

CARBON COUNTY PLANNING & ZONING COMMISSION

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REVISED – STAFF REPORT

TO: CARBON COUNTY PLANNING & ZONING COMMISSION

FROM: Lou Kline, Planning Director

MEETING DATE: September 4, 2007	SUBJECT: Public Hearing Item, Case File #07-17 Conditional Use Permit for: Medicine Bow Fuel & Power, LLC – Applicant & Owner	CONTACT: Lou Kline
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PROJECT: Petition requests Carbon County to issue a Conditional Use Permit in a RAM Zone to allow the construction and operations of a coal-to-liquids (CTL) facility. The site would consist of the CTL plant, coal-handling facility, and construction lay down area. The CTL facility is located on approximately 160 acres and the coal handling facility is located on approximately 205 acres encompassing a total of approximately 365 acres. During the construction of the CTL, there will also be an equipment and construction lay down area north of the site that is approximately 338 acres. All of these parcels are on the permitted Arch coalmine property that has a total land area of 14,348 acres. The CTL facility and coal handling facility are located in T21N, R79W. The CTL facility is in the eastern ½ of Section 29, T21N, R79W. The coal handling facility is located in the southern ½ of Section 29, the southeast ¼ of Section 30, the northwest ¼ of Section 31, and the northwest ¼ of Section 32, T21N, R79W.

PROJECT LOCATION: Approximately 4 miles northeast of Elk Mountain and 13 miles southwest of Medicine Bow; north of I-80; south of US HWY 30

LEGAL DESCRIPTION: The CTL facility and coal handling facility are located in T21N, R79W. The CTL facility is in the eastern ½ of Section 29, T21N, R79W. The coal handling facility is located in the southern ½ of Section 29, the southeast ¼ of Section 30, the northwest ¼ of Section 31, and the northwest ¼ of Section 32, T21N, R79W, 6th P.M., Carbon County, Wyoming.

APPLICANT: Medicine Bow Fuel & Power, LLC (APPLICANT)
PO Box 460
Hanna, WY 82327

OWNER: Medicine Bow Fuel & Power, LLC (OWNER)
Two Riverway, Suite 1780
Houston, TX 77056

AGENT: None

MAJOR ISSUES: None

RECOMMENDATION: Approval as conditioned by Exhibit "A"

Lou Kline, Planning Director

cc: Applicants, County Attorney's Office

REQUIRED FINDINGS

Section 5.6 – Conditionally Permitted Use Requirements of the Carbon County Zoning Resolution 2003 Amended 01/06/2004 specifies the findings must be made to approve the Conditional Use Permit. The County Planning & Zoning Commission shall make the following determinations prior to approval of a Conditional Use Permit.

1. The proposed use shall serve an obvious public need.
2. The proposed use will not be detrimental to the surrounding area or to established uses.
3. That adequate and safe access and circulation shall be provided.
4. That any resulting commercial and truck traffic shall not use a residential street nor create a hazard to a developed residential area.
5. That the record owner has taken adequate steps to minimize and control potential environmental problems that might result from the proposed use.

In addition, Section 5.6 of the Carbon County Zoning Resolution of 2003 Amended 01/06/2004 states, due to their unusual and unique features, conditionally permitted uses shall be subject to the following requirements to insure the best interests of the health, safety and welfare of Carbon County citizens. Conditionally Permitted Uses shall be permitted in Districts where designated only after review and approval by the Carbon County Planning & Zoning Commission. The basic criterion to be used in reviewing applications for conditionally permitted uses shall be whether or not granting the permit for development either by itself or in combination with other developments will subvert the stated purposes of the established District. If so, the permit shall be denied and the petitioner will have the option of requesting a zone change. Appeals of decisions and conditions made by the Carbon County Planning & Zoning Commission may be taken to the Carbon County Board of County Commissioners.

RECOMMENDATION

The required findings CAN be made based on the following analysis. Staff recommends the application be approved as conditioned in Exhibit A.

PROJECT BACKGROUND

The ownership of Medicine Bow Fuel & Power, LLC is 33.9% DKRW Advanced Fuels, LLC, 24% Arch Coal, 42.1% others. DKRW Advanced Fuels, LLC has an option with Arch Coal to purchase the property for the Medicine Bow Fuel & Power project. Medicine Bow Fuel & Power, LLC (MBFP), a subsidiary of DKRW Advanced Fuels, LLC, proposes to construct and operate a coal-to-liquids (CTL) plant and coal handling facility in Medicine Bow, Wyoming. The CTL facility will use an indirect liquefaction process to convert coal resources into refined products that meet critical energy needs while reducing the environmental concerns associated with coal combustion. Proven processes and technologies are available to convert the significant underutilized or “stranded” coal resources that exist in the U.S. and the rest of the world, into valuable outputs, principally ultra clean diesel fuels.

