana, West Virginia and Alabama. The table provides employer identification numbers and MSHA numbers (with date of issuance) for all sites controlled by the Applicant, Covol Engineered Fuels, LC, and affiliates: Covol Fuels No 2 LLC, Covol Fuels No 3 LLC, Covol Fuels No 4 LLC, Covol Fuels No 5 LLC, within the last five years.

Section 1.1.2.6 provides surface ownership information, which is current as of 2008. Appendix 1-3 includes a copy of a portion of the plat map for T. 15 S, R. 10 E. Section 14 which

shows adjacent surface ownership in 2005. Subsurface ownership is not identified, because no subsurface activity will occur. The applicant has stated no interest in contiguous lands.

The site has MSHA ID#42-02398 (as stated in Section 1.1.2.7).

Findings:

The Plan has met the Identification of Interests requirements of the State of Utah R645-Coal Mining Rules.

VIOLATION INFORMATION

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

Analysis:

A listing of violations received by the Applicant and/or affiliated companies is included in Section 1.1.3, as required by R645-301-113.300.

In accordance with R645-301-113.100, The Plan includes a statement that neither the Applicant nor its major stockholders have had a permit suspended or bond forfeited. The Plan was verified by the notarized signature of Keith Thompson, President of Covol Engineered Fuels, LC.

No outstanding violations or unresolved compliance issues were reported for the company or its affiliates (Section 1.1.3). This fact was confirmed by an entity evaluation conducted through OSM's Applicant Violator System on March 13, 2008 and November 26, 2008.

An OSM-AVS recommendation was requested on August 20, 2009, which indicated that an outstanding violation was connected to the applicant through Jim Walter Resources Inc. in Alabama. After contacting the Alabama Surface Mining Commission and COVOL regarding this violation, it was determined that COVOL had nothing to do with the violation issued to Jim Walters Resources and COVOL should not be blocked from obtaining a permit. See correspondence from Carla D. Lightsey, Alabama Surface Mining Commission dated August 26, 2009.

Findings:

The Plan has met the Violation Information requirements of the State of Utah R645-Coal Mining Rules.

RIGHT OF ENTRY

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

Analysis:

The applicant is the surface landowner (Section 1.1.4). Thirty acres is owned by COVOL Engineered Fuels, LC (Sec. 1.1.2 and 1.1.2.5). Appendix 1-3 provides warranty deeds showing a ten-acre parcel was purchased from Price City in 2003 by Terra Systems and transferred to Covol Engineered Fuels, LC in 2005. A twenty-acre parcel was purchased in 2005 from Price City by COVOL Engineered Fuels, Inc. On both parcels, underground oil and gas and mineral rights were retained by Price City.

Findings:

The Plan has met the Right of Entry requirements of the State of Utah R645-Coal Mining Rules.

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:

The thirty-acre facility is located in Sec. 14, T 15 S, R 10 E, 2 miles west of Wellington city limits, in Carbon County. A more precise description is found in the Reclamation Agreement (M:\FILES\COAL\PERMITS\007\C0070045\2007\INCOMING\0012.pdf).

According to title insurance documents in Appendix 1-3, the site is "within the boundaries of the Price River Water Improvement District which has been assigned to Miller Creek Water Special Service District..."

The site is located in an area that is zoned M-1by the County (App. 1-4). There is no unsuitability issue.

Findings:

The Plan has met the Legal Description and Status of Unsuitability Claims requirements of the State of Utah R645-Coal Mining Rules. The COVOL site is not in an area designated as unsuitable for mining operations.

PERMIT TERM

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

Analysis:

The permit term is five years, beginning 2009.

Findings:

The Plan has met the Permit Term requirements of the State of Utah R645-Coal Mining Rules.

PUBLIC NOTICE AND COMMENT

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

Analysis:

Liability insurance is found in Appendix 8-1. The insurance is carried by the parent company Headwaters Incorporated and covers the permitted site. There is no blasting coverage (and no blasting will be conducted at the site, see 2007/Incoming/0014.pdf.

Public notice of the permitting action was published in the Sun Advocate on March 18, 25, April 1, and April 8, 2008. No public comments were received. An affidavit of publication is included in Appendix 1-4 of The Plan.

Findings:

The Plan has met the Public Notice and Comment requirements of the State of Utah R645-Coal Mining Rules.

FILING FEE

Regulatory Reference: 30 CFR 777.17; R645-301-118.

Analysis:

A filing fee has been paid (Section 1.1.8).

Findings:

The Plan has met the Filing Fee requirements of the State of Utah R645-Coal Mining Rules.

PERMIT APPLICATION FORMAT AND CONTENTS

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

Analysis:

The Division determined in 2004 that the COVOL operation would not likely be permitted (PAP, App. 1-1). This 2004 determination is not in the coal program files for the C/007/0045 site. The determination to permit the site was made on March 17, 2006, after much of the site had been developed without the collection of background environmental data.

The Headwaters, Inc. Wellington Dry Coal Cleaning Facility has been in operation since January 2006 (Section 1.1.1). The Plan for permit was received on January 15, 2008. The permitting chronology is as follows

- Division determination to permit dated March 17, 2006. (M:\FILES\COAL\PERMITS\007\C0070045\2006\OUTGOING/0001.pdf).
- COVOL appeal of decision to permit May 12, 2006 (2006/Incoming/0001 and 0003.pdf).
- Stipulation and Joint Motion for Continuance, dated October 20, 2006, refers to settlement agreement to be set forth at a later date (M:\OGMBOARD\Mining\C-007-045/ C-007-045_2006-p011.pdf).
- Order for Continuance dated October 25, 2006, suspending action before the Board until further notice (M:\OGMBOARD\Mining\C-007-045/C-007-045_2006-o009.pdf).

The settlement negotiations are not part of the Board file record or the Coal Program records but are included in the PAP, Appendix 1-1. Steve Alder provided a copy of the [preliminary] settlement negotiations to the Coal Program during a meeting on June 13, 2008. The settlement negotiations letter is dated October 20, 2006, and is in the form of a letter from Steve Alder, Attorney for Division of Oil, Gas & Mining to Craig D. Galli, Attorney for COVOL. The subject line indicates "RE:Settlement Negotiations between COVOL Engineered Fuels, LLC and the Division of Oil, Gas & Mining."

The October 20, 2006 settlement negotiations letter states the premise for the technical review. The Plan follows a format prescribed by the October 20, 2006 [preliminary] settlement negotiations letter that indicates in item 6 that a formal settlement agreement will follow. An Agreement to Conclude Permit and to Continue Operations, dated September 15, 2008 (2008\Incoming\0014.doc) makes progress towards the formal settlement and dismissal of the Board action.

Appendix 1-2 provides the Environmental Compliance Report described in item #3 of the October 20, 2006 settlement negotiations letter.

Findings:

The Plan has met the Permit Application Format and Contents requirements of the State of Utah R645-Coal Mining Rules.

REPORTING OF TECHNICAL DATA

Regulatory Reference: 30 CFR 777.13; R645-301-130.

Analysis:

Environmental audit information has been accompanied by names of persons, dates and descriptions of methodology.

Findings:

The Plan has met the Reporting of Technical Data requirements of the State of Utah R645-Coal Mining Rules.

MAPS AND PLANS

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

Analysis:

Maps include the types of information set forth on USGS 1:24,000 series maps. Maps of the permit area are of a scale of 1:6,000 minimum.

There was no coal mining conducted prior to August 1977. However, the applicant was allowed to develop the site without a permit (letter from Mary Ann Wright to W. Layne Ashton, COVOL Engineered Fuels, LC, September 13, 2004, see Appendix 1-1); and had done some site development by June 15, 2005 (Inspection Report #639, filed in General/2006/Incoming).

By the time the decision to permit was reached March 17, 2006, the 10 acre parcel had been fully developed, but not the additional 20 acres to the south (M:\FILES\COAL\PERMITS\007\C0070045\2006\OUTGOING/0001.pdf). The appeal of the

decision to permit was filed May 12, 2006 (2006/Incoming/0001 and 0003.pdf), and the two parties agreed to settlement October 20, 2006 (see App. 1-1).

Section 1.40 of The Plan states that the entire 30 acre permit area was developed by the time of permit application, January 15, 2008, as illustrated on Plate 5-2, Reclamation Map. Photographs taken during an August 13, 2008 courtesy site visit illustrate that there were islands of undisturbed vegetation and pockets of topsoil west of the office, south of the west topsoil stockpile, and along the south fence line.

Findings:

The Plan has met the Maps and Plans requirements of the State of Utah R645-Coal Mining Rules.

COMPLETENESS

Regulatory Reference: 30 CFR 777.15; R645-301-150.

Analysis:

The Plan was determined complete on March 14, 2008 (M:\FILES\COAL\PERMITS\007\C0070045\2008\OUTGOING). The Division has one year to review and either permit or deny The Plan. Some technical deficiencies were identified on the Apparent Completeness Review form. The first deficiency letter was mailed July 10, 2008. The COVOL permitting agreement was signed on September 15, 2008 (2008\Incoming\0014.doc) and responses to deficiencies were received on October 15, 2008. The Division review date for this round was December 8, 2008. Additional information was submitted on March 30, 2009, and July 13, 2009. Finally on August 18, 2009 the last submittal was made which incorporated all of the updates made throughout the review process and the application was considered to be complete and accurate.

Findings:

The Plan has met the Completeness requirements of the State of Utah R645-Coal Mining Rules.

ENVIRONMENTAL RESOURCE INFORMATION

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

GENERAL

Regulatory Reference: 30 CFR 783.12; R645-301-411, -301-521, -301-721.

Analysis:

The Plan meets the General Environmental Resource Information requirements. Beginning on page 7-2, The Plan provides the general hydrologic information.

Findings:

The Plan has met the General Environmental Resource Information requirements of the State of Utah R645-Coal Mining Rules.

PERMIT AREA

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

Analysis:

The permit area consists of 30 acres. There will be no "mining" at this facility. Coal will be transported to the site from mines in the adjacent coalfield. Coal will be stockpiled blended and shipped from the facility. COVOL is a dry operation where no flotation or chemical separation will occur. A map showing the site and facilities and corresponding permit area is provided in Plate 5-1.

Findings:

The Plan meets the Permit Area requirements of the State of Utah R645-Coal Mining Rules.

HISTORIC AND ARCHEOLOGICAL RESOURCE INFORMATION

Regulatory Reference: 30 CFR 783.12; R645-301-411.

Analysis:

A map delineating the extent of the survey is included in chapter 4. The Plan also included a class one survey, (Literature search) for the permit and adjacent areas.

Findings:

The Plan meets the Historic and Archeological Resource Information requirements of the State of Utah R645-Coal Mining Rules.

CLIMATOLOGICAL RESOURCE INFORMATION

Regulatory Reference: 30 CFR 783.18; R645-301-724.

Analysis:

The Plan meets the Climatological Resource Information requirements per the State of Utah R645-Coal Mining Rules. On page 7-6, the Plan provides climatological information for the site. Data is presented from the Western Regional Climate Center. The Plan provides normal annual precipitation values, normal annual temperatures as well as the average annual wind speed at the location.

Findings:

The Plan meets the Climatological Resource Information requirements of the State of Utah R645-Coal Mining Rules.

VEGETATION RESOURCE INFORMATION

Regulatory Reference: 30 CFR 783.19; R645-301-320.

Analysis:

The Plan includes a current list of Threatened and Endangered plant species for Carbon County. The Plan references information according to the Savage Coal Terminal MRP. That

information is included in the Plan along with the names of individuals responsible for collecting the information. The Plan also includes a map and a vegetative survey of the permit and adjacent areas.

Findings:

The Plan meets the Vegetation Resource Information requirements of the State of Utah R645-Coal Mining Rules.

FISH AND WILDLIFE RESOURCE INFORMATION

Regulatory Reference: 30 CFR 784.21; R645-301-322.

Analysis:

The Plan includes a current list of Threatened and Endangered wildlife species for Carbon County. Page 3-3, Section 3.2.2 references Savage Services Corporation 1983 for information about fish and wildlife. That information is included in the Plan along with supporting data and maps and the names of the individuals responsible for acquiring the data and analyzing the information. The applicant has provided a commitment to conduct a burrowing owl survey in the spring of 2010.

Findings:

The Plan meets the Fish and Wildlife Resource Information requirements of the State of Utah R645-Coal Mining Rules.

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.

Analysis:

Per Division/COVOL Engineered Fuels, LC agreement, the Plan relies upon published soil survey information for that portion of the site that that has been disturbed by the operations to date, see.M:\FILES\COAL\PERMITS\007\C0070045\2007\INCOMING\0005.pdf and M:\FILES\COAL\PERMITS\007\C0070045\2007\OUTGOING\0008.pdf.

Sec. 2.2 states elevation of 5,530 ft. The site is on a ridge, which juts up above the 5,500 ft elevation lines shown on Figure 2-1. Figure 2-1, Soil Map indicates Map Unit 80 Persayo/Chipeta complex and Map Unit 59 Killpack Clay Loam based on 1988 Carbon County

Soil Survey. Appendix 2-2 provides map unit information from the Carbon County Soil Survey. Appendix 2-1 has photographs of the site prior to disturbance, in lieu of site-specific survey information.

Plate 5-2 illustrates the site development at the time of permit application and indicates that ten acres (to the south) have been only marginally disturbed by two sediment ponds. Photographs taken during an August 13, 2008 courtesy site visit illustrate that there were islands of undisturbed vegetation and pockets of topsoil west of the office, south of the west topsoil stockpile, and along the south fence line. Section 2.2.2 states that prior to any future disturbance in any undisturbed areas of the site, soil will be sampled.

Findings:

The Plan has met the Soil Resource Information requirements of the State of Utah R645-Coal Mining Rules.

LAND-USE RESOURCE INFORMATION

Regulatory Reference: 30 CFR 783.22; R645-301-411.

Analysis:

Land Use information is provided for in chapter 4 of the Plan. According to the information in the Division's records and on page 4-1 of the Plan, the area was previously undisturbed even though it may have been zoned for industrial use as noted on the zoned land use map figure 4-1. Covol Technologies Inc. as a coal processing facility is currently using the land. The Plan includes a narrative that describes the current uses of the land by Covol Technologies.

Post Mining Land Use Information is included in Chapter 4, page 4-2, Section 4.1.2.1. After operations have been completed, the applicant intends to grade the site, stockpile topsoil and construct drainage controls. Except for grading to approximate original contour, topsoil stockpiling and the construction of drainage controls are not permitted at the conclusion of mining.

The land is zoned for industrial use, Figure 4-1. Appendix 1-4 provides a description of the M-1 zoning for the site. The Vegetation Map in Appendix A of App. 3-1 shows the surrounding agricultural land and the proximity of the mine site to Miller Creek. The site will be reclaimed for industrial use.

Findings:

The Plan has met the Land-Use Resource Information requirements of the State of Utah R645-Coal Mining Rules.

ALLUVIAL VALLEY FLOORS

Regulatory Reference: 30 CFR 785.19; 30 CFR 822; R645-302-320.

Analysis:

Alluvial Valley Floor Determination

The Plan meets the Alluvial Valley floor requirements as outlined in the State of Utah R645-Coal Mining Rules. The Plan addresses alluvial valley floors in Chapter 9 of The Plan.

The Plan states, "The COVOL Dry –Coal Cleaning Facility is located in an upland area overlain by a thin veneer of colluvial, slope wash deposits. It is not located within or adjacent to an alluvial valley floor."

Findings:

The Plan meets the Alluvial Valley Floor requirements of the State of Utah R645-Coal Mining Rules.

PRIME FARMLAND

Regulatory Reference: 30 CFR 785.16, 823; R645-301-221, -302-270.

Analysis:

The Plan correctly states there is no farmland on the ridge where the site is located, see.M:\FILES\COAL\PERMITS\007\C0070045\2007\INCOMING\0005.pdf and M:\FILES\COAL\PERMITS\007\C0070045\2007\OUTGOING\0008.pdf.

Prime Farmland and Farmland of Statewide Importance was designated (by the USDA) along the Miller Creek drainage to the south and along the Price River drainage to the north [Utah Agricultural Exp. Sta. Res. Rpt. #76].

1979 USDA aerial photos show an irrigation canal running through the property and agricultural land immediately to the west. This irrigation canal has since been abandoned.

Findings:

The Plan meets the Prime Farmland requirements of the State of Utah R645-Coal Mining Rules. The Division conducted an investigation in accordance with R645-302-313, and finds that there is no prime farmland within the permit area.

GEOLOGIC RESOURCE INFORMATION

Regulatory Reference: 30 CFR 784.22; R645-301-623, -301-724.

Analysis:

The Plan provides information to describe the geology of the area. Regional geology is described in Chapter 6 of the MRP. Figure 6-1 is a generalized stratagraphic section of the site. The rock surrounding and underlying the permit area is sedimentary. For the most part of the permit area, the facilities sit on alluvium that covers the Bluegate Shale member of the Mancos Shale Formation. COVOL site will process coal from costumer mines in the adjacent coalfield. No mining will take place and no exploration holes exist on the permit area. No faults occur on or adjacent to the facilities. The general dip of the consolidated strata is 3 to 6 degrees to the northwest.

Findings:

The Plan meets the Geologic Resource Information requirements of the State of Utah R645-Coal Mining Rules.

HYDROLOGIC RESOURCE INFORMATION

Regulatory Reference: 30 CFR Sec. 701.5, 784.14; R645-100-200, -301-724.

Analysis:

Water Rights

The Plan discusses water rights within the adjacent area of the permit beginning on page 7-3. A previous Division technical analysis (Task ID #2899) had identified water rights that were not discussed and/or presented in the previous submittal. Specifically, upon reviewing the water right information available on the Division of Water Rights database, it was determined that Water Right #91-3295 was located on Miller Creek approximately ¾ of a mile south of the

site. The Plan has amended the water right information in Appendix 7-1 as well depicted Water Right #91-3295 on Figure 7-2, *Surface Point of Diversion Water Rights and Permitted Facility Discharge Locations.*

In addition, The Plan has amended the water right information contained in Appendix 7-1 to include the numerous places of use (POU) that were identified in the Division of Water Rights Database. Upon review of the 69 POU's within the adjacent area of the site, it was determined that the Price River Water user's Association (PriWD) held these water rights. These POU's represent water that is diverted from remote locations well outside the permit area and delivered via distribution systems throughout the region for industrial use as well as some limited stock watering and domestic use.

Sampling and Analysis

Upon consultation with the Division, The Plan utilized sampling and analysis data from the Savage Coal Terminal to characterize the ground and surface water systems in the permit and adjacent area.

Baseline Groundwater Information

The Plan meets the Groundwater Baseline requirements as required by the State of Utah R645-Coal Mining Rules.

The previous technical reviews performed by the Division (Task ID #2899, Task ID #3075 and Task ID #3256) had identified deficiencies with the groundwater characterization provided in the initial application. The Division noted during the initial technical analysis that the ground water monitoring requirements for the purpose of obtaining baseline information could be waived if The Plan could demonstrate that data obtained from adjacent areas is comparable to the conditions found at the site. The Plan utilized ground water monitoring data from the Savage Coal Terminal facility located approximately ½ mile from the site. In addition, The Plan provided a groundwater characterization obtained from "*Energy, Mineral and Ground-Water Resources of Carbon and Emery Counties, Utah*", Bulletin 132, Utah Geological Survey, Utah Department of Natural Resources, Salt Lake City, UT.

Additionally, COVOL responded by supplying GW data obtained from one round of sampling at the sites newly installed monitoring well which does not address the baseline requirement of the State of Utah R645-Coal Mining Rules. The Plan also provided a figure that depicts the location of their monitoring well on the proposed permit area.

Baseline Surface Water Information

The Plan meets the Surface Water Baseline requirements as required by the State of Utah R645-Coal Mining Rules. The previous technical reviews performed by the Division (Task ID

#2899 and Task ID #3075) had identified deficiencies with the surface water characterization provided in the initial application. The Division had requested additional information on Miller Creek as well as a small tributary to Miller Creek located approximately 400 feet southwest of the southwest corner of the permit area.

Upon review of The Plan, The Plan has addressed the deficiency on page 7-7. Based upon field observations of vegetation, geomorphic conditions and the presence of surface water in the late summer/early autumn of 2007 and 2008, The Plan determined that Miller Creek is a perennial stream at it's location south of the permit area. In addition, the USGS topographic map of the area depicts Miller Creek as a solid blue line, which is indicative of a perennial drainage.

The Plan has characterized the small tributary as ephemeral. The characterization is based upon field observations of vegetation, geomorphic conditions, the lack of surface water as well as a lack of a well-defined surface flow path within the channel. The drainage has a small contributing watershed area.

The surface water information is presented on page 7-3 and 7-5 of The Plan. Figure 7-2, *Surface Water Rights and Permitted Facility Discharge Locations*, depicts the proposed permit area boundary relative to surface water resources with the permit and adjacent area. The permit boundary is located approximately 350 feet of a tributary drainage to Miller Creek.

The topography of the permit and adjacent areas drains to the south toward Miller Creek. Miller Creek is characterized in The Plan as being a perennial stream that feeds into the Price River in Wellington, Utah. The Plan indicates that no historical stream gage data exists for Miller Creek.

Baseline Cumulative Impact Area Information

The Plan meets the Baseline Cumulative Impact Area Information requirements of R645-301-725. The Plan has demonstrated that the operation at the site poses a minimal threat of producing any ground and/or surface water impacts. Due to the relatively small size of the site and the robust sediment ponds located either side, it's extremely unlikely that any contamination or disruption could occur off the permit area. The sediment ponds have been designed for total containment of the 10-year, 24-hour design storm event.

