



# Department of Environmental Quality



To protect, conserve and enhance the quality of Wyoming's environment for the benefit of current and future generations.

Dave Freudenthal, Governor

John Corra, Director

## NOTIFICATION OF COVERAGE

November 7, 2008

Greg Milliken  
429 Hwy 230  
Laramie, Wyoming 82070

RE: KOA Campground (Laramie): Water Improvements,  
Location: SW¼ SW¼, Section 29, T16N, R73W,

Application No. **08-551**  
Albany County

Dear Mr. Milliken:

The above application for coverage under General Permit to Construct, Install, Modify or Operate Extensions to or Modifications of Existing Public Water Supply Distribution Systems in accordance with Chapter 3, Section 9 of the Wyoming Water Quality Rules and Regulations has been reviewed and is hereby approved. You are authorized to construct, install or modify the water distribution system in accordance with Chapter 12, Section 14 of the Water Quality Division Rules and Regulations, the general permit, the conditions listed below, and the materials submitted in your application package. All water service connections will be protected by the appropriate backflow device as required by Chapter 12, Section 14(i) of the Water Quality Division Rules and Regulations. Your attention is directed to the mandatory reporting requirements outlined in Part V, Section O of the general permit. Additionally, the following project-specific conditions also apply:

1. Additions to Wyoming Public Works Standard Specifications for Waterline Construction:
  - a. Section 2665 E.6 - Water tight plugs shall be maintained in all pipe openings in a trench any time pipe laying is not in progress or the trench is unattended.
  - b. Section 2675 D - Flushing shall achieve minimum velocities of at least 5 feet per second for pipelines 12 inches in diameter or less. Flushing shall be through flush valves and a discharge pipe to the surface. Fire hydrants shall not be flushed until after the water main or distribution line is flushed.

Herschler Building • 122 West 25th Street • Cheyenne, WY 82002 • <http://deq.state.wy.us>

ADMIN/OUTREACH (307) 777-7937 FAX 777-3610	ABANDONED MINES (307) 777-6145 FAX 777-6462	AIR QUALITY (307) 777-7391 FAX 777-5616	INDUSTRIAL SITING (307) 777-7369 FAX 777-5973	LAND QUALITY (307) 777-7756 FAX 777-5864	SOLID & HAZ. WASTE (307) 777-7752 FAX 777-5973	WATER QUALITY (307) 777-7781 FAX 777-5973
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2. Insufficient Plan & Profile Drawing Detail - nowhere on the plan & profile drawings are any pipe size "reducers" or "increasers" indicated. However, it is obvious that you cannot come out of an 8" valve directly into a 4" PVC waterline, or change size from an 8" waterline to a 4" waterline without going through some kind of reducer or increaser fitting, and so on.

Therefore, a new set of plans shall be prepared for the contractor to work from which includes this information on the plan and profile drawings and the locations where these fittings are to be inserted. These drawing, as well as final as-built drawings, shall be submitted to the DEQ / Water Quality Division within 60 days of completion of the authorized construction.

The approval granted under this Notification Of Coverage and the General Permit shall expire on November 7, 2010. Please reference Application Number **08-551** in any future correspondence.

If you have any questions, please contact me at (307) 777-6183.

Sincerely,



Ronald L. Ewald  
Consulting Engineer  
Southeast District, Water Quality Division

RLE/rm/8-0875

Enclosures: GENERAL PERMIT - Extensions/Modifications of Existing Public Water  
Supply Distribution Systems  
Certificate of Completion Form

cc: IPS, Cheyenne  
Lloyd Baker, Gertsch/Baker & Associates, 104 S. 4<sup>th</sup> Street, Suite 100, Laramie,  
Wyoming 82070  
City of Laramie, Attn: Larry Ketcham, City Engineer, P.O. Box C, Laramie,  
Wyoming 82073

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY  
WATER QUALITY DIVISION  
"AS-BUILT" PERMIT TO CONSTRUCT

PERMIT NO. 08-552

Maycock Kingsbury CBM Development Area, 34-26-5075 Reservoir

This permit hereby authorizes the applicant:

Williams Production RMT Company  
Attn.: Ms. Peggy Carter  
300 North Works St.  
Gillette, WY 82716

to have installed three (3) compliance monitoring wells according to the procedures and conditions of the application number 08-552. The facility is proximal to coalbed methane produced water impoundment located in Township 50N, Range 75W, Section 5 in the county of Campbell, in the State of Wyoming. All construction, installation, or modification allowed by this permit has been completed.