PROJECT BACKGROUND – CONTINUES:

PLANT CAPACITY:

The CTL facility will produce the following (volumes are approximate):

- 13,000 barrels per day of refined liquids primarily ultra-low-sulfur diesel and naphtha, which will be sold into the market. Sinclair Oil Corporation has a long-term contract to purchase all of the diesel.
- Steam, tailgas and power produced from the CTL process will provide the necessary energy for internal CTL facility use with some surplus power sold to the utility grid.
- Other byproducts for sale in the market are elemental sulfur, chemicals, and ash, which will be put to productive use in the region.

CONSTRUCTION:

MBFP anticipates that construction of the CTL facility will begin in the second quarter of 2008 with a commercial operating date in the second quarter of 2011. The facility is expected to operate for 30+ years.

OPERATIONS:

Arch Coal will operate and maintain the coal mine. MBFP will operate and maintain the CTL facility.

LOCATION:

The subject area is located approximately 4 miles northeast of Elk Mountain and 13 miles southwest of Medicine Bow; north of I-80; south of US HWY 30.

PRELIMINARY HOUSING LOGISTICS:

Preliminary housing requirements for the project are for an estimated 2,000 personnel with an overflow of an additional 300. The proposed plan includes a housing facility at the project site with the capability of housing up to 500 personnel. This will account for winter construction campaigns and the start up and operation phases of the facility.

Further housing logistics studies for possible permanent housing in the towns of Saratoga, Medicine Bow, Hanna and Elk Mountain are being developed. It is anticipated that the housing will be in the range of 150 to 200 each, to help support living for the personnel required for the permanent operation of the new facility and support the coal mining operations. The towns of Medicine Bow and Hanna are also being evaluated for temporary housing for up to 500 personnel in each. Laramie and Casper will also be examined. It is estimated that 50 personnel may travel from the Casper area and 500 from the Laramie area. These are preliminary numbers and each location is currently under further evaluation.

LANDOWNER INFORMATION AND PUBLIC OUTREACH:

On July 10, 2007, the Medicine Bow Fuel & Power, LLC project team met with local city and county agencies and the general public at two informational meetings in Rawlins. The project team also met with state agencies in Cheyenne on July 11 and local agencies and the public in two meetings in Laramie on July 12.

Exhibit H is the plats received from the Carbon County Assessor's Office with surrounding landowner information.

STAFF ANALYSES

1. Community Concern

Public notice of this conditional use permit request was made in the Rawlins Daily Times and in the Saratoga Sun on Wednesday, August 1, 2007. The Department also mailed formal notices to the petitioner, adjacent landowners, and selected governmental agencies on Thursday, August 8, 2007. The notice requested recipients to provide written public comments.

1A. Comments

- The Medicine Bow Conservation District (MBCD) commented on the following:
 - MBCD generally support the project as outlined.
 - MBCD would like to see measures taken to effectively control excess runoff, including sediment loads, created by the facilities. MBCD asks that appropriate designs, procedures, measures, etc., be taken to assure water quality be maintained/enhanced on the Medicine Bow River and its impacted tributaries.
 - MBCD asks the applicant will not degrade the existing quality of water used for domestic, recreation, and irrigation uses.
 - MBCD requests that the applicant replaces trees (which might be removed during construction) at a biomass amount equal to or greater than that lost due to construction. This may require off-site plantings or landscape type plantings within the facility's area. The trees currently located on Third Sand Creek and within other drainages in the area play an important role in sediment/erosion control as well as maintaining/enhancing water quality.
 - MBCD requests that the applicant uses only certified hay or straw on any and all reclamation projects that occur on privately owned land or on lands owned by the State of Wyoming or the Federal Government.
 - The applicant is solely responsible for all control of noxious weeds until full establishment of perennial grass cover is established meeting the satisfaction of the private landowner, lessee, or federal manager.
 - MBCD request that the applicant be an active participant in MBCD's established "Coordinated Resource Management" Group (CRM) focused sole on Weed Prevention and Management. This is beneficial to the applicant, MBCD, and the adjacent landowners to the project.
- The Wyoming Department of Transportation (WYDOT) commented that the CTL plant is off the Highway system and will be accessed from a County Road that will be brought to the current standards on a previous Access Permit where it intersects Highway WY 72 to the west.
- The Wyoming Game & Fish commented since their terrestrial and aquatic concerns have been addressed during the Industrial Siting Process, the Wyoming Game & Fish have no additional concerns pertaining to the Conditional Use Permit request.
- Carbon County Road & Bridge found no conflicts with the conditional use permit request.