Modeling

No numerical modeling of ground or surface water was conducted in the preparation of The Plan.

Probable Hydrologic Consequences Determination

The Plan meets the Probable Hydrologic Consequences Determination requirements of R645-301-728.

The Plan discusses the probable hydrologic consequences from the operation beginning on page 7-7. The potential for hydrologic consequences on surface and ground water resources within the permit and adjacent area are minimal. As no mining activity is associated with the operation, the surface disturbance will be minimal.

The facility will operate under a UPDES Permit (# UTR000685). As part of the UPDES permit, The Plan has developed a Storm Water Pollution Prevention Plan (SWP3) as well as a Spill Prevention Control and Countermeasure Plan. Copies of these documents are provided in The Plan in Appendices 7-2, 7-3 and 7-4 respectively.

The surface topography of the site slopes generally to the southeast. Grading of the site has been performed to direct all surface runoff to one of two sediment ponds located in the southeast and southwest corners of the site. Berms will be constructed to prevent storm water runoff from leaving the site. As part of the UPDES permit, both the berms and sediment ponds will be inspected on a quarterly basis or after/during a storm event greater than .5 inches to insure that they are operating as designed. As a result of the surface drainage plan, the potential for increased sedimentation to the receiving drainage (Miller Creek) is considered minimal. The potential for flooding or stream flow alteration is considered minimal. The disturbed area does not contain surface water drainages. In addition, the disturbed area will be isolated from adjacent areas by the runoff control structures such as earthen berms, diversion ditches and sedimentation ponds. Runoff from all disturbed areas will flow to one of two sedimentation ponds prior to discharge into undisturbed drainages.

Groundwater and surface water availability impacts should be minimal. Due to the minimal amount of surface water resources within the permit and adjacent areas, and due to the runoff controls to be implemented at the site, surface water availability impacts should be negligible. Groundwater availability impacts should be minimal as well due to the relatively impermeable nature of the surface geology and underlying strata of Mancos Shale.

Potential hydrocarbon contamination is addressed on page 7-9 of The Plan. Impacts due to hydrocarbon contamination are considered to be minimal. All tanks and drums will be stored in secondary containment structures that prevent leaks from ever reaching the ground. Spills caused by filling operations outside of the secondary containment structures will be minimized due to the economic value of the product. In addition, because the storage tanks and drums will be located above ground, leakage from the tanks will be readily detected and repaired. The Plan has provided the Spill Prevention Control and Countermeasure Plan in Appendix 7-4. The plan mandates in sections, training and operational measures to minimize contamination resulting from the use of hydrocarbon products at the site.

In the previous technical reviews performed by the Division (Task ID #2899 and Task ID #3075) additional information was requested as to whether acid- or toxic-forming materials are to be present at the site. In addition, The Plan was asked to address how they would identify/determine whether acid- or toxic- forming materials were brought to the site. Several areas were cited in the previous technical analysis where The Plan needed to provide clarification/discussion as to acid- or toxic-forming materials on the site.

On page 7-14 of The Plan, The Plan discusses acid- and toxic-forming materials. The Plan commits to sampling any material left on site during extended periods of in-activity, "To further minimize the potential for surface- and groundwater contamination, COVOL will sample all coal and coal waste that remains on site after an inactive period of 30 days. COVOL will collect one sample for every 2,000 yd3 of the on-site material, composite these samples for the like material, and have this sample analyzed for acid- and toxic-forming materials in accordance with Tables 7 and 8 of DOGM's Guidelines for the Analysis of Topsoil and Overburden." Any material that is verified to contain acid- and toxic-forming materials will be processed no longer than one month following the receipt of verifying analyses of the COVOL samples.

Groundwater Monitoring Plan

The Plan meets the Groundwater Monitoring Plan requirements of R645-301-724.100.

In the previous technical analyses performed by the Division (Task ID #2899 and Task ID #3075), The Plan was asked to provide a justification for not conducting groundwater monitoring within the permit and adjacent area. The Division noted during the initial technical analysis that the ground water monitoring requirements for the purpose of obtaining baseline information could be waived if The Plan could demonstrate that data obtained from adjacent areas is comparable to the conditions found at the site. As noted in the ground water baseline deficiency above, the data utilized by The Plan from the Savage facility was not provided as requested.

Based upon the agreement entered into by The Plan and the Division (dated September 15th, 2008), The Plan has agreed to install one groundwater monitoring well down gradient from the proposed operation site. Additionally, The Plan commits to quarterly water monitoring for a period of one year in order to obtain baseline information. Quarterly water monitoring would also be conducted during the first year of reclamation after operations at the site have ended.

On page 7-6 of The Plan, The Plan discusses the ground water monitoring to be conducted at the site. A monitoring well was installed inside the permit area during the fourth quarter of 2008. Water-level data and water-quality samples were collected in December 2008 and will be collected from this well on a quarterly basis for the first year following the well's installation and resume during the first year of reclamation after plant operations have ended.

The analytical parameters to be analyzed are listed in Table 7-1. Upon review of Table 7-1, The Plan has submitted a suite of parameters that follows the Division's Tech005 Directive.

Surface-Water Monitoring Plan

The Plan meets the Surface Water Monitoring Plan requirements of R645-301-724.200.

In previous technical reviews performed by the Division (Task ID #2899 and Task ID #3075), The Plan was asked to provide a reasonable justification for not conducting surface-water monitoring at the site. On page 7-4 of The Plan, The Plan points out that all runoff from the permit area is routed to one of two sedimentation ponds located on the downstream portions of the site. As the ponds are constructed to fully contain the design storm event (10-year, 24-hour event), The Plan maintains that there is very little risk of surface water impacts outside the permit area. The locations of the ponds are shown on Plate 5-1 of The Plan. Additionally, the discharges from these ponds must comply with The Plan's UPDES discharge permit (No. UTR000685).

Findings:

The Plan has met the Hydrologic Resource Information requirements of the State of Utah R645-Coal Mining Rules.

MAPS, PLANS, AND CROSS SECTIONS OF RESOURCE INFORMATION

Regulatory Reference: 30 CFR 783.24, 783.25; R645-301-323, -301-411, -301-521, -301-622, -301-722, -301-731.

Analysis:

Affected Area Boundary Maps

No underground mining activity is planned for this site. As such, a map that depicts the size, sequence and timing of the mining of sub-areas for which additional permits may be sought is unnecessary.

Archeological Site Maps

In Chapter 4 of the Plan, a map and text is provided that includes a description of the area noting that there are no historic resources in the permit and adjacent area.

Coal Resource and Geologic Information Maps

There are no coal resources at the site to be mined. This is a coal processing facility, handling coal from mines in the adjacent coalfield.

Cultural Resource Maps

In Chapter 4 of the Plan, a map and text is provided that includes a description of the area noting that there are no public parks in the area or historic resources.

Existing Structures and Facilities Maps

Chapter 1 of the Plan provides a detailed site plan that depicts the locations of the various pieces of machinery and equipment to be utilized in the coal cleaning process. In addition, the locations of the sediment ponds and storm water runoff flow directions are provided as well. A registered professional engineer has certified the plan.

Existing Surface Configuration Maps

Chapter 1 provides a surface configuration map that provides 1-foot contours for the entire 30-acre permit area.

Mine Workings Maps

The Plan does not call for any surface or underground mining. As a result, a Mine Workings Map is not required.

Monitoring and Sampling Location Maps

In Chapter 3, the Plan provides maps that depict the biological and vegetative monitoring and sampling locations.

Figure 7-2 provides the location of the ground water monitoring well at the site.

Permit Area Boundary Maps

The Permit area boundary is illustrated on Plate 5-1. Figure 6-1 presents a geologic map and a stratigraphic column of the area surrounding facility.

Subsurface Water Resource Maps

The Plan meets the Maps, Plans and Cross Sections of Resource Information as required by R645-301-731. Figure 7-1, *Generalized Area Hydrostratigraphic Cross-Section (as adapted from Gloyn et al., 2003)*, is a cross-section that depicts the general groundwater system as identified by Utah Geological survey Bulletin 132.

Surface and Subsurface Manmade Features Maps

Figure 5-1 in Chapter 5 of the Plan depicts all buildings within 1,000 feet of the permit area.

Surface and Subsurface Ownership Maps

Figure 5-2A in Chapter 5 of the Plan provides a surface land ownership map. As no under ground coal mining activity is proposed, a subsurface ownership map is not required.

Surface Water Resource Maps

The Plan meets the Surface Water Resource Maps requirement of R645-301-722. Figure 7-2, *Surface Water Rights and Permitted Facility Discharge Locations*, depicts the surface water resources located within and adjacent to the permit area, including a point-to-point stock watering right located on Miller Creek (Water Right #91-3294).

Vegetation Reference Area Maps

The Plan contains a commitment to establishing a reference area at the end of processing the refuse material as the adjacent property is private and may change at some point before the cessation of operations.

Well Maps

The Plan meets the Well Maps requirements of the State of Utah R645-Coal Mining Rules. Figure 7-2 depicts the location of the on-site ground water monitoring well.

Findings:

The Plan has met the Maps, Plans and Cross Sections of Resource Information requirements of the State of Utah R645-Coal Mining Rules.

OPERATION PLAN

MINING OPERATIONS AND FACILITIES

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

Analysis:

As no underground mining operations are proposed for the site, a detailed description/narrative as to the mining operations is non-applicable.

Chapter 2 of the plan discusses the topsoil pile and how it was designed/constructed. The Plan also discusses re-vegetation techniques to be employed during operations and also discusses wind and water erosion protection measures that will be implemented.

Chapter 7 provides the detailed design drawings and design calculations for the sediment ponds to be utilized at the site. In addition, the Plan provides the spill pollution prevention techniques that will be utilized at the site in accordance with the site's Utah Pollution Discharge Elimination System (UPDES) permit.

Findings:

The Plan meets the Mining Operations and Facilities requirements of the State of Utah R645-Coal Mining Rules.

EXISTING STRUCTURES:

Regulatory Reference: 30 CFR 784.12; R645-301-526.

Analysis:

No structures or facilities utilized in connection with coal mining or reclamation operations were in existence on the site prior to January 21st, 1981. As such, this regulation does not apply.

Findings:

The Plan meets the Existing Structures requirements of the State of Utah R645-Coal Mining Rules.

PROTECTION OF PUBLIC PARKS AND HISTORIC PLACES

Regulatory Reference: 30 CFR784.17; R645-301-411.

Analysis:

The Plan addressed this section of the regulations. No public parks and/or historic places are located within the permit or adjacent area.

Findings:

The Plan meets the Protection of Public Parks and Historic Places as required by the State of Utah R645-Coal Mining Rules.

RELOCATION OR USE OF PUBLIC ROADS

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

Analysis:

The Plan meets the Relocation or Use of Public Roads requirements of the State of Utah R645-Coal Mining Rules. The Plan does not call for the relocation or alteration to a public road. No underground mining activities are proposed thus the interests of the public and adjacent landowners are protected.

Findings:

The Plan meets the Relocation or Use of Public Roads requirements of the State of Utah R645-Coal Mining Rules.

AIR POLLUTION CONTROL PLAN

Regulatory Reference: 30 CFR 784.26, 817.95; R645-301-244, -301-420.

Analysis:

June 30, 2005 DAQE-AN2952003-05 issued to COVOL Engineered Fuels, LC in App. 4-2, allows process of 1.5 million tons of coal over 12 month period. Equipment: one crusher, one screen, two hoppers, 3 air tables, 3 fabric filter baghouses treating exhaust air from air tables, covered or enclosed conveyors, telescoping discharge tubes and one 200-ton storage silo. Opacity from screens conveyor transfer and baghouse stacks to be 10%, Crushers are allowed 15% opacity. Dust control on operational areas by water sprays Haul road paved (0.69 miles).

Headwaters Energy Service notified the Division of Air Quality of the initiation of construction on August 5, 2005, in accordance with DAQE-AN2952003-05 (see Appendix 1-2, Exhibit 2 or M:\FILES\COAL\PERMITS\007\C0070045\2006\INCOMING\11152006). The same letter notes that once construction has been completed and initial startup takes place, the required notification will be made. A second letter, dated February 2006, indicates that the annual emission inventory for the facility was not required because the facility was still under construction and production had not yet taken place (Environmental Audit in Appendix 1-2, Exhibit 2). The February 2006 letter promises notification of the onset of production.

Appendix 4-2 includes a letter dated November 21, 2006, notifying the DEQ that construction was completed, but paving the roads would not be completed within the 18 month time frame required by the AO.

The diagrams provided to acquire an air quality permit provide the most information on the site process (see Appendix 1-2 or M:\FILES\COAL\PERMITS\007\C0070045\2006\INCOMING\11152006).

Findings:

The Plan has met the Land-Use Resource Information requirements of the State of Utah R645-Coal Mining Rules.

COAL RECOVERY

Regulatory Reference: 30 CFR 817.59; R645-301-522.

Analysis:

The Plan does not propose coal-mining activity. As such, the Coal Recovery section of the State of Utah R645-Coal Mining Rules is non-applicable.

Findings:

The Plan meets the Coal Recovery requirements of the State of Utah R645-Coal Mining Rules.

SUBSIDENCE CONTROL PLAN

Regulatory Reference: 30 CFR 784.20, 817.121, 817.122; R645-301-521, -301-525, -301-724.

Analysis:

Renewable Resources Survey

The Plan meets the Renewable Resources Survey requirements of the State of Utah R645-Coal Mining Rules. On page 5-10 of The Plan The Plan states, "There will be no underground mining or subsidence at this facility. Hence, no pre-subsidence survey will be conduced, no areas need to be protected from subsidence, no subsidence control plan will be developed, no subsidence control measures will be implemented, no subsidence damage repair will be performed and no public notice of underground mining activities will be required".

Subsidence Control Plan

The Plan meets the Subsidence Control Plan requirements of R645-301-724. On page 5-10 of The Plan The Plan states, "There will be no underground mining or subsidence at this facility. Hence, no pre-subsidence survey will be conduced, no areas need to be protected from subsidence, no subsidence control plan will be developed, no subsidence control measures will be implemented, no subsidence damage repair will be performed and no public notice of underground mining activities will be required".

Performance Standards For Subsidence Control

The Plan meets the Performance Standards for Subsidence Control requirements of the State of Utah R645-Coal Mining Rules. On page 5-10 of The Plan The Plan states, "There will be no underground mining or subsidence at this facility. Hence, no pre-subsidence survey will be conduced, no areas need to be protected from subsidence, no subsidence control plan will be developed, no subsidence control measures will be implemented, no subsidence damage repair will be performed and no public notice of underground mining activities will be required".

Notification

The Plan meets the Performance Standards for Subsidence Control requirements of the State of Utah R645-Coal Mining Rules. On page 5-10 of The Plan The Plan states, "There will be no underground mining or subsidence at this facility. Hence, no pre-subsidence survey will be conduced, no areas need to be protected from subsidence, no subsidence control plan will be developed, no subsidence control measures will be implemented, no subsidence damage repair will be performed and no public notice of underground mining activities will be required".

Findings:

The Plan has met the Subsidence Control Plan requirements of the State of Utah R645-Coal Mining Rules.

SLIDES AND OTHER DAMAGE

Regulatory Reference: 30 CFR Sec. 817.99; R645-301-515.

Analysis:

The Plan meets the Slides and Other Damage requirements of the State of Utah R645-Coal Mining Rules.

Due to no underground mining activity proposed at the site and the general lack of topographic relief, there is minimal chance of a slide occurring that could potentially produce an adverse affect to the public, property, health, safety or the environment.

The Plan does call for the examination/inspection of the two sediment ponds on site at least four times per year.

Findings:

The Plan meets the Slides and Other Damage requirements of the State of Utah R645-Coal Mining Rules.

FISH AND WILDLIFE INFORMATION

Regulatory Reference: 30 CFR Sec. 784.21, 817.97; R645-301-322, -301-333, -301-342, -301-358.

Analysis:

Protection and Enhancement Plan

Page 3-12, Section 3.5.8 states, *"The plan is designed to minimize disturbances and adverse impacts on fish, wildlife and their related environments. Covol will periodically educate their employees about wildlife needs and their importance" The Plan* includes a wildlife awareness plan that is designed to minimize disturbances, what wildlife needs are and how Covol will periodically educate their employees about wildlife needs and their importance.

Endangered and Threatened Species

Appendix 3-1 of The Plan includes a letter from the Division of Wildlife Resources, DWR, regarding species of concern. As noted in the letter and personal communication with Chris Wood, DRW habitat manager for the southeastern region, the information is not to be considered a substitute for on-the-ground biological surveys. The Plan needs to include a survey of the adjacent area for threatened and endangered species of plants and wildlife to ensure compliance with the Endangered Species Act.

The Plan is accompanied by the names of the individuals that collected and analyzed the data, the dates of collection, analysis of the data and a description of the methodology used to collect and analyze the data to support the following statement noted on page 3-12, Section 3.5.8.1 of The Plan; ***There are no known endangered or threatened species within the permit area.***

Mining operations may affect the habitat of the following endangered fish species, ***Colorado Pike minnow, Razor back sucker, Humpback chub and Boneytail chub***. The Plan includes calculations for water consumption expressed in acre-feet per year as required by the USFWS's Colorado fish Recovery Program. Water consumption in excess of 100 acre feet per year will require a mitigation fee as determined by the FWS. The FWS is working in conjunction with the Division to streamline the consultation process. The Division will provide Covol with the results of the consultation upon completion of the Section 7 working agreement.

Bald and Golden Eagles

On page 3-19 of the Plan in Section 3.5.8.2, The Plan states, "No suitable bald or golden eagle habitat exists in the permit and adjacent are." Appendix 3-1 of the Plan provides the biological survey of the permit and adjacent areas as prepared by Christopher T. Jensen of Canyon Environmental L.L.C.

Wetlands and Habitats of Unusually High Value for Fish and Wildlife

Appendix 3-1 of The Plan includes a letter from the Division of Wildlife Resources, DWR, regarding species of concern. It lists three sensitive species that occur within the general vicinity of the Covol facility, burrowing owl, Bluehead sucker and white tailed prairie dog. The Plan includes a narrative that includes protection measures to be taken to avoid disturbances to habitats of high value for fish and wildlife, (burrowing owl, Bluehead sucker and white tailed prairie dog), and maps that show the habitat for these species in relation to the permit area boundary. Appendix A Figure 3 includes habitat delineation for Mule Deer, Pronghorn Antelope, Burrowing owl and Bluehead sucker. The Division will conduct a field visit to ground truth the habitat delineations. The applicant has provided a commitment to conduct an occupancy survey for Burrowing Owls that is agreed upon by DWR and DOGM at the appropriate time during the calendar year 2010. The following language was suggested for revisions to paragraph 3 on page 3-5 of The Plan "In order to best determine the presence or absence of Burrowing owls in the habitat areas adjacent to the coal cleaning facility Covol Technologies will ensure that a qualified individual acting on behalf of the company will conduct a Burrowing owl survey during the appropriate time of calendar year 2010. A representative from Covol will consult with DWR and DOGM prior to conducting the survey to verify the appropriate time and protocol to be used to implement the survey.

The Plan is accompanied by the names of the individuals that collected and analyzed the data, the dates of collection, analysis of the data and a description of the methodology used to collect and analyze the data to support the following statement noted on page 3-12, Section 3.5.8.2 of The Plan: ***" No wetland or riparian habitat exists in the permit or adjacent areas".***

Findings:

The Plan meets the Fish and Wildlife Information requirements of the State of Utah R645-Coal Mining Rules.

TOPSOIL AND SUBSOIL

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

Analysis:

Topsoil Removal and Storage

Section 2.3.1.4 indicates that two topsoil stockpiles were constructed in August 2005. Approximately 500 cu. yd. soil is contained in these two stockpiles. The stockpiles are marked and will be (but are not currently) protected by a silt fence.

Section 2.3.1.4 indicates that the topsoil will be seeded prior to April 17, 2009 using the seed mix listed in Table 3.1 minus three unavailable species.

Findings:

The Plan has met the Topsoil and Subsoil requirements of the State of Utah R645-Coal Mining Rules.

VEGETATION

Regulatory Reference: R645-301-330, -301-331, -301-332.

Analysis:

Page 3-4, Section 3.30 describes measures taken to disturb the smallest practicable area. No disturbance beyond the current fenced disturbed/permit area anticipated. A description of the plant communities found adjacent to the project area and a map delineating the vegetative communities including the riparian zone is included in Appendix 3-1 of The Plan. Associated maps are to appropriate scale. The trees, shrubs, forbs, and grasses listed on page 2 of Appendix 3-1 have been appropriately categorized.

Findings:

The Plan meets the Vegetation requirements of the State of Utah R645-Coal Mining Rules.

ROAD SYSTEMS AND OTHER TRANSPORTATION FACILITIES

Regulatory Reference: 30 CFR Sec. 784.24, 817.150, 817.151; R645-301-521, -301-527, -301-534, -301-732.

Analysis:

Road Classification System

The Plan provides road classification system information on page 5-3 and 5-9 of The Plan. All roads within the permit area are considered primary roads as defined in R645-301-527.120. A professional engineer has certified the roads as meeting the requirements of R645-301-534.200 and R645-301-742.420 (See Appendix 5-1).

The roads to be utilized by The Plan are shown on Plate 5-1. Drainage structures of the roads are discussed in Section 7.5.2.2 of The Plan. A standard road cross-section is provided in Figure 5-3.