The issuance of this permit confirms that the Wyoming Department of Environmental Quality (DEQ) has evaluated the application submitted by the permittee and determined that it meets minimum applicable construction and design standards. The compliance with construction standards and the operation and maintenance of the facility to meet the engineer's design are the responsibility of the permittee, owner, and operator.

Nothing in this permit constitutes an endorsement by DEQ of the construction or the design of the facility described herein. This permit verifies only that the submitted application meets the design and construction standards imposed by Wyoming statutes, rules and regulations. The DEQ assumes no liability for, and does not in any way guarantee or warrant the performance or operation of the permitted facility. The permittee, owner and operator are solely responsible for any liability arising from the construction or operation of the permitted facility. By issuing this permit, the State of Wyoming does not waive its sovereign immunity.

The permittee shall allow authorized representatives from DEQ to enter and inspect any property, premise or place on or at which the facility is located or is being constructed or installed for the purpose of investigating actual or potential sources of water pollution, and for determining compliance or non-compliance with any rules, regulations, standards, permits or orders.

Nothing in this permit shall be construed to preclude the institution of any legal action or other proceeding to enforce any applicable provision of law or rules and regulations. It is the duty of the permittee, owner and operator to comply with all applicable federal, state and local laws or regulations in the exercise of its activities authorized by this permit.

The issuance of this permit does not convey any property rights in either real or personal property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations.

The permittee shall operate the permitted facility in accordance with the statements, representations, procedures, terms and conditions of the permit application, supporting documents and permit. This permit does not relieve the permittee from any duty to obtain any other permit or authorization that may be required by any provision of federal, state or local laws.

In carrying out its activities authorized by this permit, the permittee, owner and operator shall comply with all of the following permit conditions:

- 1 of 4 The applicant will provide immediate oral or written notice to the Wyoming Department of Environmental Quality/ Water Quality Division, Groundwater Program, 1866 South Sheridan Avenue, Sheridan, WY 82801, 307-673-9337, fax 307-672-2213, in accordance with the provisions of Section 11, Chapter 3, Wyoming Water Quality Rules and Regulations of any changes or modifications which are not consistent with the terms and conditions of this permit.
- 2 of 4 The applicant will provide immediate oral or written notice to the Wyoming Department of Environmental Quality/ Water Quality Division, Groundwater Program, 1866 South Sheridan Avenue, Sheridan, WY 82801, 307-673-9337, fax 307-672-2213 when discharge to each impoundment covered under this permit commences.
- 3 of 4 **Monitoring Requirements:**  
Groundwater monitoring at the impoundments shall be performed on a quarterly basis until further notice and shall include the following information:
  - Measurement of static water level in all wells: 34-26-5075 MW-01, 34-26-5075 MW-02, 34-26-5075 MW-03;
  - Sampling and analysis of groundwater at down-gradient well: 34-26-5075 MW-01;
  - Reporting results of quarterly monitoring and sampling to the department by January 15th, April 15th, July 15th, and October 15th of each year. The first set of data will be due by January 15, 2009;
  - The parameters listed in the tables below are required for groundwater compliance monitoring beneath the listed impoundment:

**Impoundment: 34-26-5075 Reservoir**

Parameter	34-26-5075 MW-01 Background Value (mg/L) (11/30/2007)	Class III Water Quality Standards (mg/L)
Arsenic	ND	0.2
Selenium	ND	0.05
Sulfate	965	3000
Total Dissolved Solids (TDS)	1620	5000
pH	7.59	6.5 – 8.5 (s.u)

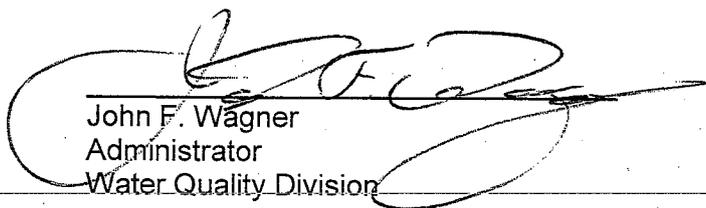
If groundwater monitoring reveals a pH measurement of 6.5 or less, the WDEQ may require sampling and analysis of groundwater for the following additional parameters: aluminum, boron, cadmium, chromium, copper, lead and zinc.