Comment letters were supplied to the applicant.

2. Zoning

The project site is currently zoned Ranching, Agriculture, Mining (RAM). The permitted uses in the RAM Zoning District are:

Principally Permitted Uses:

1. Commercial agriculture including ranching and farming, their related uses and facilities and animal husbandry relative to above activities.
2. Residential uses that are accessory to a preexisting Commercial Agricultural operation, as defined in Chapter III including guest house, bed & breakfast facility, home occupation, and cottage industries.
3. Public parks and playgrounds.
4. Cemeteries.
5. Ore beneficiation, milling and quarrying with proof of state permit. Said operations if above ground are not permitted within 1,000 feet of a residential district. Ore processing is principally permitted only if directly associated with an adjacent extraction operation.
6. Oil, gas and mineral exploration, development and production.
7. Forestry activities including, but not limited to the growing, harvesting and processing of forest products, milling, log decking, kilning, but not including wood pulp or paper processing.
8. Buried underground utility lines and facilities and overhead electrical transmission lines of 69,000 volts or less.
9. Highway and street construction camps, gravel mines, processing plants, and other related facilities.
10. Habitat management.

Conditionally Permitted Uses – The following uses are permitted subject to the Planning Commission approval pursuant to Chapter V:

- Radio transmitting stations.
- Institutions, rest rooms, hospitals, clinics.
- Public building and schools.
- Pulp and paper processing, related facilities and appurtenant uses.
- Public facilities and utilities limited to above ground structures including sewage treatment and water supply facilities, sanitary land fill operations, substations, distribution and regulator stations and overhead electrical transmission lines of over 69,000 volts – all conforming to State Health Department requirements. [emphasis added]
- Trailer camp as defined in Chapter III.
- Public and commercial recreation areas and facilities, including fishing ponds and campgrounds.
- **Construction camps, processing plants and related facilities.** [emphasis added]
- Commercial wind farms consisting of wind towers or other appurtenant items, intended to provide electrical power from the wind to be used for resale to power companies.
- Churches and Sunday schools.
- Residential uses if accessory to a commercial agricultural operation if the operation is not preexisting.
- Boarding house and recreation lodge.
- Telecommunications facilities and their appurtenant uses and structures.
- Agriculture Industrial Uses.

The Ranching, Agriculture, Mining Zone does not allow the construction of seasonal or year-round residences except as provided for above.

3. **Public Health & Safety/Environmental**

Based on this information submitted by the petitioner, documents on file in the Carbon County Planning and Development Department, and referrals from responding jurisdictional agencies and interested parties, at present, staff believes that the proposed conditional use permit, and its associated uses, will not cause significant environmental effects nor be detrimental to the public health, safety or welfare.

4. **Adjoining Land Uses**

BLM and privately owned lands adjoin the subject property and are zoned RAM. The vicinity of the proposed project is used mainly for livestock grazing and, more recently, the oil and gas development as well as the coal-to-liquids development.

5. **Required Findings**

1. The proposed use shall serve an obvious public need.

Medicine Bow Fuel & Power, LLC letter states the following: The CTL facility will serve an obvious public need by providing benefits at a federal, state, and local level.

National Energy Needs:

- The CTL facility will utilize the abundant coal reserves of the U.S., including stranded resources. Utilizing U.S. coal resources, increases the domestic production of petroleum, reduces energy imports, and lessens the U.S. dependence on the Middle East.
- CTL technology is environmentally responsible.
 - The gasification process and diesel fuel production help in reducing CO₂ emissions. The gasification process captures the pure CO₂, thereby facilitating carbon capture and sequestration.
 - The CTL facility will increase the U.S. refined product production through production of ultra-low sulfur diesel. The use of ultra-low sulfur diesel as a transportation fuel reduces SO₂ emissions and greenhouse gases. Environmental regulators are pushing for limitations on the sulfur content of fuels, and by 2007 U.S. sulfur levels in diesel will be regulated at <15ppm. Ultra-low sulfur diesel produced at this facility will be approximately 1ppm sulfur.

Benefits to Wyoming:

- The CTL facility will be a \$2+ billion investment in the state of Wyoming
- Coal severance taxes will increase as more coal is extracted
- Oil royalties will increase due to the potential sale of CO₂ to enhanced oil recovery sites
- The following is an estimate of bulk materials and equipment that may be purchased from suppliers in Wyoming (Table 1). The Thomas Register was used to generate lists of potential vendors for bulks and equipment within the state. Based on these lists, estimates on the percentage of each category that may be reasonably purchased in Wyoming were made.