Plate 5-1 depicts the following roads within the permit area: access road, loop road, scale road, scale bypass road, dump bin road and a loading silo road.

Plans and Drawings

The Plan meets the Plans and Drawings requirements of R645-301-732. Figure 5-3, *Standard Road Cross-Section,* provides the cross-sections and profiles to be used and/or maintained on the COVOL site roads.

The roads to be utilized by The Plan are shown on Plate 5-1. Drainage structures of the roads are discussed in Section 7.5.2.2 of The Plan. A standard road cross-section is provided in Figure 5-3.

Performance Standards

The Plan meets the Performance Standard requirements of R645-301-742.423. The Plan discusses the road drainage considerations/designs on page 7-14 in Section 7.3.2.4. The road drainage facilities will incorporate diversion ditches, culverts and containment berms.

The facility will utilize three roads: an access road that leads from Ridge road into the main yard, a road around the perimeter of the main yard and a truck turnaround north of the main yard. None of the roads are located in the channel of an intermittent or perennial stream.

The design specifications for the road ditches and culverts were calculated utilizing a 100-year, 6-hour precipitation event. The diversion hydrology calculations are provided in Appendix 7-7. The Plan generated the design storm hydrographs used in designing the drainage system of the site by utilizing HydroCAD 8.5. HydroCAD 8.5 is a software application that calculates peak flows, velocities and hydrographs for a given storm event. The Plan utilized an average curve number of 87 for the disturbed area calculations. The curve number selected is reasonable given the conditions of the site and the soil type.

On page 5-13 of The Plan, The Plan states, "No alterations or relocations of natural drainage ways are required within the permit area to accommodate the needs of transportation systems."

Primary Road Certification

A professional engineer has certified the roads as meeting the requirements of R645-301-534.200 and R645-301-742.420 (See Appendix 5-1).

Other Transportation Facilities

The plan does not call for the utilization of Other Transportation Facilities as defined in the State of Utah R645-Coal Mining Rules.

Findings:

The Plan has met the Road Systems and Other Transportation Facilities requirements of the State of Utah R645-Coal Mining Rules.

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

The Plan meets the Disposal of Noncoal Mine Wastes requirements of R645-301-747. On page 5-14 of The Plan The Plan discusses the disposal of noncoal mine waste. The Plan outlines that noncoal waste generated in the permit area will be temporarily stored in dumpsters and will be regularly collected to be disposed of at the East Carbon Development Company landfill. The Plan states, "No non-coal waste is permanently disposed of within the permit area". In addition, The Plan commits to handling any hazardous non-coal waste in accordance with the requirements of Subtitle C of the Resource Conservation and Recovery Act.

Coal Mine Waste

The Covol Facility processes material received from off-site clients. This material may have once been classified as coal mine waste or coal processing waste from it's origin. However, the Covol Facility processes all material brought onto the site into one of two (or both) products: high-quality coal and/or low-quality (low-BTU) coal. The product is then shipped off-

site in accordance with contract requirements. No material brought on site is stored for indefinite periods of time. The Covol Facility performs testing of any material to be brought on site prior to it's arrival. If the material cannot be processed into one of the aforementioned final products, it is rejected and not brought to the site.

The potential for the coal product stored at the site to produce contamination from acid- or toxic-forming materials is minimal. The sources of coal at the Covol Facility are located in the Book Cliffs, Wasatch Plateau and Emery Coal Fields. These coal seams have historically not produced acid or toxic coals. In addition, the coal is only temporarily stored at the facility, the native soils in the permit area are alkaline and sediment precipitation runoff is controlled by drainage ditches and two large sedimentation ponds. As a result, the potential for acid- or toxic-forming contamination migrating off the disturbed area is minimal.

As an additional safety measure, The Plan commits to sampling all coal and coal waste that remains on site after an inactive period of 30 days. The Plan will collect one sample for every 2,000 cubic yards of the on-site material, composite the samples and have the sample analyzed for acid- and toxic-forming materials in accordance with Tables 7 and 8 of the Division's Guidelines for the Analysis of Topsoil and Overburden. Any material that is verified to contain acid- and toxic-forming materials will be processed within one month following the receipt of the verifying analyses.

Refuse Piles

The Plan meets the Refuse Pile requirements of R645-301-746.200.

On page 5-5 The Plan states, "No refuse piles will be located in the permit area". On page 7-25, The Plan states, "There are no refuse piles at the facility."

Impounding Structures

Impounding structures constructed from coalmine waste will not be utilized in The Plan's operation.

Burning And Burned Waste Utilization

The plan does not call for the burning of coalmine waste or the utilization of burned waste.

Return of Coal Processing Waste to Abandoned Underground Workings

The plan does not call for any sub-grade disturbance, mining or underground exploration.

Excess Spoil

The plan does not call for any sub-grade disturbance, mining or underground exploration. As a result, no excess spoil material will be located on the site.

Findings:

The Plan meets the Spoil and Waste Materials requirements of the State of Utah R645-Coal Mining Rules.

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.

Analysis:

General

The Plan meets the General Hydrologic Information requirements as provided for in R645-301-730. Section 7 of The Plan provides the general hydrologic information for the proposed site and adjacent area.

Water Rights and Replacement

The Plan meets the Water Rights and Replacement requirements of the State of Utah R645-Coal Mining Rules.

On page 7-14 of The Plan, the Permittee states, "COVOL will replace the water supply of an owner of interest in real property who obtains all or part of his or her supply of water for domestic, agricultural, industrial or other legitimate use from an underground or surface source, where the supply has been adversely impacted by contamination, diminution or interruption proximately resulting from activities conducted by
COVOL in the permit area."

Groundwater Monitoring

The Plan meets the Groundwater Monitoring Plan requirements of R645-301-731.200.

In the previous technical analyses performed by the Division (Task ID #2899 and Task ID #3075), the Permittee was asked to provide a justification for not conducting groundwater

monitoring within the permit and adjacent area. The Division noted during the initial technical analysis that the ground water monitoring requirements for the purpose of obtaining baseline information could be waived if the Permittee could demonstrate that data obtained from adjacent areas is comparable to the conditions found at the site. As noted in the ground water baseline deficiency above, the data utilized by the Permittee from the Savage facility was not provided as requested.

Based upon the agreement entered into by the Permittee and the Division (dated September 15th, 2008), the Permittee has agreed to install one groundwater monitoring well down gradient from the proposed operation site. Additionally, the Permittee commits to quarterly water monitoring for a period of one year in order to obtain baseline information. Quarterly water monitoring would also be conducted during the first year of reclamation after operations at the site have ended.

On page 7-6 of The Plan, the Permittee discusses the ground water monitoring to be conducted at the site. A monitoring well was installed inside the permit area during the fourth quarter of 2008. Water-level data and water-quality samples were collected in December 2008 and will be collected from this well on a quarterly basis for the first year following the well's installation and resume during the first year of reclamation after plant operations have ended. The analytical parameters to be analyzed are listed in Table 7-1. Upon review of Table 7-1, the Permittee has submitted a suite of parameters that follows the Division's Tech005 Directive.

Surface Water Monitoring

The Plan meets the Surface Water Monitoring Plan requirements of R645-301-724.200.

In previous technical reviews performed by the Division (Task ID #2899 and Task ID #3075), the Permittee was asked to provide a reasonable justification for not conducting surface-water monitoring at the site. On page 7-4 of The Plan, the Permittee points out that all runoff from the permit area is routed to one of two sedimentation ponds located on the downstream portions of the site. As the ponds are constructed to fully contain the design storm event (10-year, 24-hour event), the Permittee maintains that there is very little risk of surface water impacts outside the permit area. The locations of the ponds are shown on Plate 5-1 of The Plan. Additionally, the discharges from these ponds must comply with the conditions of the Permittee's UPDES discharge permit (No. UTR000685).

Acid- and Toxic-Forming Materials and Underground Development Waste

The Plan meets the Acid- and Toxic-Forming Materials and Underground Development Waste requirements of R645-301-731.300.

In the previous technical reviews performed by the Division (Task ID #2899 and Task ID #3075) additional information was requested as to whether acid- or toxic-forming materials are

to be present at the site. In addition, the Permittee was asked to address how they would identify/determine whether acid- or toxic- forming materials were brought to the site. Several areas were cited in the previous technical analysis where The Plan needed to provide clarification/discussion as to acid- or toxic-forming materials on the site.

On page 7-14 of The Plan, the Permittee discusses acid- and toxic-forming materials. The Permittee commits to sampling any material left on site during extended periods of in-activity: "To further minimize the potential for surface- and groundwater contamination, COVOL will sample all coal and coal waste that remains on site after an inactive period of 30 days. COVOL will collect one sample for every 2,000 yd^3 of the on-site material, composite these samples for the like material, and have this sample analyzed for acid- and toxic-forming materials in accordance with Tables 7 and 8 of DOGM's Guidelines for the Analysis of Topsoil and Overburden." Any material that is verified to contain acid- and toxic-forming materials will be processed no longer than one month following the receipt of verifying analyses of the COVOL samples.

Transfer of Wells

The Plan does not call for the transfer of the sole groundwater monitoring well at the site. The monitoring well will be reclaimed at the termination of active operations.

Discharges Into An Underground Mine

The Plan does not call for any underground mining or sub-grade disturbance. As a result, this regulation is non-applicable.

Gravity Discharges From Underground Mines

The Plan does not call for any underground mining or sub-grade disturbance. As a result, this regulation is non-applicable.

Water-Quality Standards And Effluent Limitations

The Plan contains a Utah Pollution Discharge Elimination System (UPDES) permit (No. UTR000685). As part of the UPDES permit, the Plan also contains a Spill Prevention Control and Countermeasure Plan.

Diversions: General

The Plan meets the Diversions: General requirements of R645-301-742.300. The hydrologic design considerations and methods are provided in Appendix 7-5 of The Plan. Plate 7-2, *Site Watershed and Drainage Map Wellington Dry Coal Cleaning Facility*, depicts the drainage system to be utilized at the site as well as the watershed boundaries utilized in sizing the various components of the drainage system. Appendix 7-7 provides the hydrologic calculations

for the drainage channels and associated culverts. Table 7-2 provides a summary of the drainage ditch and culvert data.

The ditch capacities and flow velocities were calculated using HydroCAD 8.5. HydroCAD 8.5 uses the Manning and continuity equations. With the post-mining land-use to remain industrial, the diversions are not slated for removal/reclamation following the cessation of operations at the site. As such, the Permittee calculated runoff values assuming permanent diversion structures. A 100-year, 6-hour precipitation event was utilized in the drainage calculations for the diversion ditches.

Beginning on page 7-22, The Plan provides a summary of the geometry, channel slope, peak discharge, erosion protection, maximum flow velocity and minimum depth values for each diversion ditch and culvert at the facility.

Diversions: Perennial and Intermittent Streams

The Plan meets the Diversions: Perennial and Intermittent Stream requirements of R645-301-742.300. No diversions of perennial or intermittent streams are planned for this operation. As a result, this regulation is non-applicable.

Diversions: Miscellaneous Flows

The Plan does not call for the diversion of any Miscellaneous Flows. As a result, this regulation is non-applicable.

Stream Buffer Zones

No perennial or intermittent streams are located within the permit or adjacent area. As a result, this regulation is non-applicable.

Sediment Control Measures

The Plan meets the Sediment Control Measures requirements of R645-301-742. The sediment control measures have been designed to prevent additional contributions of sediment to streams or to runoff outside the permit area, meet applicable effluent limitations and minimize erosion to the extent possible. The structures to be used to control sediment transport at the site include diversion channels, sedimentation ponds, containment berms, silt fences and road diversions and culverts.

Siltation Structures: General

The Plan does not call for the use of Siltation Structures other than Sedimentation Ponds (See Below). As a result, this regulation is non-applicable.

Siltation Structures: Sedimentation Ponds

The Plan meets the Siltation Structures: Sedimentation Ponds requirements of R645-301-732.200. The design considerations for the sediment pond designs are provided in Section 3 of Appendix 7-5. Plate 7-1 provides cross sections for each of the sedimentation ponds that depict the maximum water storage elevation, maximum sediment storage stage as well as the 60% sediment cleanout stage. Table 7-1 provides a summary of the sediment pond data for both the east and west ponds. Appendix 7-6 provides the sediment storage calculations.

The ponds are designed to work individually. The ponds respectively accept runoff from the eastern and western portions of the disturbed area. The sediment ponds were designed to contain sediment in addition to the runoff produced from the design storm event. The Universal Soil Loss Equation was utilized in determining the expected annual sediment volume reporting to each of the ponds.

The capacity of each pond was designed based on runoff and sediment storage volumes derived from the design storm event as outlined in the regulations. The ponds have been designed to completely contain the 10-year, 24-hour storm event. The spillways were designed to adequately pass the peak flow resulting from the 25-year, 6-hour precipitation event.

In Sections 7.4.2.2 and 7.4.4, the Permittee discusses the discharge of the sediment ponds. If the ponds were to discharge, the water would eventually enter the tributary to Miller Creek via overland flow. Each sediment pond is equipped with a riprap-armored spillway (D50= 40 inches).

Siltation Structures: Other Treatment Facilities

The Plan does not call for the utilization of Siltation Structures: Other Treatment Facilities as defined in the State of Utah R645-Coal Mining Rules. As a result, this regulation is non-applicable.

Siltation Structures: Exemptions

The Plan does not call for a Siltation Structure exemption. As a result, this regulation is non-applicable.

Discharge Structures

The Plan meets the Discharge Structures requirements of R645-301-744. The Permittee provides the design considerations in Section 3 of Appendix 7-5.

Each of the sediment ponds is equipped with a swale on its downstream side that serves as a spillway. The spillways were designed to safely discharge the peak flow resulting from the 25-year, 6-hour event as required by R645-301-743.300.

Utilizing the design storm event, the peak velocity of the outflow from the eastern pond was 2.01 feet per second (fps). With the peak velocity less than 5 fps, the flow is considered non-erosive and such erosion protection is not required. The peak velocity of the outflow from the western pond was calculated to be 3.24 cfs. Again, with a peak velocity below 5 fps, erosion protection is not required.

Impoundments

The Plan calls for the use of two sediment ponds located on the southern corners of the permit area. The sedimentation ponds have met the criteria of the State of Utah R645-Coal Mining Rules. The Plan does not call for the use of Impoundment structures, other than the two sedimentation ponds discussed above.

Ponds, Impoundments, Banks, Dams, and Embankments

The Plan calls for the use of two sediment ponds located on the southern corners of the permit area. The sedimentation ponds have met the criteria of the State of Utah R645-Coal Mining Rules. The Plan does not call for the use of Impoundment structures, other than the two sedimentation ponds discussed above.

Findings:

The Plan meets the Hydrologic Information requirements of the State of Utah R645-Coal Mining Rules.

SIGNS AND MARKERS

Regulatory Reference: 30 CFR Sec. 817.11; R645-301-521.

Analysis:

The Plan meets the Signs and Markers requirements of the State of Utah R645-Coal Mining Rules. All applicable signs and markers have been constructed and placed in the appropriate locations. Page 5-10 of the Plan discusses the placement of perimeter markers, permit identification signs and topsoil markers. Buffer zone markers have not been erected, as the facility is not located near a perennial or intermittent stream channel.

Findings:

The Plan meets the Signs and Markers requirements of the State of Utah R645-Coal Mining Rules.

USE OF EXPLOSIVES

Regulatory Reference: 30 CFR Sec. 817.61, 817.62, 817.64, 817.66, 817.67, 817.68; R645-301-524.

Analysis:

General Requirements

The Plan does not require blasting of any kind. No sub-grade or underground exploration or mining will occur at the site. As such, none of the blasting regulations as defined in the State of Utah R645-Coal Mining Rules apply to the operation.

Preblasting Survey

The Plan does not require blasting of any kind. No sub-grade or underground exploration or mining will occur at the site. As such, none of the blasting regulations as defined in the State of Utah R645-Coal Mining Rules apply to the operation.

General Performance Standards

The Plan does not require blasting of any kind. No sub-grade or underground exploration or mining will occur at the site. As such, none of the blasting regulations as defined in the State of Utah R645-Coal Mining Rules apply to the operation.

Blasting Signs, Warnings, And Access Control

The Plan does not require blasting of any kind. No sub-grade or underground exploration or mining will occur at the site. As such, none of the blasting regulations as defined in the State of Utah R645-Coal Mining Rules apply to the operation.

Control of Adverse Effects

The Plan does not require blasting of any kind. No sub-grade or underground exploration or mining will occur at the site. As such, none of the blasting regulations as defined in the State of Utah R645-Coal Mining Rules apply to the operation.

Records of Blasting Operations

The Plan does not require blasting of any kind. No sub-grade or underground exploration or mining will occur at the site. As such, none of the blasting regulations as defined in the State of Utah R645-Coal Mining Rules apply to the operation.

Findings:

The Plan meets the Use of Explosives requirements of the State of Utah R645-Coal Mining Rules.

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.

Analysis:

Affected Area Maps

In Chapter 1 of the Plan, a detailed plan is provided showing the entire 30-acre site. All areas to be affected by the operation are contained within the 30-acre permit area.

Mining Facilities Maps

Chapter 1 of the Plan provides a detailed surface facility drawing that depicts all of the elements to be utilized during the operation as well as the elements that will be retained on the site as part of the post-mining industrial land use designation.

Mine Workings Maps

No underground and/or surface mining activities are proposed in the Plan. As as result, the Mine Workings Map requirements of the State of Utah R645-Coal Mining Rules are non-applicable.

Monitoring and Sampling Location Maps

The Plan meets the Monitoring and Sampling Location Map requirements of the State of Utah R645-Coal Mining Rules.

In Chapter 3, the Plan provides maps that depict the biological and vegetative monitoring and sampling locations.

In Chapter 7, Figure 7-2 provides the location of the ground water monitoring well at the site.

Certification Requirements

The Plan meets the Certification Requirements as outlined in the State of Utah R645-Coal Mining Rules. A professional engineer registered with the State of Utah has certified the detailed design drawings and plans that are contained in the plan.

Findings:

The Plan meets the Maps, Plans and Cross Sections requirements of the State of Utah R645-Coal Mining Rules.

RECLAMATION PLAN

GENERAL REQUIREMENTS

Regulatory Reference: PL 95-87 Sec. 515 and 516; 30 CFR Sec. 784.13, 784.14, 784.15, 784.16, 784.17, 784.18, 784.19, 784.20, 784.21, 784.22, 784.23, 784.24, 784.25, 784.26; R645-301-231, -301-233, -301-322, -301-323, -301-331, -301-333, -301-341, -301-342, -301-411, -301-412, -301-422, -301-512, -301-513, -301-521, -301-522, -301-525, -301-526, -301-527, -301-528, -301-529, -301-531, -301-533, -301-534, -301-536, -301-537, -301-542, -301-623, -301-624, -301-625, -301-626, -301-631, -301-632, -301-731, -301-723, -301-724, -301-725, -301-726, -301-728, -301-729, -301-731, -301-732, -301-733, -301-746, -301-764, -301-830.

Analysis:

The plan discusses the various components of the reclamation plan in Chapter 5 beginning on page 5-25. As there are no underground openings within the entire permit area, extensive backfill and grading work will not be necessary. As the postmining land use has been identified as industrial use, the site will be reclaimed in order to restore the facility for future industrial use.

Roads and diversions will be left in place. Due to the relatively small amount of topographic relief and the retention of the roads and storm water runoff measures post operations, small depressions (or pocking) will not be necessary.

The two sedimentation ponds will be left intact for the future industrial use. In addition, the diversion ditches and associated culverts will also be left in place for the next landowner. Furthermore, as the reclamation of the site is intended to restore the site for future industrial use, the Plan does not call for significant backfilling, soil stabilization, compacting or grading. Any remaining coal piles will be removed and either sold as a product ore returned to the original owner. The final surface configuration is shown on Plate 5-2.

Coal processing equipment and structures will be removed during reclamation. Materials requiring off-site disposal will be placed in a licensed landfill. In order to support the postmining industrial land use, several structures will be left in place. These structures include the following: septic system, roads and parking areas, truck dump and loadout hopper embankments, diversions, culverts and sedimentation ponds and the perimeter fence.

After the coal processing equipment is removed, stockpiled topsoil will be redistributed over the disturbed areas not intended for re-disturbance by the future site owner and these areas will be revegetated using the approved seed mix.

Findings:

The Plan meets the General Reclamation Plan requirements of the State of Utah R645-Coal Mining Rules.

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:

Reclamation will support industrial land use (Sec. 4.1.2.1 and Figure 4-1.) Section 4.1.3.2 states an unknown industrial post mining land use, in conformance with the adjacent properties and the zoning. [Photographs accompanying DOGM Inspection Rpt. #639, dated June 15, 2005 illustrate condition of land just as operation was beginning.]

The applicant has demonstrated that the disturbed area can be reclaimed prior to obtaining approval for an alternative post mining land use as required by ***R645-301-413.100***. Chapter 3, page 3-1, paragraph 2, indicates that ***"Reclamation of the site will make it available for future industrial use rather than restoring the site to its undisturbed condition".*** Industrial use is a zoning classification and not necessarily an indicator of the land status prior to the applicant's activities. According to the information in the Division's records and on page 4-1 of the application, the area was previously undisturbed even though it may have been zoned for industrial use. The site was developed as an industrial site in 2004. A permit for conducting mining activities was not required until March 17, 2006. Reclamation of the site consists of returning the site to its use prior to mining, which was a developed industrial site.