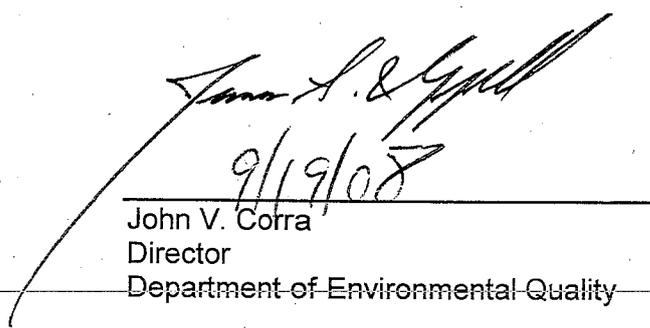
The analytical results for each sampling event, along with impoundment and monitor well location information must be submitted in the Excel spread sheet "Compliance Monitoring Data Reporting", which can be found on the WDEQ website at the following address:

(<http://deq.state.wy.us/wqd/groundwater/pollution.asp>). These data shall be submitted electronically on the due dates established above to the following department address: DEQ-CBMGroundwater@WYO.GOV. In addition, the accompanying analytical laboratory reports and field documentation must also be submitted either electronically (pdf format) or hard copy via mail to the WDEQ, Sheridan office at the address listed above.

4 of 4 Any exceedence of the water quality standards listed above will be considered a violation of this permit. If an exceedence of groundwater standards occurs as a result of the operation of the impoundment, the WDEQ may require a more frequent monitoring schedule, further investigation of the groundwater impacts, remediation of the groundwater impacts, and cessation of discharge into the impoundment.

AUTHORIZED BY:

  
John F. Wagner  
Administrator  
Water Quality Division

  
9/19/08  
John V. Corra  
Director  
Department of Environmental Quality

9-19-08  
Date of Issuance

CBD/rm/8-0711



**GROUNDWATER PROGRAM**  
**REVIEW COMMENTS:**  
**PLANS/SPECIFICATIONS/PROPOSALS/REPORTS**

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY  
WATER QUALITY DIVISION  
1866 South Sheridan Avenue  
Sheridan, WY 82801  
Phone: 307-672-6457

**PERMIT TYPE:** CBM: Groundwater Compliance Monitoring Program

**WATER QUALITY DIVISION REFERENCE (PERMIT) NUMBER:** 08-552

**SITE (POD) NAME:** Maycock Kingsbury Creek CBM Development Area

**APPLICANT:** Williams Production RMT Company  
Attn.: Ms. Peggy Carter  
300 North Works  
Gillette, WY 82716

**CONSULTANT:** CBM Associates, Inc.  
Attn.: Luke McMahan  
500 W. Lott St.  
Buffalo, Wyoming 82834

**LOCATION:** Drainage: Contrary Draw, tributary to Kingsbury  
Creek, tributary to Wild Horse Creek, tributary to  
Powder River  
County: Campbell  
Township 50 North; Range 75 West

**WYPDES No:** Discharge Permit: WY0048691

**DATE ON REPORT:** August 7, 2008

**REVIEWING OFFICIAL:** Carrie Donnell, North District Geological Project  
Analyst

**DATE OF THIS REVIEW:** September 16, 2008

**ACTION:** Compliance Monitoring Plan authorized for 34-26-5075 Reservoir  
pursuant to conditions on permit # 08-552.

**COMMENTS: GROUNDWATER SECTION**

**1.0 SITE SUMMARY:**

**1.1 Site Description.**

Watershed Name: Contrary Draw, tributary to Kingsbury Creek, tributary to Wild Horse Creek, tributary to Powder River

Groundwater Classification:

Class 1 (domestic) \_\_\_\_\_  
Class 2 (agricultural) \_\_\_\_\_  
Class 3 (livestock) 1

Basis for Classification: Laboratory analysis of groundwater indicates ambient water quality meets Water Quality Rules and Regulations Chapter 8 Class III standards and exceeds both Class I and Class II standards for Sulfate (Table 1- Chapter 8).

**Table 1. Basis for Ground Water Classification by impoundment Name covered under Permit 08-552**

Impoundment Name	Compliance Monitoring Well	Sulfate (mg/l)
34-26-5075	34-26-5075 MW-01	965

**Description of Hydrogeology:**

First groundwater occurrences in three gradient wells at the cited location are in coal, approximately 14 ft thick. The water-bearing zone underlying the cited reservoir exhibits confined conditions. Monitor well 34-26-5075 MW-01 is determined to be appropriately placed to monitor groundwater quality.