5. **REQUIRED FINDINGS – CONTINUE:**

Table 1- Estimate of bulk materials and equipment that may be purchased from suppliers in Wyoming

Commodity	Amount in Feasibility Study Estimate (Million Dollars)	Percentage in WY	\$ in WY (Million Dollars)	Comments
Piping	\$65	10%	\$6.5	River Rock/Rawlins
Concrete	\$20	90%	\$18	Rawlins
Steel	\$12	10%	\$1.2	Cheyenne/Casper/Rawlins
Instruments	\$16	5%	\$800,000.00	Casper/ Rawlins
Electrical	\$21	5%	\$1.05	Casper/Rawlins
Insulation	\$7	25%	\$1.75	Casper/Rawlins
Paint	\$1.7	90%	\$1.53	Casper/Rawlins
Equipment	\$285	10%	\$28.5	Casper
TOTAL	\$427.7	14%	\$59.33	

Benefits to Carbon County and Local Communities:

- Increase in property tax base
 - Additional tax revenue generated by the CTL project will increase Carbon County’s ability to provide support services to its citizens.
- Job creation
 - During the approximate 3-year construction period, an estimated average of 900 people will be employed at the site, with a peak of 2,000 employees. The majority of construction workers would be employees of construction and equipment manufacturing companies under contract to MBFP.
 - In the long-term, 300+ full-time operating personnel will be employed on the site.

The proposed project does serve an obvious public need concerning an increase in the oil and gas industry as well as the coal-to-liquids development located in Carbon County, Wyoming.

Approval of the permit will greatly benefit the county as well as the Medicine Bow, Elk Mountain, and Hanna areas.

2. The proposed use will not be detrimental to the surrounding area or to established uses.

Medicine Bow Fuel & Power, LLC letter states the following: The CTL facility will not be detrimental to established uses of the surrounding area. All land in the project area (T21N, R79W Sections 29, 30, 31, and 32) is zoned Ranching, Agriculture, Mining (RAM). Oil, gas and mineral exploration, development and production are permitted uses in the RAM zoning district. Union Pacific Railroad rights-of-way exist as it extends through the unincorporated land of Carbon County. All ranges and sections are in T21N.

5. REQUIRED FINDINGS – CONTINUE:

2. The proposed use will not be detrimental to the surrounding area or to established uses - CONTIUES.

Staff does not believe the construction of the coal-to-liquids plant and associated facilities will be detrimental to surrounding land uses.

3. That adequate and safe access and circulation shall be provided.

Medicine Bow Fuel & Power, LLC letter states the following: The following is the proposed plan on access roads and transportation routes for the duration of construction and operations of the CTL facility. Exhibit F provides a map of the proposed transportation routes for the facility. The preliminary transportation plan is based on a thirty-three month construction campaign, which will begin in May 2008 (Month 1) and complete in December 2010 (Month 33) (Table 2). The information is based on truckloads to the site from any location to the main warehousing in the Medicine Bow area.

Table 2- Construction campaigns, construction stages, and estimated deliveries

Campaign	Construction Stage	Deliveries (Based on Monday to Friday delivery schedule)
Campaign 1: Month 1 (May 2008) thru Month 8	Site development/ civil/ underground pipe and electrical/ temporary facilities and receiving supporting materials	Estimated 2,400 deliveries
Campaign 2: Month 9 thru Month 11	Receiving/ underground pipe and electrical/ civil all performed to a smaller scale in relation to personnel	Estimated 120 deliveries (winter campaign)
Campaign 3: Month 12 thru Month 20	Civil/ piping/ structural steel/ buildings/ heavy equipment setting/ electrical/ instrumentation	Estimated 4,000 deliveries
Campaign 4: Month 21 thru Month 23	Piping/ electrical/ instrumentation/equipment, again a smaller scale in relation to personnel	Estimated 120 deliveries (winter campaign)
Campaign 5: Month 23 thru Month 33 (December 2010)	Civil/ piping/ structural steel/ buildings/ heavy equipment setting/ electrical/ instrumentation/ pain/ tracing/ insulation/ vendor support	Estimated 5,000 deliveries

All loads will be trucked or brought in by rail, with rail loads offloaded at the new Union Pacific railroad siding in Medicine Bow. All truck routing will be delivered in routes going off of I-80 onto Highway 13 to Rock River, Highway 72 to Hanna, and then continue on Highway 30 into the Medicine Bow warehouse location or the site location. The routing from Casper will be on Highway 220 to Highway 487 into Medicine Bow. All deliveries will be routed around Laramie to prevent any congestion to the city. All transportation will be on paved roads with the exception of County Road 1 and County Road 3. These county roads will be upgraded and only will be reached from Highway 30 in Medicine Bow.