According to the information in Chapter 4, page 4-2, Section 4.1.1.2, ***"No previous mining occurred in the permit area".***

Additional post mining land use information is included in the October 15, 2008 submittal, Chapter 4, page 4-3, paragraph 1. The information identifies the post mining land use of the remaining portion of the disturbed area as "Industrial. Management did not require information on this section of the technical analysis.

The Plan addresses the following items:

- Chapter one Appendix one page 10-5 includes a description of the type or types of uses the industrial site could be used for at the completion of mining activities.

- A copy of the Wellington City agreement for reclamation of the site is included in Chapter one, Appendix 1-4 of the application.

- Page 5-21 of the application includes a commitment to provide the following information at the end of mining:

    - The entity responsible for the post mining land use.
    - A written request from the entity identifying their needs for the property, and a right of entry agreement between Covol and the industrial site user if other than Covol.

Findings:

The Plan has met the Postmining Land Use requirements of the State of Utah R645-Coal Mining Rules.

PROTECTION OF FISH, WILDLIFE, AND RELATED ENVIRONMENTAL VALUES

Regulatory Reference: 30 CFR Sec. 817.97; R645-301-333, -301-342, -301-358.

Analysis:

The Plan meets the Protection of Fish, Wildlife and Related Environmental Values requirements of the State of Utah R645-Coal Mining Rules.

Protection and Enhancement Plan

Page 3-12, Section 3.5.8 states, ***"The plan is designed to minimize disturbances and adverse impacts on fish, wildlife and their related environments. Covol will periodically educate their employees about wildlife needs and their importance" The*** application includes a wildlife awareness plan that is designed to minimize disturbances, what wildlife needs are and how Covol will periodically educate their employees about wildlife needs and their importance.

Endangered and Threatened Species

Appendix 3-1 of the application includes a letter from the Division of Wildlife Resources, DWR, regarding species of concern. As noted in the letter and personal communication with Chris Wood, DRW habitat manager for the southeastern region, the information is not to be considered a substitute for on-the-ground biological surveys. The application needs to include a

survey of the adjacent area for threatened and endangered species of plants and wildlife to ensure compliance with the Endangered Species Act.

The application is accompanied by the names of the individuals that collected and analyzed the data, the dates of collection, analysis of the data and a description of the methodology used to collect and analyze the data to support the following statement noted on page 3-12, Section 3.5.8.1 of the application; ***There are no known endangered or threatened species within the permit area.***

Mining operations may affect the habitat of the following endangered fish species, ***Colorado Pike minnow, Razor back sucker, Humpback chub and Boneytail chub***. The application includes calculations for water consumption expressed in acre-feet per year as required by the USFWS's Colorado fish Recovery Program. Water consumption in excess of 100 acre feet per year will require a mitigation fee as determined by the FWS. The FWS is working in conjunction with the Division to streamline the consultation process. The Division will provide Covol with the results of the consultation upon completion of the Section 7 working agreement.

Bald and Golden Eagles

On page 3-19 of the Plan in Section 3.5.8.2, the application states, "No suitable bald or golden eagle habitat exists in the permit and adjacent are." Appendix 3-1 of the Plan provides the biological survey of the permit and adjacent areas as prepared by Christopher T. Jensen of Canyon Environmental L.L.C.

Wetlands and Habitats of Unusually High Value for Fish and Wildlife

Appendix 3-1 of the application includes a letter from the Division of Wildlife Resources, DWR, regarding species of concern. It lists three sensitive species that occur within the general vicinity of the Covol facility, burrowing owl, bluehead sucker and white tailed prairie dog. The application includes a narrative that includes protection measures to be taken to avoid disturbances to habitats of high value for fish and wildlife, (burrowing owl, bluehead sucker and white tailed prairie dog), and maps that show the habitat for these species in relation to the permit area boundary. Appendix A figure 3 includes habitat delineation for Mule Deer, Pronghorn Antelope, Burrowing owl and Bluehead sucker. The Division will conduct a field visit to ground truth the habitat delineations. The applicant has provided a commitment to conduct an occupancy survey for Burrowing Owls that is agreed upon by DWR and DOGM at the appropriate time during the calendar year 2010. The following language was suggested for revisions to paragraph 3 on page 3-5 of the application "In order to best determine the presence or absence of Burrowing owls in the habitat areas adjacent to the coal cleaning facility Covol Technologies will ensure that a qualified individual acting on behalf of the company will conduct a Burrowing owl survey during the appropriate time of calendar year 2010. A representative

from Covol will consult with DWR and DOGM prior to conducting the survey to verify the appropriate time and protocol to be used to implement the survey.

The application is accompanied by the names of the individuals that collected and analyzed the data, the dates of collection, analysis of the data and a description of the methodology used to collect and analyze the data to support the following statement noted on page 3-12, Section 3.5.8.2 of the application: ***" No wetland or riparian habitat exists in the permit or adjacent areas".***

Findings:

The Plan meets the Protection of Fish, Wildlife and Related Environmental Values requirements of the State of Utah R645-Coal Mining Rules.

APPROXIMATE ORIGINAL CONTOUR RESTORATION

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

Analysis:

The Plan meets the Approximate Original Contour Restoration requirements of the State of Utah R645-Coal Mining Rules.

As no underground openings are proposed, no extensive site regrading is anticipated. The plan outlines that the final surface configuration will be very similar to the current site. The final configuration of the site is provided on Plate 5-2.

Findings:

The Plan meets the Approximate Original Contour Restoration requirements of the State of Utah R645-Coal Mining Rules.

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.

Analysis:

General

As no underground openings are proposed, no extensive site regarding is anticipated. The plan outlines that the final surface configuration will be very similar to the current site. The final configuration of the site is provided on Plate 5-2.

Reclamation is intended to restore the site for future industrial use. As a result, no significant backfilling, soil stabilization, compacting or grading will occur. The remaining coal piles will be removed and either sold as a product or returned to the original owner.

After the coal processing equipment is removed, the stockpiled topsoil will be redistributed over the disturbed areas not intended for re-disturbance by the future site owner and these areas will be revegetated using the approved seed mix (See Plate 5-2).

Previously Mined Areas

Non-applicable.

Backfilling and Grading On Steep Slopes

Non-applicable.

Special Provisions for Steep Slope Mining

Non-applicable.

Findings:

The Plan meets the Backfilling and Grading requirements of the State of Utah R645-Coal Mining Rules.

MINE OPENINGS

Regulatory Reference: 30 CFR Sec. 817.13, 817.14, 817.15; R645-301-513, -301-529, -301-551, -301-631, -301-748, -301-765, -301-748.

Analysis:

The Plan has met the Mine Openings requirements of the State of Utah R645-Coal Mining Rules. No mine openings are proposed for the operation. As a result, the Mine Opening regulations are non-applicable.

Findings:

The Plan has met the Mine Openings requirements of the State of Utah R645-Coal Mining Rules.

TOPSOIL AND SUBSOIL

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

Analysis:

Sec. 2.40 states limited replacement of soil in (unspecified) areas to facilitate the industrial post mining land use.

Due to high clays and sodicity, grading work and chiseling will be done when the soil is dry (Section 2.4.2.1).

Findings:

The Plan has met the Topsoil and Subsoil reclamation requirements of the State of Utah R645-Coal Mining Rules.

ROAD SYSTEMS AND OTHER TRANSPORTATION FACILITIES

Regulatory Reference: 30 CFR Sec. 701.5, 784.24, 817.150, 817.151; R645-100-200, -301-513, -301-521, -301-527, -301-534, -301-537, -301-732.

Analysis:

Retention

The Plan meets the Retention requirements for Road Systems and Other Transportation Facilities as required by the State of Utah R645-Coal Mining Rules. The post-mining land use for the site is industrial. As a result, the roads that have been constructed for the operation will be retained in accordance with the industrial post-mining land use.

The roads have been designed to meet the performance standards for a retained primary road.

Findings:

The Plan meets the Retention requirements for Road Systems and Other Transportation Facilities as required by the State of Utah R645-Coal Mining Rules.

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 Plan meets the Hydrologic Reclamation Plan requirements of R645-301-760 and -761. The Plan provides a detailed reclamation plan in Section 5.40 of the plan. The future land-use of the site is for industrial use. The reclamation plan essentially focuses on rendering the site suitable/compatible for future industrial use.

Beginning on page 5-19 of The Plan, the Permittee outlines reclamation commitments. Components of the reclamation plan include: removal of any remnants of coal stockpiles, coal residue and coal processing structures and equipment. Stockpiled soil will be redistributed over the areas not intended for re-disturbance by the future site owner. Under the assumption that future uses of the property will require the existing components of the site, roads, parking areas, utilities, fencing, drainage control structures and the septic system will be left in place.

The sediment ponds and associated drainage ditches/diversions will be left in place for the future landowner.

It is anticipated that the final surface configuration of the site will be very similar to the operational phase configuration. No extensive site regarding is anticipated.

Findings:

The Plan meets the Hydrologic Reclamation Plan requirements of the State of Utah R645-Coal Mining Rules.

CONTEMPORANEOUS RECLAMATION

Regulatory Reference: 30 CFR Sec. 785.18, 817.100; R645-301-352, -301-553, -302-280, -302-281, -302-282, -302-283, -302-284.

Analysis:

General

Non-applicable. The Plan does not propose any contemporaneous reclamation.

Findings:

The Plan meets the requirements of the Contemporaneous Reclamation requirements of the State of Utah R645-Coal Mining Rules.

REVEGETATION

Regulatory Reference: 30 CFR Sec. 785.18, 817.111, 817.113, 817.114, 817.116; R645-301-244, -301-353, -301-354, -301-355, -301-356, -302-280, -302-281, -302-282, -302-283, -302-284.

Analysis:

Revegetation: General Requirements

Page 3-5, Section 3.40 indicates, ***"Post-operation revegetation of the site is not anticipated".*** The application has been revised to include a reclamation plan for the disturbed area.

Revegetation: Timing

Page 3-6, Section 3.4.1.1 includes a schedule for reclamation, late fall with a contingency plan.

Revegetation: Mulching and Other Soil Stabilizing Practices

Page 3-6, Section 3.4.1.2 indicates, ***"no mulch will be applied"*** this section of the application needs to be revised to include mulching or other soil stabilizing practices.

Revegetation: Standards For Success

Page 3-6, Section 3.4.1.2 indicates that ***"revegetation success will be monitored visually"*** this section of the application has been revised to include a reference area, a map showing the location of the reference area, a monitoring schedule during the reclamation liability period and a statistically valid sampling technique for measuring vegetation success in accordance with the vegetation guidelines, (R645-356.110 Appendix A of the Utah Coal Rules).

Findings:

The Plan meets the Revegetation Reclamation Plan requirements of the State of Utah R645-Coal Mining Rules.

STABILIZATION OF SURFACE AREAS

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

Analysis:

Broadcast seeding in described in Sec. 3.40. The final seed mixture is the same as that used on the topsoil stockpile (Table 3-1). Plate 5-2 illustrates the location of topsoil distribution and the grading of the site at final reclamation. This plate suggests that the loadout ramp, the dump bin road, and the sediment ponds will remain. The plan indicates that these structures will be left for an industrial use (use not specified), based upon the zoning of the location as M1. Documents supporting the M1 designation are found in App. 1-4.

Section 2.4.2.1 describes grading of 9.7 acres south of the facility loop road and application of topsoil to this portion of the mine site. The 9.7 graded acres will be roughened and seeded with the mix in Table 3.1. Mulch will be applied at a rate of 2 tons/acre (Section 3.4.1.2). The reclamation plan describes repair of excessive erosion in Section 3.5.5.

Findings:

The Plan meets the Stabilization of Surface Areas reclamation requirements of the State of Utah R645-Coal Mining Rules.

CESSATION OF OPERATIONS

Regulatory Reference: 30 CFR Sec. 817.131, 817.132; R645-301-515, -301-541.

Analysis:

The Plan meets the Cessation of Operations requirements of the State of Utah R645-Coal Mining Rules.

On page 5-7 of the Plan, the Permittee provides a commitment to provide the Division a notice when a temporary cessation of operations will last for a period of 30 days or more or as soon as it is known that a temporary cessation will extend beyond 30 days.

The notice will include the following information:

- A statement of the exact tonnage of coal that has been cleaned by the facility prior to cessation of operations,
- A discussion of the extent and kind of reclamation activities which will have been accomplished prior to cessation of operations, and
- An identification of the regarding, revegetation, environmental monitoring and water treatment activities that will continue during the temporary cessation.

Furthermore, the Permittee will support and maintain all surface access and will secure all facilities. The exterior fence will be maintained and all gates will be closed and locked to prevent unauthorized access to the site by humans and animals.

Findings:

The Plan meets the Cessation of Operations requirements of the State of Utah R645-Coal Mining Rules.

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:

Affected Area Boundary Maps

The Plan provides two plates that depict the entire affected area. The 30-acre permit area and all associated features of the Covol facility (coal processing equipment, storm water runoff/sediment control measures, roads, buildings, coal piles etc.) are depicted on Plate 5-1, General Site Map and Plate 5-2, Reclamation Map. The two plates depict the full extent of surface disturbance associated with the operation of the facility. No underground/sub-grade disturbance or mining is proposed.

Bonded Area Map

The Plan provides two plates that depict the entire bonded area. The 30-acre permit area and all associated features of the Covol facility (coal processing equipment, storm water runoff/sediment control measures, roads, buildings, coal piles etc.) are depicted on Plate 5-1,

General Site Map and Plate 5-2, Reclamation Map. The disturbed areas and acreages to be reclaimed are depicted on Plate 5-2.

Reclamation Backfilling And Grading Maps

Plate 5-2, Reclamation Map, depicts the final surface configuration and surface facilities that will remain on the site following reclamation.

Reclamation Facilities Maps

Plate 5-2, Reclamation Map, depicts the final surface configuration and facilities that will remain on the site following reclamation.

Final Surface Configuration Maps

Plate 5-2, Reclamation Map, depicts the final surface configuration and surface facilities that will remain on the site following reclamation.

Reclamation Surface And Subsurface Manmade Features Maps

Plate 5-2, Reclamation Map, depicts the final surface configuration and surface facilities that will remain on the site following reclamation. In addition, Plate 5-2 depicts the location of all buildings within 1,000 feet of the permit area. Plate 5-2 also depicts the location of Ridge Road relative to the site. Ridge Road is the only public road in close proximity to the Covol facility.

Reclamation Treatments Maps

Plate 5-2, Reclamation Map, depicts the areas that will be revegetated following reclamation. After a future landowner is established, a final determination will be made as to the areas that will be revegetated. The disturbed areas and acreages to be reclaimed are depicted on Plate 5-2.

Certification Requirements.

A registered professional engineer has certified all plates provided in the Plan.

Findings:

The Plan meets the requirements of the State of Utah R645-Coal Mining Rules with respect to maps, plans and cross sections of reclamation operations.

BONDING AND INSURANCE REQUIREMENTS

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

Analysis:

General

The Plan meets the general Bonding and Insurance requirements of the State of Utah R645-Coal Mining Rules.

The bonding considerations are presented in Chapter 8 of the Plan. The area covered by the bond is depicted on Plate 5-2, Reclamation Map. The disturbed areas and acreages to be reclaimed are depicted on Plate 5-2.

The bond amount was calculated utilizing unit costs obtained from RS Means Heavy Construction Cost Data, adjusted for the Price, UT area. The total estimated bond amount is provided in Appendix 8-1 of the Plan.

Form of Bond

COVOL originally posted a surety bond in the amount of $165,000 executed by Western Surety Company (a corporate surety licensed to conduct business in the State of Utah). On July 15, 2009 they changed the form of the bond to a cash bond. The cash bond in the amount of $165,000.00 is currently held in an account with the State Treasurer.

Determination of Bond Amount

The bond amount was calculated utilizing unit costs obtained from RS Means Heavy Construction Cost Data, adjusted for the Price, UT area. The total cost estimated to reclaim this site is $144,000.00 (based on 2009 costs provided by RS Means). The total amount of bond posted by the Permittee in the form of a cash bond is $165,000.00 (which is $21,000 more than the estimate). The total estimated bond amount is broken down in Appendix 8-1 of the Plan.

The cost estimates include concrete demolition, steel demolition and disposal, clean up and removal of 10,000 tons of residual coal, re-grading, re-distributing topsoil as well as revegetation (See Plate 5-2).

Terms and Conditions for Liability Insurance

A Certificate of Insurance applicable to the Covol Dry Coal Cleaning Facility is provided in Appendix 8-2 of the Plan. The policy provides for personal injury and property damage protection consistent with the amounts outlined in R645-301-890.100 of the State of Utah R645-Coal Mining Rules. .

Findings:

The Plan meets the Bonding and Insurance requirements of the State of Utah R645-Coal Mining Rules.

REQUIREMENTS FOR PERMITS FOR SPECIAL CATEGORIES OF MINING

INTRODUCTION

Regulatory Reference: 30 CFR Sec. 785; R645-302, et seq.

Analysis:

Non-applicable.

Findings:

The Plan does not call for any form of mining to occur at the site. As a result, this section of the State of Utah R645-Coal Mining Rules, does not apply.

EXPERIMENTAL PRACTICES MINING

Regulatory Reference: 30 CFR Sec. 785.13; R645-302-210, -302-211, -302-212, -302-213, -302-214, -302-215, -302-216, -302-217, -302-218.

Analysis:

Non-applicable.

Findings:

The Plan does not call for any form of mining to occur at the site. As a result, this section of the State of Utah R645-Coal Mining Rules, does not apply.

MOUNTAINTOP REMOVAL MINING

Regulatory Reference: 30 CFR Sec. 785.14, 824; R645-302-220, et. seq.

Analysis:

Non-applicable.

Findings:

The Plan does not call for any form of mining to occur at the site. As a result, this section of the State of Utah R645-Coal Mining Rules, does not apply.

STEEP SLOPE MINING

Regulatory Reference: 30 CFR Sec. 785.15; R645-302-230 et. seq.

Analysis:

Non-applicable.

Findings:

The Plan does not call for any form of mining to occur at the site. As a result, this section of the State of Utah R645-Coal Mining Rules, does not apply.

PRIME FARMLAND

Regulatory Reference: 30 CFR Sec. 785.16, 823; R645-301-221, -302-300 et seq.

Analysis:

Non-applicable.

Findings:

The Plan correctly states there is no farmland on the ridge where the site is located, see.M:\FILES\COAL\PERMITS\007\C0070045\2007\INCOMING\0005.pdf and M:\FILES\COAL\PERMITS\007\C0070045\2007\OUTGOING\0008.pdf.

Prime Farmland and Farmland of Statewide Importance was designated (by the USDA) along the Miller Creek drainage to the south and along the Price River drainage to the north [Utah Agricultural Exp. Sta. Res. Rpt. #76].

1979 USDA aerial photos show an irrigation canal running through the property and agricultural land immediately to the west. This irrigation canal has since been abandoned.

Findings:

The Division conducted an investigation in accordance with R645-302-313, and finds that there is no prime farmland within the permit area.

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

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

Analysis:

Non-applicable.

Findings:

The Covol facility is a coal-cleaning/preparation facility, however it is not associated with or connected to SMCRA permitted coal-mining operation. The Covol facility is stand-alone operation with it's own defined permit area. As such, this section of the State of Utah R645-Coal Mining Rules does not apply.

OPERATIONS IN ALLUVIAL VALLEY FLOORS

Regulatory Reference: 30 CFR Sec. 822; R645-302-324.

Analysis:

The Plan meets the Operations in Alluvial Valley Floors requirements as outlined in the State of Utah R645-Coal Mining Rules. The Plan addresses alluvial valley floors in Chapter 9 of The Plan.

Based upon several field investigations by Division staff , site topography and a review of the geologic and soil information for the area, the Division finds that the Covol facility is not located in an alluvial valley floor. As a result, the reclamation regulations of the State of Utah R645-Coal Mining Rules relative to operations in an alluvial valley floors are non-applicable.

The Plan states, "The COVOL Dry –Coal Cleaning Facility is located in an upland area overlain by a thin veneer of colluvial, slope wash deposits. It is not located within or adjacent to an alluvial valley floor."

Findings:

The Plan meets the Alluvial Valley Floor requirements of the State of Utah R645-Coal Mining Rules.

IN SITU PROCESSING

Regulatory Reference: 30 CFR Sec. 828; R645-302-254.

Analysis:

Non-applicable.

Findings:

The Plan does not call for in situ processing of coal material. As such, this section of the State of Utah R645-Coal Mining Rules does not apply.

AUGER MINING

Regulatory Reference: 30 CFR Sec. 785.20, 819; R645-302-240 et. seq.

Analysis:

Non-applicable.

Findings:

The Plan does not call for any form of mining to occur at the site. As a result, this section of the State of Utah R645-Coal Mining Rules, does not apply.

CUMULATIVE HYDROLOGIC IMPACT ASSESSMENT (CHIA)

Regulatory Reference: 30 CFR Sec. 784.14; R645-301-730.

Analysis:

The Plan provided the necessary ground and surface water information required by the Division of Oil, Gas and Mining to produce a Cumulative Hydrologic Impact Assessment (CHIA). The CHIA (dated August 31st, 2009) found that the operations to be conducted at the Covol Facility have been designed to prevent material damage to the hydrologic balance outside the permit area.

Findings:

The Plan meets the Cumulative Hydrologic Impact Assessment (CHIA) requirements of the State of Utah R645-Coal Mining Rules.

APPENDICES

SUMMARY OF COMMITMENTS

The summary below presents a list of commitments stated within the mining and reclamation plan (MRP). This list provides the following information for each commitment, when applicable:

- Title.
- Objective.
- Frequency.
- Status.
- Reports.
- Citation.