**Table 2. Names of Impoundments covered under Permit 08-552**

Impoundment Name	Capacity (acre/ft)	Qtr	Qtr	Section	Town.	Range	Down gradient Monitoring Well
34-26-5075	11.73	SW	SE	26	50N	75W	34-26-5075 MW-01

No other domestic, agricultural or livestock wells are noted in the immediate area that will be impacted. No seeps or springs are noted in the immediate area.

## 2.0 MONITORING AND REPORTING REQUIREMENTS

Groundwater monitoring at the impoundments shall be performed on a quarterly basis until further notice and shall include the following information:

- Measurement of static water level in all wells: 34-26-5075 MW-01, 34-26-5075 MW-02, 34-26-5075 MW-03;
- Sampling and analysis of groundwater at down-gradient well: 34-26-5075 MW-01;
- Reporting results of quarterly monitoring and sampling to the department by January 15<sup>th</sup>, April 15<sup>th</sup>, July 15<sup>th</sup>, and October 15<sup>th</sup> of each year. The first set of data will be due by January 15, 2009;
- The parameters listed in the tables below are required for groundwater compliance monitoring beneath the listed impoundment:

**34-26-5075 Reservoir**

<b>Parameter</b>	<b>34-26-5075 MW-01 Background Value (mg/L) (11/30/2007)</b>	<b>Class III Water Quality Standards (mg/L)</b>
Arsenic	ND	0.2
Selenium	ND	0.05
Sulfate	965	3000
Total Dissolved Solids (TDS)	1620	5000
pH	7.59	6.5 – 8.5 (s.u)

If groundwater monitoring reveals a pH measurement of 6.5 or less, the WDEQ may require sampling and analysis of groundwater for the following additional parameters: aluminum, boron, cadmium, chromium, copper, lead and zinc.

The analytical results for each sampling event, along with impoundment and monitor well location information must be submitted in the Excel spread sheet "Compliance Monitoring Data Reporting", which can be found on the WDEQ website at the following address: (<http://deq.state.wy.us/wqd/groundwater/pollution.asp>). These data shall be submitted electronically on the due dates established above to the following department address: [DEQ-CBMGroundwater@wyo.gov](mailto:DEQ-CBMGroundwater@wyo.gov). In addition, the accompanying analytical laboratory reports must also be submitted either electronically (pdf format) or hard copy via mail to the WDEQ, Sheridan office at the address listed above.

**END OF REVIEW**

**CBD/rm/8-0711**

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY  
WATER QUALITY DIVISION  
PERMIT TO CONSTRUCT

PERMIT NO. 08-554RRR

Town of La Barge - Water Treatment Plant  
PWS # WY5600222

This permit hereby authorizes the applicant:

Larry Stepp, Mayor  
Town of La Barge  
P.O. Box 327  
La Barge, WY 83123

to construct a surface water treatment plant with a capacity of 300 gpm (432,000 gpd) consisting of two new raw water pumps (installed in an existing raw water pump station building), a 74,000 gallon solids contact clarifier, two membrane filtration units, two 10,000 gallon contact tanks, two distribution system pumps and a water treatment plant building according to the procedures and conditions of the application number 08-554RRR. The facility is located in the Town of La Barge in (Part of Lot #12, David Decker Subdivision, within Gov. Lot 6) Section 6, T26N, R112W in the county of Lincoln, in the State of Wyoming. All construction, installation, or modification allowed by this permit shall be completed by July 16, 2011.

The issuance of this permit confirms that the Wyoming Department of Environmental Quality (DEQ) has evaluated the application submitted by the permittee and determined that it meets minimum applicable construction and design standards. The compliance with construction standards and the operation and maintenance of the facility to meet the engineer's design are the responsibility of the permittee, owner, and operator.

Granting this permit does not imply that DEQ guarantees or ensures that the permitted facility, when constructed, will meet applicable discharge permit conditions or other effluent or operational requirements. Compliance with discharge standards remains the responsibility of the permittee.

Nothing in this permit constitutes an endorsement by DEQ of the construction or the design of the facility described herein. This permit verifies only that the submitted application meets the design and construction standards imposed by Wyoming statutes, rules and regulations. The DEQ assumes no liability for, and does not in any way guarantee or warrant the performance or operation of the permitted facility. The permittee, owner and operator are solely responsible for any liability arising from the construction or operation of the permitted facility. By issuing this permit, the State of Wyoming does not waive its sovereign immunity.

The permittee shall allow authorized representatives from DEQ to enter and inspect any property, premise or place on or at which the facility is located or is being constructed or installed for the purpose of investigating actual or potential sources of water pollution, and for determining compliance or non-compliance with any rules, regulations, standards, permits or orders.