5. REQUIRED FINDINGS – CONTINUE:

3. That adequate and safe access and circulation shall be provided - CONTINUES.

Buses will be chartered from appropriate towns to minimize any vehicle traffic to local areas. All vehicles and parking will be located off Highway 30 to minimize traffic on the gravel roads of County Road 1 and County Road 3.

All necessary Wyoming Department of Transportation and/or Carbon County Road and Bridge Department permits for transportation on the route leading to the site will be obtained prior to construction on the site.

Staff believes that safe and adequate circulation will be provided.

4. That any resulting commercial and truck traffic shall not use a residential street nor create a hazard to a developed residential area.

Medicine Bow Fuel & Power, LLC letter states the following: No commercial traffic or large trucks are expected to pass through or have any impact to residential areas. The nearest residential communities to the CTL facility are in Elk Mountain (approximately 4 miles away), Medicine Bow (approximately 13 miles away), and Hanna (approximately 13 miles away). The construction area for the CTL facility does not contain residences.

Presently, there are no residential developments and/or residential subdivisions that exist or are proposed in the vicinity of the project area. No residential streets or access easements are present. Therefore, traffic generated by the project shall not affect residential uses or streets.

5. That the record owner has taken adequate steps to minimize and control potential environmental problems that might result from the proposed use.

Medicine Bow Fuel & Power, LLC letter states the following: The entire 14,348-acre Carbon Basin Mine permit boundary was surveyed for environmental resources as part of the Wyoming Department of Environmental Quality – Land Quality Division mine permit process. The CTL and coal handling facilities will be constructed within the Carbon Basin Mine permit boundary, and is a separate project from the Carbon Basin Mine.

As conditioned, staff does not believe the proposed project will create negative environmental impacts. As stated above, developments such as the proposed project could create a potential for environmental impacts.

6. Recommendation

Staff recommends that the application for a conditional use permit be approved by the Carbon County Planning and Zoning Commission. The recommendation is subject to the conditions shown on Exhibit A.

EXHIBIT A

CONDITIONS FOR THE APPROVAL OF CASE NO. 07-17

FOR

MEDICINE BOW FUEL & POWER, LLC (OWNER)

ANY DEVELOPMENT ON THE PROPERTY OCCURING AFTER THE APPROVAL OF THE CONDITIONAL USE PERMIT THE PETITION MUST CONFORM TO THE FOLLOWING TERMS AND REQUIREMENTS:

Informational Notes & Development Restrictions:

1. All development must be in conformance with restrictions as stated in Section 4.2 et. al. of the Carbon County Zoning Resolution of 2003 Amended 01/06/04. Zoning (building) permits are required.
2. Any future development proposals for the subject property may require review and approval of the Carbon County Planning and Development Department and/or the Carbon County Planning & Zoning Commission.
3. Any building construction on the subject property will require an application for building permit (Carbon County Zoning Resolution of 2003 Sections 6.3, 6.4, et. al.).
4. All construction should conform to the International Building Code (IBC).
5. The applicant will follow all EPA rules and regulations.
6. The applicant will follow all WYDEQ Industrial Siting conditions, rules, and regulations.
7. The applicant will obtain and maintain all local and state permits per Wyoming State Statutes 35-12-101, et. seq.
8. The applicant will work with WYDEQ Industrial Siting regarding historic preservation, Native American Indian sites, and the Wyoming Game & Fish regarding wildlife.
9. The applicant will demonstrate and show ample proof that adequate lodging for workers/employees exist as well as showing the number of workers/employees that reside in each of the affected town/community. Possible man-camps might be needed in the subject area for temporary housing.
10. The applicant will work with the Carbon County Sheriff's Office regarding law enforcement.
11. The applicant will abide by any and all requests from the Carbon County Sheriff's Office regarding law enforcement.

STAFF CONDITIONS – CONTINUE:

12. The applicant will use and work with the local Emergency Medical Services (EMS) as well as providing on-site first aid by a qualified personnel.
13. Carbon County Planning and Development Department Planning Staff reserves the right to and will provide interpretation and clarification of these conditions.
14. Violation of any of the above restrictions can be grounds for terminating this Conditional Use Permit.
- 15. In all cases practical accept all construction material and improvements be delivered F.O.B. in Carbon County.**