- **Title. Burrowing Owl Survey**
- **Objective.** Upon consultation with the Division, the Permittee will conduct a burrowing owl survey in 2010. A qualified individual will conduct the survey during the appropriate time. Appendix A, Figure 3, Wildlife Habitat, will be revised accordingly to reflect the habitat of the burrowing owl.
- **Frequency.** To be conducted in 2010.
- **Status.** Pending
- **Reports.** A report will be generated and Figure 3 of Appendix A will be modified.
- **Citation.** Page 3-5 of the MRP.

- **Title. Determination of Re-Vegetation Success**
- **Objective.** Prior to revegetation of the site, Covol will confer with the Division to select a temporary reference area on adjacent property that is representative of the permit area.. The temporary reference and revegetated areas will be inspected for plant growth and erosion at a schedule and using methods that comply with the Division's Vegetation Information Guidelines.
- **Frequency.** To be determined in consultation with the Division.
- **Status.** Pending
- **Reports.** To be submitted to the Division.
- **Citation.** Page 3-12 of the MRP.

- **Title. Post-mining Land Use**

- **Objective.** Permittee must provide the following information at the termination of operations:
    - The entity responsible for the post mining land use.
    - A statement from that entity identifying their needs for the property, and
    - A right of entry agreement between the Permittee and the site user if other than the Permittee.
- **Frequency.** Upon the termination of operations at the Covol facility.
- Status. Pending.
- **Reports. NA.** See Objective above for submittal requirements.
- **Citation.** Page 5-21 of the MRP.

LOWER MILLER CREEK CUMULATIVE HYDROLOGIC IMPACT ASSESSMENT (CHIA)

For

COVOL Engineered Fuels, LLC

Wellington Dry-Coal Cleaning Facility
C/007/0045

In

Carbon County, Utah

August 31, 2009

TABLE OF CONTENTS

I. INTRODUCTION

The Cumulativie Hydrologic Impact Assessment (CHIA) is mandated by Section 510(b)(3) of the Surface Mining Control and Reclamation Act of 1977 (SMCRA). It is part of the permit approval process, documenting that all anticipated mining in the area has been designed to prevent material damage to the hydrologic balance outside of the permit area. Before a permit can be approved, the regulatory authority (RA) must conduct an assessment of the cumulative hydrologic impacts of all anticipated mining on the hydrologic balance in the cumulative impact area (CIA) and must find that the proposed operation has been designed to prevent material damage to the hydrologic balance outside the permit area. The CHIA is not only a determination as to whether a coal mining operation has been designed to prevent material damage beyond it's respective permit boundary, but also a determination that the cumulative effects of additional coal mining operations in the area will not result in material damage to the hydrologic balance outside the respective permit areas.

The following CHIA has been prepared for Covol Engineered Fuels, LLC Wellington Dry-Coal Cleaning Facility (Covol Facility). The Covol Facility is located approximately 7 miles south south-east of Price, UT (See Figure 1- *General Location*). The Covol Facility is located within a sub-watershed of Miller Creek. Miller Creek is a small, perennial tributary to the Price River. A CIA encompassing a portion of this sub-watershed has been delineated and analyzed in the preparation of this CHIA (See Figure 2- *Cumulative Impact Area Location*). The CIA is approximately 193 acres and located within T16S R10E Sections 13, 14, 23 and 24. Two small ephemeral tributaries to Miller Creek are located south of the permit area.

The Covol Facility is not a mining operation, but rather a coal cleaning facility that utilizes an air-jig separation method to process coal-bearing materials. The entire coal cleaning process takes place above ground with no associated underground/sub-grade disturbance. The sources of coal at the Covol Facility are obtained from the Book Cliffs, Wasatch Plateau and Emery Coal Fields, which historically have not produced acid or toxic coal. The Covol Facility is 30 acres in size.

The objective of the CHIA document is to:

1. Identify the Cumulative Impact Area (CIA) (Part II)
2. Characterize CIA Baseline Conditions; (Part III)
3. Identify Hydrologic Concerns and Assess the Potential for Material Damage (Part IV)
4. Prepare a Statement of Findings (Part V)
5. Provide References (Part VI)

This CHIA complies with the federal Surface Mining Control and Reclamation Act of 1977 (SMCRA) and subsequent federal regulatory programs under 30 CFR 784.14(f), and with Utah regulatory programs established under Utah Code Annotated 40-10-et seq. and the attendant State Program rules under R645-301-729.

II. CUMULATIVE IMPACT AREA (CIA)

The CIA is approximately 193 acres and located within T16S R10E Sections 13, 14, 23 and 24. Figure 2- *Cumulative Impact Area Location* delineates the CIA for current and projected mining in the Lower Miller Creek watershed area. A CIA encompassing a portion of a sub-watershed of Miller Creek has been delineated and analyzed in the preparation of this CHIA. The CIA includes a portion of Miller Creek as a hydrologic resource that could be potentially impacted by proposed and anticipated coal mining activity. Ground and surface water resources within the area were analyzed and evaluated in producing the CIA for the Covol Facility.

The CIA is approximately 193 acres and located within T16S R10E Sections 13, 14, 23 and 24. Two small ephemeral tributaries to Miller Creek are located south of the permit area. No surface water features are located within the permit area. In addition, no springs or domestic/industrial use water wells have been identified within the permit area.

The entire permit area (30 acres) for the Covol Facility is located within this lower portion of the Miller Creek Watershed. A hydrologic/watershed boundary is located north of and directly adjacent to the Covol Facility. This boundary represents a hydrologic separation between what has been identifed within this CHIA as the Lower Miller Creek Watershed (See Figure 2- *Cumulative Impact Area Location*) and the adjacent Price River Watershed to the north.

Based upon a review of area topography, the watershed directly north of the Covol Facility reports directly to the Price River. Within this watershed, the Savage Coal Terminal is located approximately 0.4 miles north-west of the Covol Facility. The Savage Coal Terminal is currently operating under a SMCRA permit (C/007/0022) and a CHIA was prepared in August, 1989. The Savage Coal Terminal previously operated under the title of C.V. Spur Coal Processing and Loadout Facility. The Savage Coal Terminal prepares/washes raw coal that is incapable of meeting contract specifications in it's natural state (i.e. high ash content).

The Savage Coal Terminal is located within the Price River Watershed (as the Covol Facility), but is not contained within the Lower Miller Creek CIA. Though the Savage Coal Terminal is located in close proximity to the Covol Facility (approximately 0.4 miles north-west), the potential for a cumulative hydrologic impact from the two facilities is minimal. As a result, the Savage Coal Terminal was not included within the CIA for the Covol Facility. A more detailed discussion is provided below in the Hydrologic Concerns section.

At this time, no other coal mining related activities are proposed and/or anticpated within the Lower Miller Creek Watershed and delineated CIA.

III. HYDROLOGIC SYSTEM AND BASELINE CONDITIONS

The climatic, soil and geologic conditions of the CIA, which affect and determine the hydrologic characteristics, are described below. Discussion of the ground and surface water systems follow under separate headings.

CLIMATOLOGICAL INFORMATION

Based upon climate data obtained from the Western Regional Climate Center, normal annual precipitation at the permit area is approximately 9 inches per year. Due to the relatively low amount of annual rainfall, the CIA is considered semi-arid. Surface elevations in the area range from approximately 5,530 to 5,500 feet above sea level.

Average annual wind speed data (as obtained from the Price, Utah airport) is reported at 6.8 miles per hour (mph).

Average annual temperature for the area is approximately 49.9 degrees Farenheit. Temperature variation is considerable with a normal monthly low of 13.4 degrees Farenheit reported for January to a normal monthly high of 90.0 degrees Farenheit for the month of June (Western Regional Climate Center data).

SOIL INFORMATION

The Covol Facility is located in central Utah in the lowland area south of the Book Cliffs and north of the San Rafael Swell. The dominant surficial geologic formation within the CIA is the Mancos Shale. The member of the Mancos Shale found predominantly at the Covol Facility is the Blue Gate member which is comprised of primarily shales, siltstones and minor sandstone bedding.

Upon review of the Soil Survey of Carbon County (Jensen and Borfchert, 1988), the Covol Facility is located on soils identified as the Persayo-Chipeta Complex with some Killpack Clay Loam soils located on the permit areas eastern edge.

The Persayo-Chipeta Complex is characterized by a light brownish-grey, shallow, well-drained soil that formed in shale. Permeability is considered slow to moderately slow. The potential for water erosion is moderate to high and the potential for blowing soil is considered moderate. Agricultural use of the Persayo-Chipeta Complex is not considered practical due to its fine texture and the areas low amount of annual precipitation (Jensen and Borchert, 1988).

The Killpack Clay Loam is characterized by a grayish-brown, moderately deep, well-drained soil that formed as residual of shale. The permeability of the soil is characterized as slow. The potential for both water erosion and blowing soil are moderate. As with the Persayo-Chipeta Complex, revegetation/agricultural applications on the Killpack Clay Loam is not considered practical due to its fine texture and the areas low amount of annual precipitation (Jensen and Borchert, 1988).

GEOLOGY INFORMATION

The Covol Facility is located in Castle Valley, approximately 3.5 miles west of the town of Wellington, UT. To the north and east of Castle Valley lie the Book Cliffs. The San Rafael Swell borders the valley to the south with the Wasatch Plateau adjacent on the west side. Castle Valley is characterized as a broad plain with several drainages dissecting it.

The surficial geology of the Covol Facility and adjacent area is predominantly the Blue Gate Member of the Mancos Shale. The Blue Gate Member of the Mancos Shale consists of light bluish gray and gray thin-to medium-bedded shale and shaly siltstone with interlayered sandstone beds. The Blue Gate Member unit is relatively impermeable and contains a high gypsum content. (Weiss et al., 1990). According to Weiss et al. (1990), the Covol Facility is constructed primarily on Quaternary slope wash and weathered material from the Blue Gate Shale Member of the Mancos Shale. This unit is up to 2,000 feet thick in the region, but estimated to be approximately 700 feet thick beneath the Covol Facility and adjacent area. (Weiss et al., 1990).

The upper Mancos is an extremely effective confining unit because of its great thickness and continuity of impermeable shale and siltstone units (Gloyn et al., 2003). Direct precipitation on outcrops of the Ferron Sandstone and infiltration from streams are sources of recharge to the aquifer, particularly in the Castle Valley area (Gloyn et al., 2003). The potentiometric surface of the aquifer indicates that the primary recharge area to the Ferron aquifer is from the west.

Well logs from nearby gas production wells (DOGM, 2007) indicate that the Blue Gate Shale Member is underlain by the Ferron Sandstone Member at depth of approximately 700 feet beneath the site. The Ferron Sandstone Member of the Mancos Shale is comprised of an upper and a lower sandstone unit with a middle unit of shale (Hintze, 1988). The sandstones are typically light brown, thin and even bedded, cross-bedded, very fine grained to fine-grained sandstone and contain large rounded concretions (Weiss et al., 1990).

HYDRAULIC CONDUCTIVITY

All of the rock units in the vicinity of the Covol Facility are sedimentary (Hintze, 1988) . In sedimentary rocks, there is a wide range of textures or fabrics that determine the hydraulic characteristics of the unfractured medium. These textures or fabrics are related to the mineralogy or composition of the sediments, the range of sizes of the sedimentary particles (sorting), the spatial distribution of different sediment-sizes (grading), the shape and spatial orientation or arrangement of the sediment particles after compaction (packing), cementation and properties acquired or altered as the sediments were lithified (Hintze, 1988).

According to Gloyn et al. 2003, shales are characterized as semi-permeable to impermeable with hydraulic conductivity values of 10^{-8} to 10^{-3} feet/day. These values are representative of the hydraulic conductivities of the Blue Gate Members of the Mancos Shale present at the Covol Facility.

HYDROLOGIC RESOURCES

The CIA is located in the Price River Watershed. The Covol Facility is approximately 0.40 miles from Miller Creek (a small perennial tributary to the Price River). No ground or surface water resources are located within the permit area of the Covol Facility.

Ground Water

Based upon data and well logs obtained from the Savage Coal Terminal located approximately 0.4 miles west of the Covol Facility, groundwater is potentially located in the shallow, perched Quaternary deposits above bedrock and in the Ferron Sandstone Member of the Mancos Shale (which is located approximately 700 feet below the surface of the permit area). A Bluegate Shale Member of the Mancos Shale separates these two potentially water-bearing units. As discussed in the geology section above, the Bluegate Member of the Mancos Shale is highly impermeable thus greatly reducing the vertical migration of ground water. The upper Mancos is an extremely effective confining unit because of its great thickness and continuity of impermeable shale and siltstone units (Gloyn et al., 2003).

Perched ground water may occur in the area of the Covol Facility in disconnected, unconsolidated materials that overly relatively impermeable bedrock. These ground water resources are primarily recharged via precipitation, infiltration from losing stream reaches and flood irrigation practices in the area. (Gloyn et al., 2003).

Groundwater in these units are generally of poor quality with high total dissolved solid concentrations (TDS) (Gloyn et al., 2003). Based upon ground water monitoring data obtained from the nearby Savage Coal Terminal, ground water samples typically produce TDS levels well over 2,000 mg/L (DOGM, Electronic Water Monitoring Database 2009).

Surface Water

The Covol Facility is approximately 0.40 miles from Miller Creek. The topography of the area drains southward to Miller Creek. The site is predominantly flat with little topographic relief. No surface water resources are located within the permit area. Drainage of the area occurs as overland flow or in ephemeral drainages that flow in direct response to precipitation event and/or snow melt. Two ephemeral drainages that report to Miller Creek are located adjacent to the southern portion of the permit area. One of the ephemeral drainages is approximately 400 feet west of the south-west corner of the permit area. The other ephemeral drainage is located approximately 0.35 miles south-east of the south-east corner of the Covol facilities permit area.

Miller Creek is a small perennial stream that intercepts the Price River in Wellington, Utah. Historical stream gage data is not available for Miller Creek.

IV. IDENTIFY HYDROLOGIC CONCERNS

In this section, potential hydrologic impacts/concerns to ground and surface water

resources as a result of the Covol facilities operations are discussed.

As the Covol Facility is strictly a surface, coal cleaning operation, potential impacts to hydrologic resources differ from that of an underground coal mining operation. The following are potential impacts that operations at the Covol Facility could produce:

- Contamination from acid- or toxic-forming materials;
- Increased sediment yield from disturbed areas;
- Impacts to groundwater availability;
- Impacts to surface water availability;
- Flooding or streamflow alteration;
- Hydrocarbon contamination from above ground storage tanks or from the use of hydrocarbons in the permit area.

The following is a discussion of these impacts and the measures that have been implemented to minimize the potential for causing material damage to the hydrologic balance.

CONTAMINATION FROM ACID- OR TOXIC-FORMING MATERIALS

The Covol Facility processes material received from off-site clients. This material may have once been classified as coal mine waste or coal processing waste from it's origin. However, the Covol Facility processes all material brought onto the site into one of two (or both) products: high-quality coal and/or low-quality (low-BTU) coal. The product is then shipped off-site in accordance with contract requirements. No material brought on site is stored for indefinite periods of time. The Covol Facility performs testing of any material to be brought on site prior to it's arrival. If the material can not be processed into one of the aformentioned final products, it is rejected and not brought to the site.

The potential for the coal product stored at the site to produce contamination from acid- or toxic-forming materials is minimal. The sources of coal at the Covol Facility are located in the Book Cliffs, Wasatch Plateau and Emery Coal Fields. These coal seams have historically not produced acid or toxic coals. In addition, the coal is only temporarily stored at the facility, the native soils in the permit area are alkaline and sediment precipitation runoff is controlled by drainage ditches and two large sedimentation ponds. As a result, the potential for acid- or toxic-forming contamination migrating off the disturbed area is minimal.

As an additional safety measure, the Permittee commits to sampling all coal and coal waste that remains on site after an inactive period of 30 days. The Permittee will collect one sample for every 2,000 cubic yards of the on-site material, composite the samples and have the sample analyzed for acid- and toxic-forming materials in accordance with Tables 7 and 8 of the Division's Guidelines for the Analysis of Topsoil and Overburden. Any material that is verified to contain acid- and toxic-forming materials will be processed within one month following the receipt of the verifying analyses.

Given the impermeable nature of the surficial geology, the historic lack of acid producing

coal in the Book Cliffs, Wasatch Plateau and Emery Coal Fields, the limited ground water resources in the area and the stormwater runoff measures implemented at the site, the potential for material damage to the hydrologic balance from acid- and toxic-forming materials is negligible.

INCREASED SEDIMENT YIELD FROM DISTURBED AREAS

As the site of the Covol Facility was previously un-developed prior to the acquistion by the Permittee, the site was disturbed and extensive earth work performed during the construction of the site. As a result, increased sediment yield from the disturbed area has the potential to impact hydrologic resources down gradient from the site.

The Covol Facility utilizes a series of diversion channels, sedimentation ponds, containment berms, silt fences and road diversions and culverts to route and handle stormwater runoff from the disturbed area. These sediment controls have been designed and constructed to prevent additional contributions of sediment to streams or to runoff outside the permit area.

Two sediment ponds have been constructed on the southern portion of the permit area. The ponds are designed to work individually. One pond receives the drainage from the eastern portion of the disturbed area while the other pond receives the runoff from the western portion of the disturbed area. The ponds have been designed to fully contain the stormwater runoff from a 10-year, 24-hour precipitation event. Based upon Universal Soil Loss Equation calculations provided in the MRP, the east and west sediment ponds have been constructed to store 16,930 and 12,730 cubic feet of sediment respectively. These volumes of sediment correspond to apprxoimately 51 to 95 years of average annual sediment storage for the east and west ponds respectively.

The topography of the area slopes to the south. In order for sediment to reach one of the ephemeral tributaries to Miller Creek, the sediment ponds would have to discharge. The discharged sediment would then have to travel overland approximately 400'-500' prior to being deposited into the nearest ephemeral drainage that reports to Miller Creek.

As a result of the robust design and construction specifications of the sediment ponds, the unlikelihood of the ponds discharging and the distance the sediment would need to travel before encountering a surface water resource, the potential for material damage to the hydrologic balance from increased sediment yield outside of the permit area is minimal.

IMPACTS TO GROUNDWATER AVAILABILITY

As outlined previously, the Covol Facility's operation is a dry, coal cleaning operation that utilizes an air jig separator to produce a final product. The operation is conducted above ground. No underground mining or excavation will be conducted at the site. As a result, impacts to groundwater availability are negligible.

Regional hydrogeologic information indicates that the extent of groundwater in the area of the Covol Facility is limited. In addition, the Covol Facility is located upon an approximately 700

foot thick layer of Mancos Shale. As previously discussed, the upper Mancos is an extremely effective confining unit because of its thickness and continuity of impermeable shale and siltstone units (Gloyn et al., 2003). The result of which is very limited groundwater resources in the area of the Covol Facility. Groundwater monitoring wells at the Savage Coal Terminal, located approximately 0.25 miles north of the Covol Facility, were constructed from 6 to 20 feet deep into this material. Water samples obtained from these wells often produced TDS (Total Dissolved Solids) values well over 2,000 mg/L (Savage Services Corporation MRP, 1983).

Based upon well logs from nearby gas production wells (DOGM, 2007), the other aquifer system identified in the region of the Covol Facility is the Ferron Sandstone which is located approximately 700 feet below the site. The Ferron Sandstone Member of the Mancos Shale is comprised of an upper and a lower sandstone unit with a middle unit of shale (Hintze, 1988). The sandstones are typically light brown, thin and even bedded, cross-bedded, very fine grained to fine-grained sandstone and contain large rounded concretions (Weiss et al., 1990). According to Gloyn et al., 2003, sources of recharge to the Ferron aquifer system, particularly in the Castle Valley area are from direct precipitation on outcrops and infiltration from streams.

No water supply wells are located within the permit or adjacent areas. The dominant surficial geology contains minimal amounts of groundwater and it's physical characteristics impede vertical groundwater flow. Furthermore, the minimal groundwater that is located in the area is of very poor quality. As a result, the potential for material damage to groundwater availability, due to the operation of the Covol Facility, is minimal.

IMPACTS TO SURFACE WATER AVAILABILITY

No surface water resources are located within the permit area of the Covol Facility. A small ephemeral tributary to Miller Creek is located approximately 400 feet west of the south-west corner of the permit area. A second ephemeral drainage reporting to Miller Creek is located approximately 0.35 miles south-east of the south-east corner of the Covol Facility's permit area.

Miller Creek is located approximate 0.4 miles south of the Covol Facility. The topography of the Covol Facility drains to the south toward Miller Creek. The Price River is located approximately 2 miles northeast of the Covol Facility.

Two surface water rights are located on Miller Creek, south of the Covol facility (#91-3294 and #91-3295). They are approximately 0.4 to 0.5 miles from the site. Both of the water rights are for stockwatering directly on the stream.

The operations at the Covol Facility consist of a dry, air separation system whereby the coal is processed without the use of chemicals and/or water. The Covol Facility does not divert or utilize surface water resources in their coal processing operation.

As there are no surface water resources on the site, the operations of the facility are above ground and water is not utilized in the processing of the coal, there is minimal potential for material damage to surface water availability as a result of the Covol Facility's operation.

FLOODING OR STREAMFLOW ALTERATION

The Covol Facility and it's disturbed area runoff are isolated from the adjacent area by utilizing a series of runoff control structures such as berms, diversion ditches and sedimentation ponds. All stormwater runoff generated on the site is routed to one of the two sedimentation ponds. The ponds are designed for total containment of the design storm event (10-year, 24 hour). As previously discussed, the Covol facility is approximately 0.4 miles from Miller Creek.