Nothing in this permit shall be construed to preclude the institution of any legal action or other proceeding to enforce any applicable provision of law or rules and regulations. It is the duty of the permittee, owner and operator to comply with all applicable federal, state and local laws or regulations in the exercise of its activities authorized by this permit.

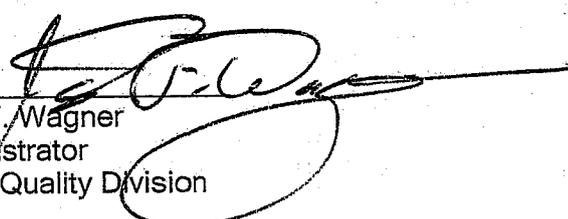
The issuance of this permit does not convey any property rights in either real or personal property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations.

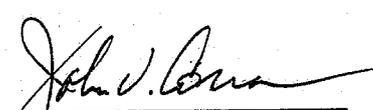
The permittee shall construct and operate the permitted facility in accordance with the statements, representations, procedures, terms and conditions of the permit application, supporting documents and permit. This permit does not relieve the permittee from any duty to obtain any other permit or authorization that may be required by any provision of federal, state or local laws.

In carrying out its activities authorized by this permit, the permittee, owner and operator shall comply with all of the following permit conditions:

- 1 of 3      The applicant will provide immediate oral or written notice to the Wyoming Department of Environmental Quality, Water Quality Division (WQD), Southwest District Engineer, 510 Meadow View Drive, Lander, WY 82520, 307-332-3144, FAX 307-332-3183, in accordance with the provisions of Section 11, Chapter 3, Wyoming Water Quality Rules and Regulations of any changes or modifications which are not consistent with the terms and conditions of this permit.
- 2 of 3      Within sixty days of completion of construction of the authorized facility, the applicant will submit to the Southwest District a certification of completion signed by the Engineer of Record or the owner. A form titled "Certificate of Completion" has been provided.
- a. Date that construction of the facility was completed; and
  - b. Date that the facility was placed in operation; and
  - c. Certification the facility was constructed in accordance with the terms and conditions of the permit; or
  - d. Certification the facility was completed with changes or modifications. Submittal of as-constructed plans and specifications for the system as it was constructed, certified by an engineer if appropriate is required. All modifications or deviations from the authorized plans must be highlighted.
- 3 of 3      The review and approval of this permit is based upon the items identified in the attached "Statement of Basis".

AUTHORIZED BY:

  
John F. Wagner  
Administrator  
Water Quality Division

  
John V. Corra  
Director  
Department of Environmental Quality

7/22/09  
Date of Issuance

MDB/rm/9-0612

## STATEMENT OF BASIS

1. Permit Number: 08-554RRR
2. Application reviewed for compliance with the following regulations:  
Chapters 3 and 12 of the Wyoming Water Quality Rules and Regulations.
3. Does the permit comply with all applicable regulations identified above?  
No. Chapter 12, Section 8 (d)(i) requires that treatment facilities with 100,000 gallon per day capacity and over shall provide duplicate units. The proposed concrete solids contact clarifier is capable of functioning without the mechanical rake arm. A spare motor for the rake arm will be kept on site.
4. If a Section 17 of Chapter 3 review is required indicate the basis for determining groundwater will be protected.  
Not required.
5. Documentation of Statement of Basis: The archive file for this permit includes adequate documentation of all sections of this Statement of Basis.

## CERTIFICATION

The issuance of this permit is based upon a review of the application package submitted in accordance with the requirements of Chapter 3, Section 6, Wyoming Water Quality Rules and Regulations. This review was performed by Kevin Frank, P.E., [kfrank1@wyo.gov](mailto:kfrank1@wyo.gov), Engineering Consultant, Mark D. Baron, P.E., [mbaron@wyo.gov](mailto:mbaron@wyo.gov), Southwest District Engineer and completed on July 16, 2009. Permit issuance is recommended based upon statements, representations, and procedures presented in the permit application and supporting documents, permit conditions, and the items identified in this "Statement of Basis."

cc: Dave Noel, P.E., Forsgren Associates Inc., 350 North 2<sup>nd</sup> East, Rexburg, ID 83440  
Kevin Frank, P.E., Wyoming DEQ, 152 North Durbin St., Suite 100, Casper, WY 82601