In summary, the Covol Facility's potential to produce material damage from flooding or streamflow alteration imapcts is remote due to the absence of mining or exploration occuring at the site, the lack of surface water resources within the permit area and the utilization of over-designed sedimentation ponds to control stormwater runoff.

HYDROCARBON CONTAMINATION FROM ABOVE GROUND STORAGE TANKS OR FROM THE USE OF HYDROCARBONS IN THE PERMIT AREA

Diesel fuel, oils, greases and various other hydrocarbon products are stored and utilized at the Covol Facility for a variety of purposes. Any storage of these types of chemicals produces the potential for spills and/or leaks.

As part of the Covol Facility's permitting process, a Spill Prevention, Control and Countermeasure Plan (the Spill Prevention Plan) was developed, submitted and approved by the Department of Environmental Quality per the Clean Water Act. The plan outlines the various chemicals and containment practices that will be employed at the facility.

The diesel fuel is stored in an above-ground storage tank that is equipped with secondary containment. Additionally, tanks and drums of other products are stored in secondary containment structures that prevent leaks from reaching the ground. The Spill Prevention Plan indicates that: equipment maintenance will be taken care of offsite, used oil will not be accumulated on-site and no underground storage tanks will be utilized at the facility.

In addition to the secondary containment structures that will be utilized on the site, the stormwater runoff system would prevent hydrocarbon products from leaving the area as the result of a spill or release. For these reasons, the potential for material damage to hydrologic resources from hydrocarbon contamination is minimal.

CUMULATIVE EFFECTS

The Savage Coal Terminal and the Covol Facility are both located within the Price River Watershed and are in close proximity to one another. The two facilities are separated by a ridgeline that defines a hydrologic boundary. The result of which is that the Savage Coal Terminal and the Covol Facility are located in two separate sub-watersheds of the Price River despite their close proximity to one another (approximately 0.4 miles). The sub-watershed that the Covol Facility is located in drains south towards Miller Creek. The Savage Coal Terminal's

topography drains north towards the Price River. As a result, the potential for the two facilities to produce a cumulative effect on hydrologic resources is minimal.

Due to the general lack of groundwater resources in the surrounding areas, the absence of underground mining and/or exploration and the impermeable nature of the surficial geology at both facilities, the potential for cumulative material damage to groundwater resources is minimal.

The most probable cumulative hydrologic impact produced from the Covol Facility and the Savage Coal Terminal would be an increase in sedimentation and/or contamination to the Price River. However, the likelihood of such an impact occuring is negligible.

As previously discussed in this document, in order for any contamination or sediment to leave the Covol Facility, the sedimentation ponds (designed for full containment of the 10-year, 24-hour rainfall event) would need to discharge a significant amount of water. The volume of that discharge would have to be significant enough to flow overland over 500' before reaching the nearest ephemeral tributary to Miller Creek. Once that discharge entered Miller Creek, it would have to travel over 12 miles before reaching the Price River. The point at which Miller Creek intercepts the Price River would be the closest point at which the Covol Facility and the Savage Coal Terminal could potentially produce cumulative material damage to a hydrologic resource (i.e. the Price River).

As a result, the Division finds that the potential for the Covol Facility and the Savage Coal Terminal to produce a cumulative impact to hydrologic resources is minimal.

V. STATEMENT OF FINDINGS

Based on the information presented in this CHIA, the Utah Division of Oil, Gas and Mining finds that the proposed coal mining and reclamation operations of the COVOL Engineered Fuels, LLC Wellington Dry Coal Cleaning Facility have been designed to prevent material damage to the hydrologic balance outside the permit area.

VI. REFERENCES

Utah Division of Oil, Gas and Mining., Online Oil and Gas Information System. http://utstnrogmsq13.state.ut.us/UtahRBDMSWeb/main_menu.htm. 2007.

Gloyn, Tabet, Tripp, Bishop, Munyon, Gwynn, Blackett., Energy, Mineral and Ground-Water Resources of Carbon and Emery Counties, Utah., Utah Geological Survey Bulletin 132. 2003.

Hintze, L.F., Geologic History of Utah., Brigham Young University Geology Studies, 1988.

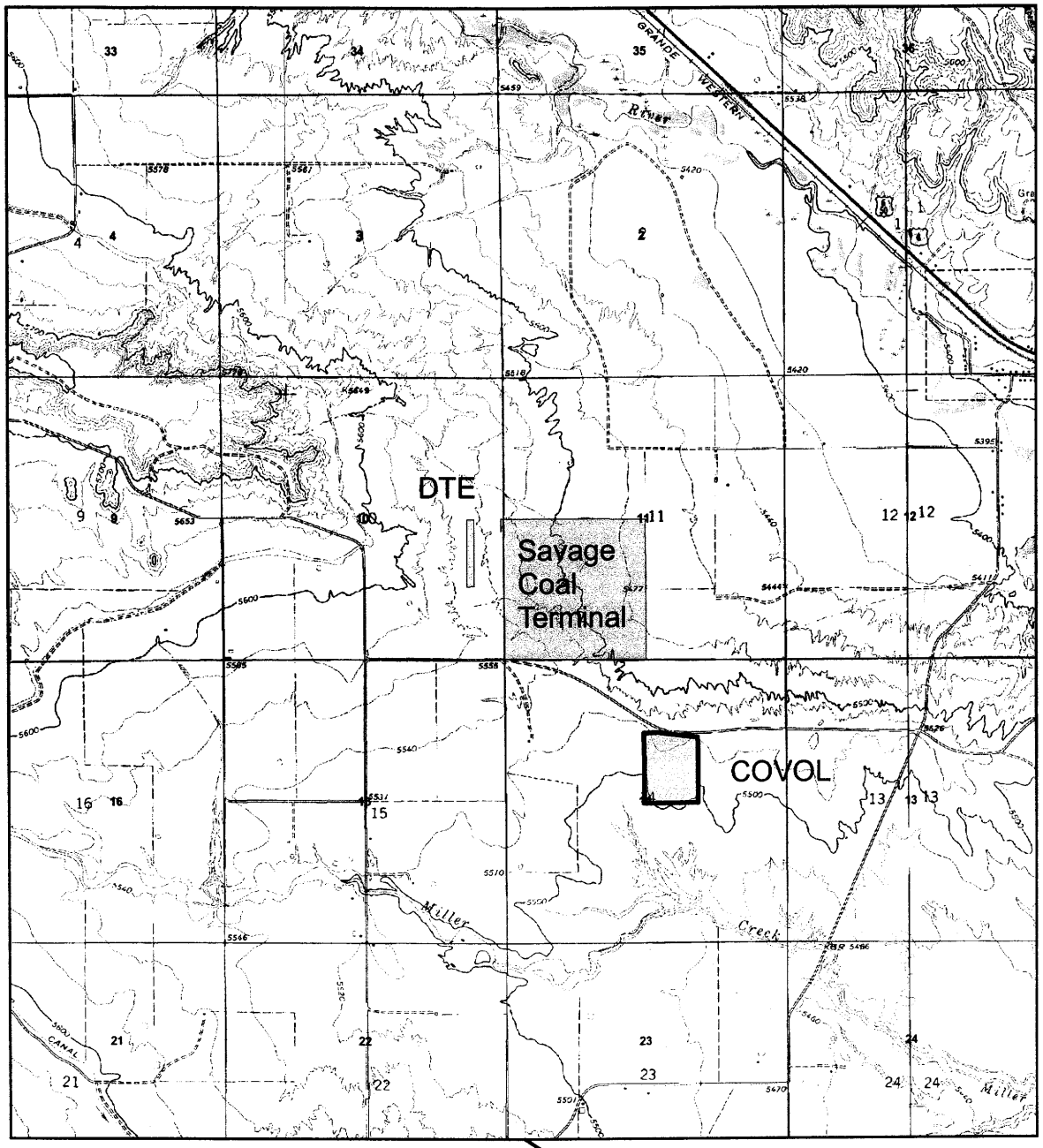
Jensen, E., Borchert, J., Soil Conservation Service., Soil Survey of Carbon Area, Utah., USDA., 1988.

Maxfield, E.B., Foraminifera from the Mancos Shale of east-central Utah., Brigham Young University Geology Studies., Volume 23. 1976.

Utah Division of Water Resources., Utah State Water Plan- West Colorado River Basin., August, 2000.

Weiss, Malcom P., Irving J. Witkind and William R. Cashion., Geologic Map of the Price 30'x60' Quadrangle., Carbon, Duschesne, Uintah and Wasatch Counties, Utah. U.S. Geological Survey Miscellaneous Map Series I-1990.

Lines, G.C., D.J. Morrisey, T.A. Ryder and R.H. Fuller. 1983. Hydrology of the Ferron Sandstone Aquifer and Effects of Proposed Surface-Coal Mining in Castle Valley, Utah. U.S. Geological Survey Water-Supply Paper 2195. Alexandria, Virginia.



COVOL

C0070045
Carbon County, Utah

Township 15 South Range 10 East

Permit Area
Proposed Mine Plan Modification (If shown)
Proposed State Permit Modification
Active Permit
In Reclamation
Relaimed-Final Bond Release

0 0.15 0.3 0.6 Miles

1:24,000

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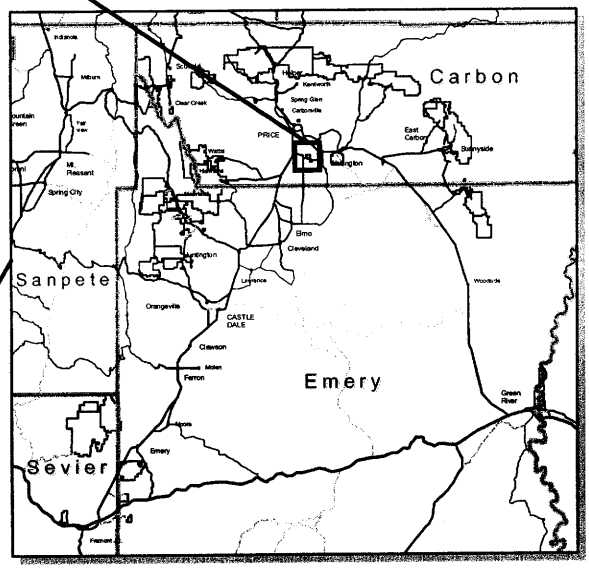
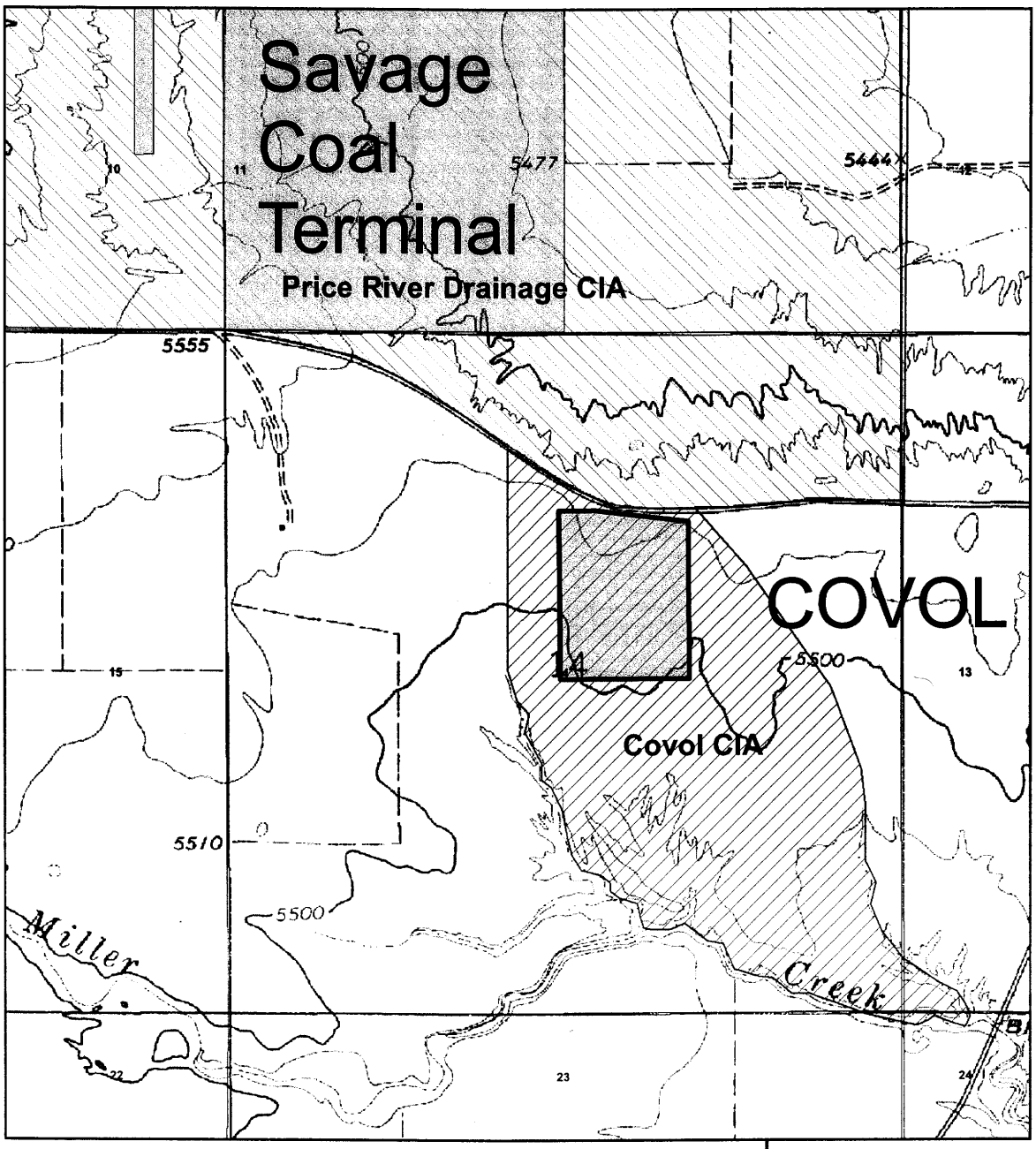


Locator Map



COVOL

C0070045
Carbon County, Utah
Figure 2 - Cumalative Impact Area (CIA)

Township 15 South Range 10 East

Permit Area
Proposed Mine Plan Modification (If shown)
Proposed State Permit Modification
Active Permit
In Reclamation
Relaimed-Final Bond Release

0 0.05 0.1 0.2 Miles

1:10,000

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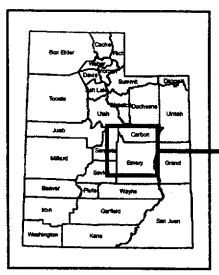
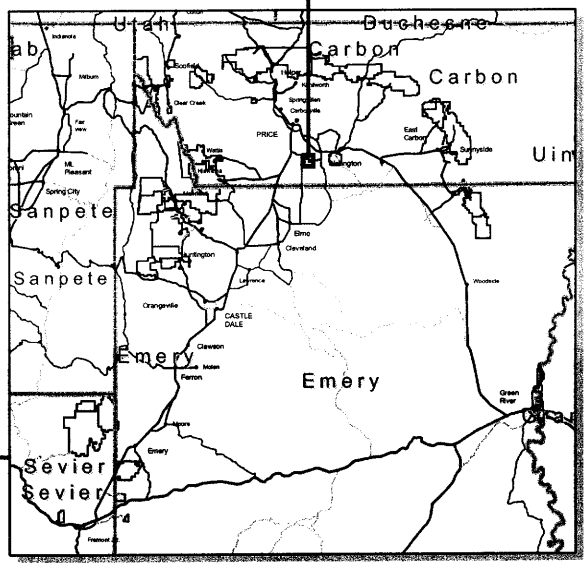




Locator Map

JON M. HUNTSMAN, JR.
Governor

GARY R. HERBERT
Lieutenant Governor

State of Utah
DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER
Executive Director

Division of Oil, Gas and Mining

JOHN R. BAZA
Division Director

August 31, 2009

TO: Internal File

FROM: Daron R. Haddock, Permit Supervisor

RE: 510 (c) Recommendation for COVOL Engineered Fuels, LC, Wellington Dry-Coal Cleaning Facility, C/007/0045

As of this writing of this memo, there are no NOVs or COs which are not corrected or in the process of being corrected. There are no finalized civil penalties, which are outstanding and overdue in the name of COVOL Engineered Fuels, LC. COVOL Engineered Fuels, LC does not demonstrate a pattern of willful violations, nor have they been subject to any bond forfeitures for any operation in the state of Utah.

On August 20, 2009, the Applicant Violator System (AVS) indicated that there was one outstanding violation associated with Jim Walters Resources in Alabama. After contacting the Alabama Surface Mining Commission, it was determined that COVOL had nothing to do with the violation and should not be blocked from obtaining a permit.

On August 26, 2009, the Division received documentation from Alabama indicting that the Jim Walters violation should not be linked to COVOL. (See attached email from Carla Lightsey.)

Attachment
O:\007045.COV\FINAL\PERMIT\2009\AVSMEMO.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*

UTAH DNR
OIL, GAS & MINING

Daron Haddock - FW: JWR Violation

From: "Lightsey, Carla" <Carla.Lightsey@asmc.alabama.gov>
To: "daronhaddock@utah.gov" <daronhaddock@utah.gov>
Date: 8/26/2009 10:49 AM
Subject: FW: JWR Violation

Per a request from Gina Rau of Covol, I have had the issue of the FTACO issued to Jim Walter Resources on P-3256 and have confirmed that Covol has nothing to do with this violation that it is on one of JWR's impoundments and they are working to abate the violation. You may want to run this by the AVS office for them to make any notes with regard to their recommendation.

Please let me know if you need anything else.

Thank you -

Carla D. Lightsey
Chief, Division of Surface Mining Control and Reclamation
Alabama Surface Mining Commission
P O Box 2390
JASPER AL 35502-2390
205.221.4130

From: McCarthy, Milton
Sent: Wednesday, August 26, 2009 11:25 AM
To: Lightsey, Carla
Subject: RE: JWR Violation

Carla,
I have confirmed with Derek that Covol has nothing to do with this violation. JWR is working to abate the C.O. but has a ways to go. The info. contained in the e-mail from Ms. Rau appears accurate.
Let me know if a more formal response is required.
Thanks,
MIlton

From: Lightsey, Carla
Sent: Wednesday, August 26, 2009 11:03 AM
To: McCarthy, Milton
Subject: FW: JWR Violation

Per our conversation, can you research the facts of this and possibly give me the letter they are requesting. I will then forward to UDOGM so they can issue Covol's permit in Utah.

Thanks - Carla

From: Gina Rau [mailto:grau@headwaters.com]
Sent: Tuesday, August 25, 2009 9:02 PM

To: Lightsey, Carla
Subject: JWR Violation

Carla,

ASMC issued a violation on 1/22/2009 to JWR for failure to certify Freshwater Impoundment #2 on ASMC Permit P3256. The impoundment could not be certified because it was too full of solids. JWR worked on cleaning out the impoundment, but was not able to complete the work before the extensions that ASMC granted expired. Therefore, ASMC issued the cessation order for failure to abate the violation on 8/6/2009. Based on conversations with Jerry Pike of JWR, a dredge has been moved into the impoundment and they are currently removing the solids from the impoundment so that it can be certified.

Since the cessation order is on the AVS database and Covol Engineered Fuels is listed as a contract miner on this permit, the Utah Division of Oil, Gas, and Mining (UDOGM) called me last Thursday and said that they can't issue the permit for Covol's Utah facility because there is a permit block on the AVS database that won't be removed until the cessation order is abated. I explained to UDOGM that the violation is associated with JWR's preparation plant, not Covol's operations. UDOGM also spoke with Kathy Box at ASMC. UDOGM told me that if they issued our permit, OSM would have an issue with them. They said that if ASMC would send them a letter stating the order is associated with JWR's plant and not Covol's operations and JWR has committed to and is working to abate the order, then UDOGM could issue the mine permit for Covol's Utah facility. The contact at UDOGM is Mr. Daron Haddock, 1594 West North Temple, Suite 1210, Salt Lake City, UT 84116.

If you need additional information, please let me know. Also, I'm available to meet Thursday morning, if that would help.

Thank you for your help,
Gina

Gina Rau
Environmental Manager
Headwaters, Inc.
Ph: 801-984-3770
Cell: 801-703-7590

Entity Evaluation

Entity Number	158171
Entity Name	Covol Engineered Fuels Lc
Date of Evaluation	9/1/2009 9:01:28 AM
Requested Individual	suzanne.steab

CAUTION: The Applicant/Violator System (AVS) is an informational database. Permit eligibility determinations are made by the regulatory authority with jurisdiction over the permit application not by the AVS. Results which display outstanding violations may not include critical information about settlements or other conditions that affect permit eligibility. Consult the AVS Office at 800-643-9748 for verification of information prior to making decisions on these results.

There were no violations retrieved by the system

Evaluation OFT

Entities: 23

247060 Earnest Partners - ()
---149912 Headwaters Inc - (Subsidiary Company)
------061923 James A Herickhoff - (Director)
------144794 Harlan M Hatfield - (Secretary)
------144794 Harlan M Hatfield - (Vice President)
------146994 Steven G Stewart - (Chief Financial Officer)
------146994 Steven G Stewart - (Treasurer)
------147759 Raymond J Weller - (Director)
------147760 Kirk A Benson - (Chairman of the Board)
------147760 Kirk A Benson - (Chief Executive Officer)
------147760 Kirk A Benson - (Director)
------158172 Headwaters Energy Services Corp - (Subsidiary Company)
---------144794 Harlan M Hatfield - (Vice President)
---------146994 Steven G Stewart - (Chairman of the Board)
---------146994 Steven G Stewart - (Chief Financial Officer)
---------146994 Steven G Stewart - (Director)
---------158171 Covol Engineered Fuels Lc - (Subsidiary Company)
----------124297 John R Shaal - (Vice President)
----------144794 Harlan M Hatfield - (Manager)
----------144794 Harlan M Hatfield - (Vice President)
----------146994 Steven G Stewart - (Chief Financial Officer)
----------146994 Steven G Stewart - (Manager)
----------158176 Curtis J Brown - (Secretary)
----------158177 Jason T Day - (Assistant Secretary)
----------248871 William Gehrmann - (President)
----------248873 Scott Ballard - (Treasurer)
---------158176 Curtis J Brown - (Secretary)
---------158177 Jason T Day - (Assistant Secretary)
---------248871 William Gehrmann - (President)
---------248872 Stephanie Black - (Vice President)
---------248873 Scott Ballard - (Treasurer)
------158207 R Sam Christensen - (Director)
------158208 William S Dickenson - (Director)
------158209 E J Garn - (Director)
------158210 Malyn K Malquist - (Director)
------158212 Blake O Fisher Jr - (Director)
---247061 Paul Viera - (Chief Executive Officer)
---247062 John Whitmore - (Chief Operations Officer)
---247063 James Wilson Jr - (Chief Financial Officer)

Narrative

AFFIDAVIT OF PUBLICATION

STATE OF UTAH)

ss.

County of Carbon,)

I, Richard Shaw, on oath, say that I am the Publisher of the Sun Advocate, a twice-weekly newspaper of general circulation, published at Price, State a true copy of which is hereto attached, was published in the full issue of such newspaper for 4 (Four) consecutive issues, and the first publication was on the 1st day of April, 2008, and that the last publication of such notice was in the issue of such newspaper dated the 22nd day of April, 2008.

Richard Shaw - Publisher

Subscribed and sworn to before me this 22nd day of April, 2008.

Notary Public My commission expires January 10, 2007 Residing at Price, Utah

Publication fee, $399.36

LINDA THAYN
NOTARY PUBLIC-STATE OF UTAH
845 EAST MAIN
PRICE, UTAH 84501
COMM. EXP. 01-10-2011

NOTICE OF PERMIT APPLICATION
COVOL ENGINEERED FUELS, LC

Notice is hereby given that COVOL Engineered Fuels, L.C. 10653 South River Front Parkway, South Jordan, Utah 84095 has submitted an application to the Utah Division of Oil, Gas and Mining (the "Division") to operate a dry coal cleaning facility approximately 2 miles southwest of Wellington, Utah. The permit area for this facility is located in NE¼ Sec. 14, T. 15 S., R. 10 E., SLBM and contains approximately 30 acres. Pursuant to the Utah Administrative Code R645-300-121.150 notice is also provided that this facility is located within 100 feet of the outside right-of-way of a public road (Ridge Road).

The Division has determined that this application is administratively complete. A copy of the permit application is available for public inspection at the following locations:

Utah Division of Oil, Gas and Mining
1594 West North Temple, Suite 1210
Salt Lake City, UT 84114-5801

Carbon County Clerk's Office
120 East Main
Price, Utah 84501

Written comments, objections, and requests for informal conferences or public hearings on the application or location of the facility may be addressed to:

Utah Coal Program
Utah Division of Oil, Gas and Mining
1594 West North Temple, Suite 1210
P.O. Box 145801
Salt Lake City, Utah 84114-5801

Closing date for submissions of comments, objections, and requests for informal conference or public hearing is 30 days from the last date of newspaper publication.

Published in the Sun Advocate April 1, 8, 15 and 22, 2008.

RECEIVED
MAY 02 2008
DIV. OF OIL, GAS & MINING

State of Utah
Department of Natural Resources
Division of Oil, Gas and Mining
1594 West North Temple, Suite 1210
P.O. Box 145801
Salt Lake City, Utah 84114-5801
(801) 538-5340

(Non-Federal)

Contents:

Permit Number: Not issued
Date Original Permit Issued: Not issued
Effective Date of Agreement: _____
Bond Number: 929392507

RECLAMATION AGREEMENT

This **RECLAMATION AGREEMENT** (hereafter referred to as "Agreement") is entered into by COVOL ENGINEERED FUELS, LC (hereafter referred to as the "Permittee") and the State of Utah, Department of Natural Resources, Division of Oil, Gas and Mining (hereafter referred to as the "Division").

For the purpose of the **AGREEMENT** the information provided below, shall constitute forms of definition or are for information regarding the Permittee or its operations.

"ACT": Title 40-10-1, et. seq., Utah Code Annotated (1953, as amended)

"BOND": A bond in compliance with Utah Administrative Rule 645-301-800, et. seq.

"BOND AMOUNT":

"BONDED AREA": The area covered by the Performance Bond as provided at R645-301-820.110 of the Utah Administrative Code and any additional areas of subsidence related material damage as identified and required by R645-301-525.550 of the Utah Administrative Code.

"BOND TYPE":

Bonding Company: Western Surety Company
Address: P.O. Box 5077, Sioux Falls, SD 57117-5077
Telephone Number: 801-533-3624

"COMPANY OFFICERS":

"COOPERATIVE AGREEMENT": That certain agreement codified at 30 C. F. R. 944.30

"DISTURBED AREA": This term is defined in Utah Administrative Code R645-100-200. The Permittee and the Division contemplate that the Disturbed Area will be as approved and shown in the Permit Application Package, but the Permittee's reclamation obligation and the bond related thereto are governed by applicable law.

"LIABILITY INSURANCE": Public liability insurance policy submitted as part of the permit application and attached as Exhibit "C".

Insurance Company:	Marsh USA Risk & Insurance Services
Address:	15 West South Temple, Suite 700
	Salt Lake City, UT 84101
Telephone Number:	801-533-3654
Policy Number:	PGL N04286510
Expiration Date:	10/01/2008

Bond Number 929395207

"MINE":

"PERMIT": Utah Mining and Reclamation Permit No.

"PERMITTEE":

Principal Address:	10653 S. River Front Parkway, Suite 300
Utah Address:	South Jordan, UT 84095
Telephone Numbers:	801-984-9400

"PERMITTEE'S UTAH REGISTERED AGENT FOR SERVICE OF PROCESS":

"REGULATIONS": The regulations promulgated by the Division and OSM pertaining to coal mining and reclamation activities.

"SMCRA": The Surface Mining Control and Reclamation Act of 1977, 30 U.S.C. §§ 1201, et. seq.

"SURETY":

The following Exhibits are incorporated within and made a part of this Agreement.

EXHIBITS:

"BONDED AREA"	**Exhibit "A"**
"BONDING AGREEMENT"	**Exhibit "B"**
"LIABILITY INSURANCE"	**Exhibit "C"**

WHEREAS, the Permittee is ready and willing to file the Bond in the amount and in a form acceptable to the Division and to perform all obligations imposed by the Division pursuant to applicable laws under the permit; and

NOW, THEREFORE, the Division and the Permittee agree as follows:

1. The provisions of SMCRA, the Act and the Regulations are incorporated by reference herein and hereby made a part of this Agreement. Provisions of the Act or Regulations and Rules shall supersede conflicting provisions of this Agreement.

2. The Permittee agrees to comply with all terms and provisions of this Agreement, the Permit (which is based upon the approved Permit Application Package), the Act and the Regulations, including the reclamation of all areas disturbed by surface coal mining and reclamation operations, despite the eventuality that the costs of actual reclamation exceeds the Bond Amount.

3. The Permit Application Package includes a legal description of the Bonded Area, including the number of acres approved by the Division to be disturbed by surface mining and reclamation operations during the Permit period. For convenience, a copy of the description of the Bonded Area is attached as Exhibit "A", and is incorporated by reference.

4. The Permittee agrees to provide a Bond to the Division in the form and amount acceptable to the Division ensuring the timely performance of the reclamation obligations in the manner and by the standards set forth in this Agreement, the Permit, (which is based upon the Permit Application Package), the Act and the Regulations. The Bond is attached as Exhibit "B" and is incorporated by reference.

5. The Permittee agrees to maintain in full force and effect the Liability Insurance policy submitted as part of the Permit application and which is described in the attached Exhibit "C". The Division shall be listed as an additional insured on this policy.

6. In the event that the Disturbed Area is increased through expansion of the coal mining and reclamation operations or decreased through partial reclamation, the Division shall adjust the Bond as appropriate in accordance with applicable law. In the event of material damage to the surface lands, or contamination, diminution, or interruption of a protected water supply caused by subsidence from underground coal mining, the Permittee may be required by the Division to increase the bond amount pursuant to the provisions of R645-301-525.550 of the Utah Administrative Code.

7. The Permittee does hereby agree to indemnify and hold harmless the State of Utah and the Division, and their respective employees and agents, from any claim, demand, liability, cost, charge, or suit initiated by a third party as a result of the Permittee or Permittee's agents or employees failure to abide by the terms and conditions of the

approved Permit (which is based upon the approved Permit Application Package), and this Agreement.

8. The terms and conditions of this Agreement are non-cancelable until such time as the Permittee has satisfactorily, as determined by the Division, reclaimed the Disturbed Area in accordance with this Agreement, the approved Permit (which is based upon the approved Permit Application Package), the Act, and the Regulations. Notwithstanding the above, the Division may direct, or the Permittee may request and the Division may approve a written modification to this Agreement in accordance with applicable law.

9. The Permittee may, at any time, submit a request to the Division to substitute the bonding method. The Division may approve the substitution if the new Bond form meets the requirements of the Act, and the Regulations, but no Bond shall be released until the Division has approved and accepted the replacement Bond.

10. This Agreement shall be governed and construed in accordance with the laws of the state of Utah. The Permittee shall be liable for all reasonable costs incurred by the Division to enforce this Agreement.

11. Any breach of the provisions of this Agreement, the Act, the Regulations, or the Permit (which is based upon the approved Permit Application Package) may, at the discretion of the Division, result in enforcement actions by the Division which include, but are not limited to, an order to cease coal mining and reclamation operations, revocation of the Permittee's Permit and forfeiture of the Bond.

12. In the event of forfeiture of the Bond, the Permittee agrees to be liable for additional costs in excess of the Bond Amount which may be incurred by the Division in order to comply with the Permit (which is based upon the approved Permit Application Package), the Act, and the Regulations. Any excess monies resulting from the forfeiture of the Bond, upon compliance with this Agreement, shall be refunded as directed by the Permittee or, if a dispute arises, as directed by a court of competent jurisdiction by interpleading the funds subject to the dispute.

13. No delay on the part of the Division in exercising any right, power, or privilege, under the Permit, the Bonding Agreement (Exhibit "B") and/or this Agreement shall operate as a waiver thereof, nor shall any single or partial exercise of any right, power or privilege thereof preclude other or further exercise of any right, power or privilege. The provisions of this Agreement are severable, and if any provision of this Agreement, or the application of any provision of this Agreement, to any circumstances is held invalid, the application of such provision to other circumstances, and the remainder of this Agreement, shall not be affected thereby.

14. Each signatory below represents that he/she is authorized to execute this Agreement on behalf of the named party. Proof of such authorization is provided on a form acceptable to the Division and is attached thereto.

SO AGREED this 5th day of November, 20 07.

STATE OF UTAH:

John R. Baza
Director,
Division of Oil, Gas and Mining

PERMITTEE:

By: Ewan J. O'Neil

Title: Sr. Vice President

NOTE: An affidavit of Qualification must be completed and attached to this form for each authorized agent or officer. Where one signs by virtue of Power of Attorney for a company, such Power of Attorney must be filed with this Agreement. If the principal is a corporation, the Agreement shall be executed by its duly authorized officer.

EXHIBIT "A"

Bonded Area
Legal Description

(Non-Federal Coal)

RECEIVED
NOV 0 1 2007
DIV. OF OIL, GAS & MINING

Exhibit "A"
Legal Description
Non-Federal
Bond Number 929392507

EXHIBIT "A"

Pursuant to R645-301- 820.110, the surety bond covers an identified increment of land within the permit area upon which the operator will initiate and conduct coal mining and reclamation operations during the initial term of the permit. This area is identified as:

Map(s) showing the BONDED AREA within the approved PERMIT AREA :

Drawing No.: OPT-01 Note that the bonded area consists of two parcels – one 10-acre parcel and one 20-acre parcel.

Legal description of BONDED AREA:

Description Parcel #1 (10 acres):

BEGINNING AT THE NORTHWEST CORNER OF THE SOUTHWEST QUARTER OF THE NORTHEAST QUARTER OF SECTION 14 TOWNSHIP 15 SOUTH RANGE 10 EAST OF THE SALT LAKE BASE & MERIDIAN AND RUNNING THENCE S00°26'51"E 469.62 FEET ALONG THE QUARTER SECTION LINE, THENCE N89°30'07"E 1020.02 FEET, THENCE N00°26'51"W 397.84 FEET TO THE SOUTHERLY RIGHT-OF-WAY LINE OF AN EXISTING COUNTY ROAD KNOWN AS RIDGE ROAD. THENCE ALONG SAID LINE THE FOLLOWING TWO (2) CALLS, S89°23'40"W 293.93 FEET THENCE 464.66 FEET ALONG THE ARC OF A 1456.39 FOOT RADIUS CURVE TO THE RIGHT AND CONCAVE TO THE SOUTH, (CHORD BEARS N81°30'15"W 462.69 FEET) TO A POINT ON THE 40 ACRE LINE, THENCE ALONG SAID LINE S89°30'07"W 269.03 FEET TO THE POINT OF BEGINNING. SAID PARCEL CONTAINS 435602.54 SQ.FT. OR 10.00 ACRES

Description Parcel #2 (20 acres):

BEGINNING AT A POINT WHICH LIES S00°26'51"E ALONG THE QUARTER SECTION LINE 469.62 FEET FROM THE NORTHWEST CORNER OF THE SOUTHWEST QUARTER OF THE NORTHEAST QUARTER OF SECTION 14 TOWNSHIP 15 SOUTH RANGE 10 EAST OF THE SALT LAKE BASE AND MERIDIAN AND RUNNING THENCE S00°26'51"E 852.51 FEET TO THE NORTH LINE OF THE SOUTHEAST QUARTER OF SECTION 14, THENCE ALONG SAID LINE N89°40'58"E 1020.02 FEET, THENCE N00°26'51"W 855.73 FEET, THENCE S89°30'07"W 1020.02 FEET TO THE POINT OF BEGINNING. SAID PARCEL CONTAINS 871220.73 SQ.FT. OR 20.00 ACRES

SUBJECT TO A 100-FOOT WIDE RAILROAD EASEMENT BEING 50.0 FEET EACH SIDE OF THE FOLLOWING DESCRIBED CENTERLINE.

BEGINNING AT A POINT WHICH LIES N00°26'51"W ALONG THE QUARTER SECTION LINE 117.37 FEET FROM THE SOUTHEAST CORNER OF THE NORTHEAST QUARTER OF SECTION 14 TOWNSHIP 15 SOUTH RANGE 10 EAST OF THE SALT LAKE BASE AND MERIDIAN THENCE 167.36 FEET ALONG THE ARC OF A 200.00 FOOT RADIUS CURVE, CONCAVE TO THE SOUTHWEST, (CHORD BEARS S66°05'14"E 164.16 FEET) TO A POINT 50.00 FEET FROM THE NORTH LINE OF THE SOUTHEAST QUARTER OF SECTION 14, THENCE N89°40'58"E 870.48 FEET TO THE POINT OF TERMINUS.

Exhibit "A"
Legal Description
Non-Federal
Bond Number 929392507

The above described area shall be modified as necessary to correspond to an increase in the area disturbed as a result of an expansion of coal mining and reclamation operations. The described area may also be decreased as a result of partial reclamation.

IN WITNESS WHEREOF the **SURETY** has hereunto set its signature and seal this

26th day of September, 20 07.

WESTERN SURETY COMPANY
SURETY

By:

Tina Davis, Attorney-In-Fact
Title:

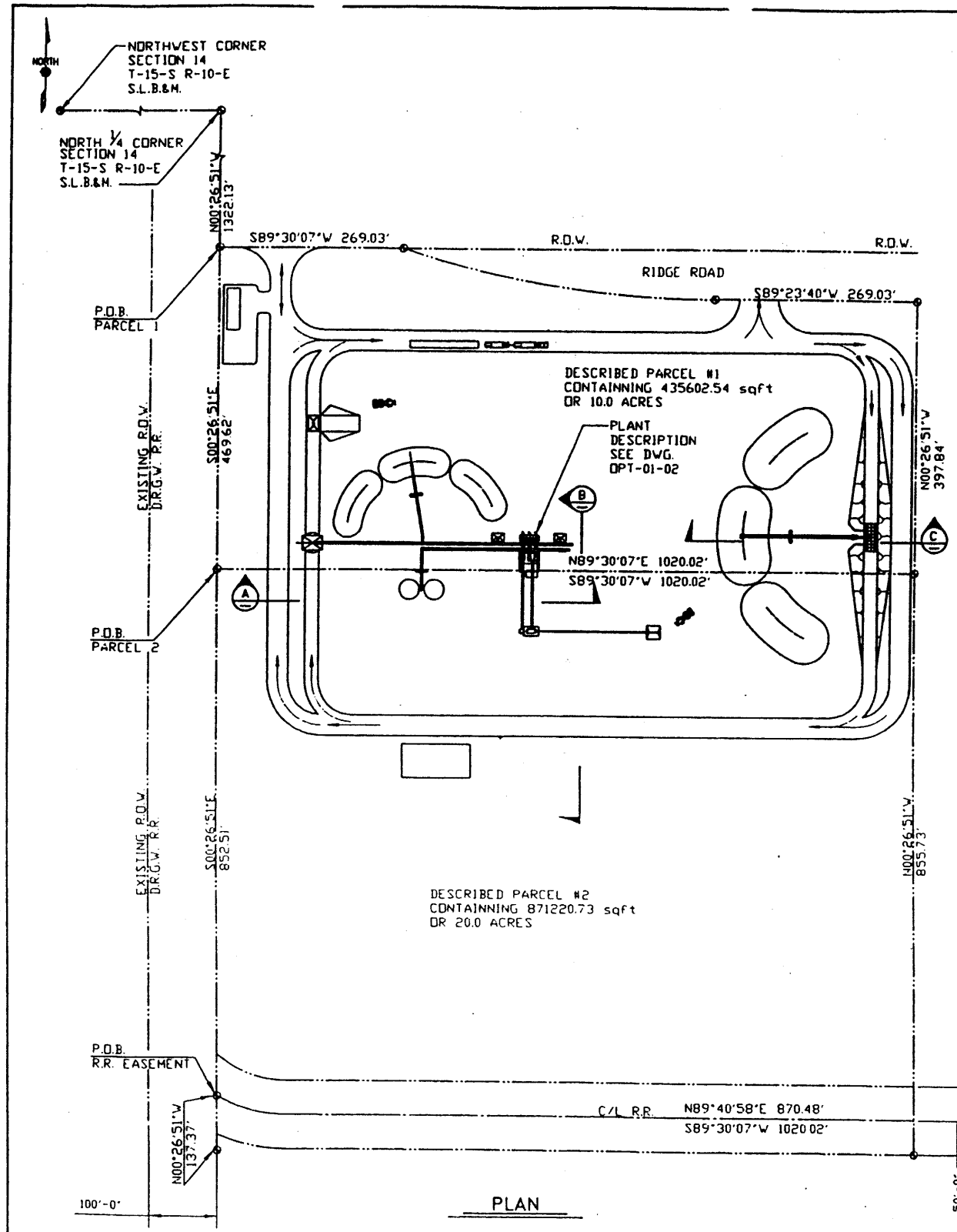
SURETY ACKNOWLEDGMENT

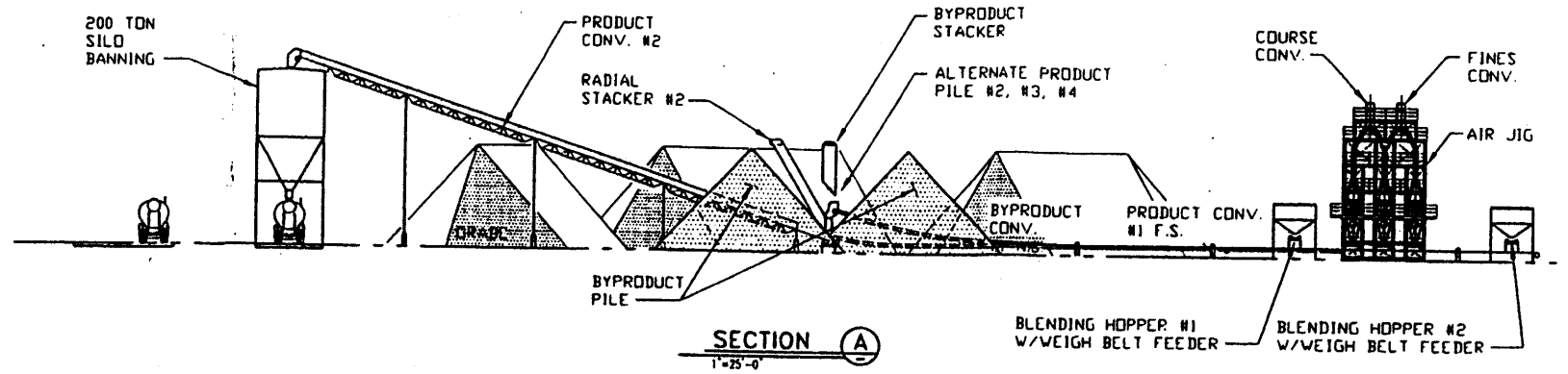
STATE OF UTAH }
COUNTY OF SALT LAKE } **SS**

On this 26TH day of SEPTEMBER, 2007, before me personally came TINA DAVIS to me known, who, being by me duly sworn, did depose and say that she is an Attorney-In-Fact of WESTERN SURETY COMPANY the corporation described in and which executed the within instrument; that she knows the corporate seal of said corporation, that the seal affixed to the within instrument is such corporate seal, and that she signed the said instrument and affixed the said seal as Attorney-In-Fact of the Board of Directors of said corporation and by authority of this office under the Standing Resolutions thereof.

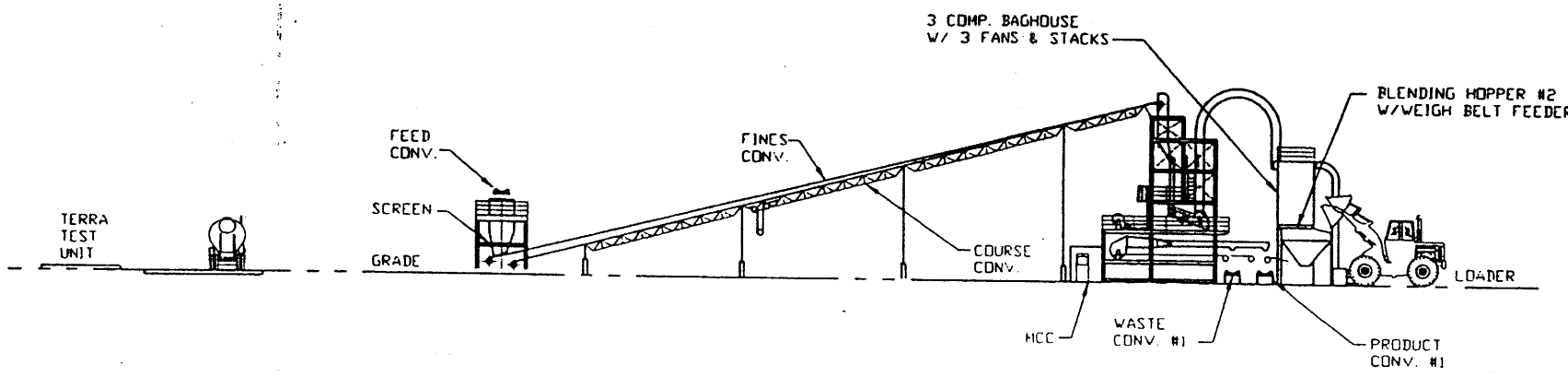
Notary Public

NOTARY PUBLIC
MARCINDA DRYSDALE
277 East 1150 North
Layton, Utah 84041
My Commission Expires
August 30, 2008
STATE OF UTAH

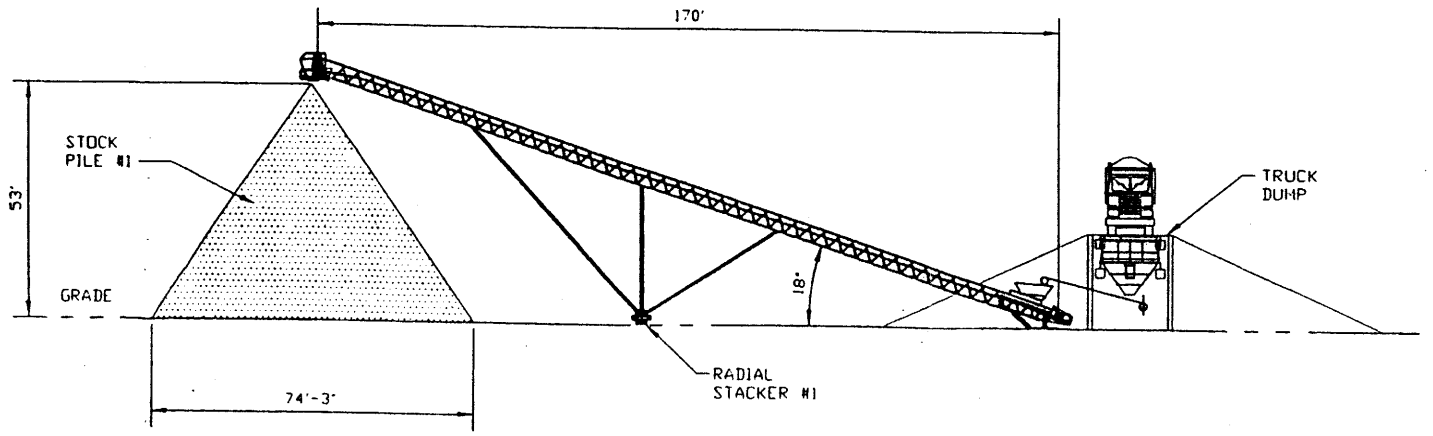




SECTION (A)
1"=25'-0"



SECTION (B)
1"=20'-0"



SECTION (C)
1"=20'-0"

No.	BY	CHD	DATE	REVISIONS
C	RP	TM	07.12.04	ADDED PRODUCT VOL & ISSUED FOR REVIEW
B	RP	TM	06.24.04	REVISED PER COVOL ISSUED FOR REVIEW
A	RP	–	05.26.04	ISSUED FOR REVIEW

APPROVED FOR CONSTRUCTION
BY:
DATE:

DRAWN BY:	RP	05.26.04
DESIGNED BY:	JA	05.26.04
CHECKED BY:		
APPROVED:		
APPROVED:		

COVOL FUELS
A DIVISION OF HEADWATERS INC.
Mine & Mill Engineering Inc.
Salt Lake City

COVOL – CLEAN COAL PROJECT
SITE PLAN
OPTION –01

SCALE:	1"=100'-0"
PROJECT NO:	04007
CADFILE:	SITEPLAN01
DRAWING NO.	OPT-01
REV.	C

EXHIBIT "C"

Liability Insurance

(Non-Federal Coal)

AFFIDAVITS

OF

QUALIFICATION

Bond Number 929392507

AFFIDAVIT OF QUALIFICATION
DIRECTOR
--ooOOoo--

John Baza, being first duly sworn under oath, deposes and says that he is the Director for the Division of Oil, Gas and Mining, Department of Natural Resources, State of Utah; and that she is duly authorized to execute and deliver the foregoing obligations; and that said Acting Director is authorized to execute the same by authority of laws on behalf of the State of Utah.

John Baza
Director, Division of Oil, Gas and Mining

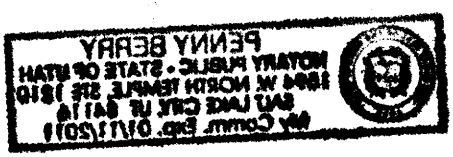
STATE OF Utah)
) ss:
COUNTY OF Salt Lake)

Subscribed and sworn to before me this 5 day of November 2007.

Notary Public

My Commission Expires:
1/11/, 2011.

PENNY BERRY
NOTARY PUBLIC - STATE OF UTAH
1594 W. NORTH TEMPLE, STE 1210
SALT LAKE CITY, UT 84116
My Comm. Exp. 01/11/2011


PENNY BERRY
NOTARY PUBLIC - STATE OF UTAH
1864 W. NORTH TEMPLE STE 1210
SALT LAKE CITY, UT 84116
My Comm. Exp. 01/17/2019

Bond Number 929392507

AFFIDAVIT OF QUALIFICATION
PERMITTEE
--ooOOoo--

I, Evan J. O'Neil, being first duly sworn under oath, deposes and says that he/she is the (officer or agent) Sr. Vice President of Covol Engineered Fuels, LC; and that he/she is duly authorized to execute and deliver the foregoing obligations; and that said PERMITTEE is authorized to execute the same and has complied in all respects with the laws of Utah in reference to commitments, undertakings and obligations herein.

Evan J. O'Neil
(Signed)
Name - Position
Sr. Vice President

Attest:
Secretary of the Corporation

STATE OF Utah)
) ss:
COUNTY OF Salt Lake)
Subscribed and sworn to before me this 30th day of October, 2007.

Notary Public

Notary Public
AMBER B. GIBBS
10653 South River Front Pkwy #300
South Jordan, Utah 84095
My Commission Expires
May 10, 2009
State of Utah

My Commission Expires:
May 10, 2009.

Bond Number 929392507

AFFIDAVIT OF QUALIFICATION
SURETY COMPANY
--ooOOoo--

I, TINA DAVIS, being first duly sworn under oath, deposes and says that he/she is the (officer or agent) ATTORNEY-IN-FACT of WESTERN SURETY COMPANY; and that he/she is duly authorized to execute and deliver the foregoing obligations; and that said SURETY COMPANY is authorized to execute the same and has complied in all respects with the laws of Utah in reference to becoming sole surety upon bonds, undertakings and obligations herein.

(Signed)
Surety Company Officer - Position

Attest:

STATE OF UTAH)
) ss:
COUNTY OF SALT LAKE)

Subscribed and sworn to before me this 26TH day of SEPTEMBER, 20 07.

Notary Public

NOTARY PUBLIC
KIRIE EDWARDS
1183 North 500 West
Lehi, Utah 84043
My Commission Expires
March 3, 2011
STATE OF UTAH

My Commission Expires:

MARCH 3, 20 11.

Bond Number 929392507

POWER OF ATTORNEY

Western Surety Company

POWER OF ATTORNEY APPOINTING INDIVIDUAL ATTORNEY-IN-FACT

Know All Men By These Presents, That WESTERN SURETY COMPANY, a South Dakota corporation, is a duly organized and existing corporation having its principal office in the City of Sioux Falls, and State of South Dakota, and that it does by virtue of the signature and seal herein affixed hereby make, constitute and appoint

Robert N Pflueger, Tina Davis, Derik Stevenson, Marcinda Drysdale, Individually

of Salt Lake City, UT, its true and lawful Attorney(s)-in-Fact with full power and authority hereby conferred to sign, seal and execute for and on its behalf bonds, undertakings and other obligatory instruments of similar nature

- In Unlimited Amounts -

and to bind it thereby as fully and to the same extent as if such instruments were signed by a duly authorized officer of the corporation and all the acts of said Attorney, pursuant to the authority hereby given, are hereby ratified and confirmed.

This Power of Attorney is made and executed pursuant to and by authority of the By-Law printed on the reverse hereof, duly adopted, as indicated, by the shareholders of the corporation.

In Witness Whereof, WESTERN SURETY COMPANY has caused these presents to be signed by its Senior Vice President and its corporate seal to be hereto affixed on this 2nd day of November, 2006.

WESTERN SURETY COMPANY

Paul T. Bruflat, Senior Vice President

State of South Dakota
County of Minnehaha } ss

On this 2nd day of November, 2006, before me personally came Paul T. Bruflat, to me known, who, being by me duly sworn, did depose and say: that he resides in the City of Sioux Falls, State of South Dakota; that he is the Senior Vice President of WESTERN SURETY COMPANY described in and which executed the above instrument; that he knows the seal of said corporation; that the seal affixed to the said instrument is such corporate seal; that it was so affixed pursuant to authority given by the Board of Directors of said corporation and that he signed his name thereto pursuant to like authority, and acknowledges same to be the act and deed of said corporation.

My commission expires
November 30, 2012

D. KRELL
NOTARY PUBLIC
SOUTH DAKOTA

D. Krell, Notary Public

CERTIFICATE

I, L. Nelson, Assistant Secretary of WESTERN SURETY COMPANY do hereby certify that the Power of Attorney hereinabove set forth is still in force, and further certify that the By-Law of the corporation printed on the reverse hereof is still in force. In testimony whereof I have hereunto subscribed my name and affixed the seal of the said corporation this 26 day of SEPTEMBER, 2007

WESTERN SURETY COMPANY

L. Nelson, Assistant Secretary

Form F4280-09-06

Authorizing By-Law

ADOPTED BY THE SHAREHOLDERS OF WESTERN SURETY COMPANY

This Power of Attorney is made and executed pursuant to and by authority of the following By-Law duly adopted by the shareholders of the Company.

Section 7. All bonds, policies, undertakings, Powers of Attorney, or other obligations of the corporation shall be executed in the corporate name of the Company by the President, Secretary, and Assistant Secretary, Treasurer, or any Vice President, or by such other officers as the Board of Directors may authorize. The President, any Vice President, Secretary, any Assistant Secretary, or the Treasurer may appoint Attorneys in Fact or agents who shall have authority to issue bonds, policies, or undertakings in the name of the Company. The corporate seal is not necessary for the validity of any bonds, policies, undertakings, Powers of Attorney or other obligations of the corporation. The signature of any such officer and the corporate seal may be printed by facsimile.

EXHIBIT "D"

Stipulation to Revise Reclamation Agreement (Non-Federal)

Exhibit "D"
Stipulation to Revise
Reclamation Agreement
Non-Federal

Permit Number:C/007/0045

Effective Date:_____

Bond Number:_____

COAL

STIPULATION TO REVISE RECLAMATION AGREEMENT

--ooOOoo--

This **STIPULATION TO REVISE RECLAMATION AGREEMENT** entered into by and between the **PERMITTEE** and **DIVISION** incorporates the following revisions or changes to the **RECLAMATION AGREEMENT**: (Identify and Describe Revisions below)

The bonding type is changed from Letter of Credit to a Cash Surety.

In accordance with this **STIPULATION TO REVISE RECLAMATION AGREEMENT**, the following Exhibits have been replaced by the **PERMITTEE** and are approved by the **DIVISION**.

☒ Replace the Reclamation agreement in its entirety.

☐ Replace Exhibit "A"- permit area.

☐ Replace Exhibit "B"- bonding agreement

☐ Replace Exhibit "C"- liability insurance

The bonding amount is revised from $_____ to $_____.

The bonding type is changed from Letter of Credit to Cash Surety.

The surface disturbance is revised from _____ acres to _____ acres.

The expiration date is revised from _____ to _____.

The liability insurance carrier is changed from _____ to _____.

The amount of insurance coverage for bodily injury and property damage is changed from $_____ to $_____.

Exhibit "D"
Stipulation to Revise
Reclamation Agreement
Non-Federal

IN WITNESS WHEREOF, Covol Engineered Fuels, LC the **PERMITTEE** has hereunto set its signature and seal this 15th day of July, 2009.

Covol Engineered Fuels, LC
PERMITTEE

By: John R Shaal

Title: Vice President of Operations

ACCEPTED BY THE STATE OF UTAH this 21st day of July, 2009.

Director, Division of Oil, Gas and Mining

NOTE: An **Affidavit of Qualification** must be completed and attached to this form for each authorized agent or officer. Where one signs by virtue of Power of Attorney for a company, such Power of Attorney must be filed with this Agreement. If the **PERMITTEE** is a corporation, the Agreement shall be executed by its duly authorized officer.

Bond Number

AFFIDAVIT OF QUALIFICATION
PERMITTEE
--ooOOoo--

I, John Shaal, being first duly sworn under oath, deposes and says that he/she is the (officer or agent) Vice President of Operations of Covol Engineered Fuels, LC;
and that he/she is duly authorized to execute and deliver the foregoing obligations; and that said PERMITTEE is authorized to execute the same and has complied in all respects with the laws of Utah in reference to commitments, undertakings and obligations herein.

John R Shaal Vice President of Operations
(Signed)
Name - Position

Attest: _____
Secretary of the Corporation

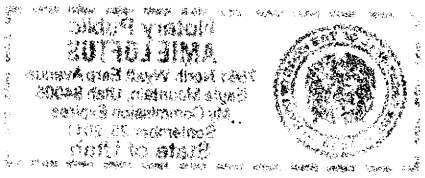
STATE OF Utah)
) ss:
COUNTY OF Salt Lake)

Subscribed and sworn to before me this 15 day of July, 2009.

_____
Notary Public

Notary Public
AMIE LOFTUS
7861 North Wyatt Earp Avenue
Eagle Mountain, Utah 84005
My Commission Expires
September 25, 2011
State of Utah

My Commission Expires:
September 25, 2011.



Bond Number Cash

AFFIDAVIT OF QUALIFICATION
DIRECTOR
--ooOOoo--

John Baza, being first duly sworn under oath, deposes and says that he is the Director for the Division of Oil, Gas and Mining, Department of Natural Resources, State of Utah; and that he is duly authorized to execute and deliver the foregoing obligations; and that said Acting Director is authorized to execute the same by authority of laws on behalf of the State of Utah.

John R. Baza

John Baza
Director, Division of Oil, Gas and Mining

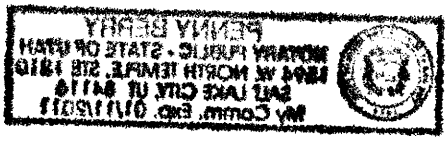
STATE OF Utah)
) ss:
COUNTY OF Salt Lake)

Subscribed and sworn to before me this 21 day of July 2009.

Penny Berry
Notary Public

My Commission Expires:
1/11/, 2011.

PENNY BERRY
NOTARY PUBLIC - STATE OF UTAH
1594 W. NORTH TEMPLE, STE 1210
SALT LAKE CITY, UT 84116
My Comm. Exp. 01/11/2011


PENNY BERRY
NOTARY PUBLIC - STATE OF UTAH
1864 W. NORTH TEMPLE, STE 1310
SALT LAKE CITY, UT 84116
My Comm. Exp. 01/17/2017

4001/0045 ... [illegible]

ACORD CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY): 07/16/2009

PRODUCER
Marsh USA Risk & Insurance Services
15 West South Temple, Suite 700
Salt Lake City, UT 84101
Attn: Chris Brimhall (801) 533-3627 Fax (801) 533-3610

0006

J78001--ALL-08-09

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW.

INSURED
Headwaters Energy Services Corp.
10653 South Riverfront Parkway Suite #3
South Jordan, UT 84095

INSURERS AFFORDING COVERAGE	NAIC #
INSURER A: ACE American Insurance Company	22667
INSURER B: N/A	N/A
INSURER C: N/A	N/A
INSURER D: N/A	N/A
INSURER E:	

8

COVERAGES

THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. AGGREGATE LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	ADD'L INSRD	TYPE OF INSURANCE	POLICY NUMBER	POLICY EFFECTIVE DATE (MM/DD/YY)	POLICY EXPIRATION DATE (MM/DD/YY)	LIMITS	
A		**GENERAL LIABILITY** [X] COMMERCIAL GENERAL LIABILITY [ ] CLAIMS MADE [X] OCCUR [X] SIR $50,000 GENERAL AGGREGATE LIMIT APPLIES PER: [X] POLICY [ ] PRO-JECT [ ] LOC		10/01/08	10/01/09	EACH OCCURRENCE DAMAGE TO RENTED PREMISES(Ea occurence) MED EXP (Any one person) PERSONAL & ADV INJURY GENERAL AGGREGATE PRODUCTS - COMP/OP AGG	$ 2,000,000 $ 250,000 $ EXCLUDED $ 2,000,000 $ 4,000,000 $ 4,000,000
		AUTOMOBILE LIABILITY [ ] ANY AUTO [ ] ALL OWNED AUTOS [ ] SCHEDULED AUTOS [ ] HIRED AUTOS [ ] NON-OWNED AUTOS				COMBINED SINGLE LIMIT (Ea accident) BODILY INJURY (Per person) BODILY INJURY (Per accident) PROPERTY DAMAGE (Per accident)	$ $ $ $
		GARAGE LIABILITY [ ] ANY AUTO				AUTO ONLY - EA ACCIDENT OTHER THAN AUTO ONLY: EA ACC AGG	$ $ $
		EXCESS/UMBRELLA LIABILITY [ ] OCCUR [ ] CLAIMS MADE [ ] DEDUCTIBLE [ ] RETENTION $				EACH OCCURRENCE AGGREGATE	$ $ $ $ $
		WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? If yes, describe under SPECIAL PROVISIONS below				WC STATU-TORY LIMITS / OTH-ER E.L. EACH ACCIDENT E.L. DISEASE - EA EMPLOYEE E.L. DISEASE - POLICY LIMIT	 $ $ $
		OTHER					

DESCRIPTION OF OPERATIONS/LOCATIONS/VEHICLES/EXCLUSIONS ADDED BY ENDORSEMENT/SPECIAL PROVISIONS
RE: C/007/0045 Wellington, UT facility. This certificate is issued as a matter of information only and confers no rights upon the certificate holder other than those provided by this policy. This certificate does not amend, extend or alter the coverage afforded by the policies described herin.

CERTIFICATE HOLDER SEA-001102199-07

Utah Dept. of Natural Resources
Division of Oil, Gas and Mining
1594 W. North Temple, Suite 1210
Salt Lake City, UT 84114

RECEIVED
JUL 20 2009
DIV. OF OIL, GAS & MINING

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, THE ISSUING INSURER WILL ~~ENDEAVOR TO~~ MAIL 30 DAYS WRITTEN NOTICE TO THE CERTIFICATE HOLDER NAMED TO THE LEFT, ~~BUT FAILURE TO DO SO SHALL IMPOSE NO OBLIGATION OR LIABILITY OF ANY KIND UPON THE INSURER, ITS AGENTS OR REPRESENTATIVES.~~

AUTHORIZED REPRESENTATIVE of Marsh USA Risk & Insurance Services
Chris Brimhall
Chris Brimhall