# ROAD APPLICATION PERMIT

New  
 Renewal  
 Modified

PERMIT NO. 08-556  
SPECIAL CONDITIONS  
REF/PERMIT

## **OILFIELD DISPOSAL SERVICES, INC. ROAD APPLICATION**

This permit hereby authorizes the applicant:

### **OILFIELD DISPOSAL SERVICES, INC.** **P.O. BOX 668** **WORLAND, WY 82401**

to road apply a total of 800 barrels of waste petroleum sludge from the Oilfield Disposal Services, Inc., commercial oilfield wastewater disposal facility for dust suppression on service roads within the Oilfield Disposal Services facility according to the procedures and conditions of application number 08-556. The application area is located in the southeast quarter of Section 17 and the southeast quarter of Section 18, Township 47 North, Range 89 West, Washakie County, Wyoming. This permit shall be effective until December 1, 2008.

The issuance of this permit confirms that the Department of Environmental Quality (DEQ) has evaluated the application submitted by the permittee and determined that it meets minimum applicable standards. Compliance with DEQ standards is the responsibility of the permittee, owner, and/or operator.

Nothing in this permit constitutes an endorsement by the DEQ of the disposal method described herein. This permit verifies only that the submitted application meets the standards imposed by the DEQ statutes, rules and regulations. The DEQ assumes no liability for, and does not in any way guarantee or warrant the performance of, the permitted activity. The permittee, owner and/or operator are solely responsible for any liability arising from the waste disposal permitted. By issuing this permit, the state does not waive its sovereign immunity.

The permittee shall allow authorized representatives from the DEQ, Water Quality Division, to enter and inspect any property, premise or place on or at which the facility is located or is being constructed or installed for the purpose of investigating actual or potential sources of water pollution, and for determining compliance or non-compliance with any rules, regulations, standards, permits or orders.

Nothing in this permit shall be construed to preclude the institution of any legal action or other proceeding to enforce any applicable provision of law or rules and regulations. It is the duty of the permittee, owner and/or operator to comply with all applicable federal, state and local laws or regulations in the exercise of its activities authorized by this permit.

The issuance of this permit does not convey any property rights in either real or personal property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations.

The permittee shall construct and operate the permitted facility in accordance with the statements, representations, procedures, terms and conditions of the permit application, supporting documents and permit. This permit does not relieve the permittee from any duty to obtain any other permit or authorization that may be required by any provision of federal, state or local laws.

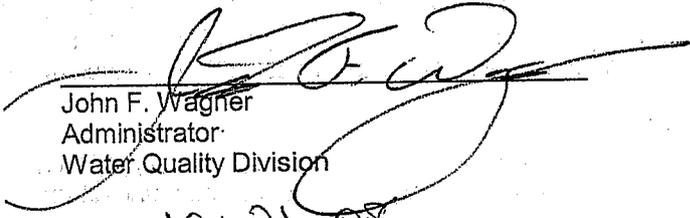
In carrying out its activities authorized by this permit, the permittee, owner and/or operator shall comply with all of the following permit conditions:

1 of 7 The permittee shall notify representatives from the DEQ/WQD of the anticipated project commencement and completion dates. At least 48 hours advance notice is required. The authorized representative in your area can be contacted at the following address: DEQ/WQD, Casper WDEQ Field Office, 152 North Durbin Street, Suite 100, Casper, WY 82601, telephone (307) 473-3452; FAX (307) 473-3458.

2 of 7 The permittee shall provide immediate oral and/or written notice to the Casper WDEQ Field Office in accordance with the provisions of Section 9, Chapter III, Wyoming Water Quality Rules and Regulations of any changes or modifications to the approved permit package.

- 3 of 7 The permittee shall provide certification that the project was completed in accordance with the terms and conditions of the permit within sixty (60) days of the project completion to the Casper WDEQ Field Office on the attached Certification of Completion form.
- a. Date that the road application was completed; and
  - b. Certification the road application was done in accordance with the terms and conditions of the permit; or
  - c. Certification the road application was completed with changes or modifications. Submit the information necessary to clearly indicate the road application as actually performed. This information shall include a contour map depicting only those sections of road that actually received CBM produced water.
- 4 of 7 The review and approval of this permit is based upon the items identified in the attached Statement of Basis.
- 5 of 7 The waste petroleum sludge shall be applied uniformly and incorporated into the road bed. The volume and rates of application will be as required for dust control.
- 6 of 7 The application site slope shall not exceed eight percent (8%) for vehicular application. The application of waste petroleum sludge shall be terminated within 300 feet of the definable high water mark of perennial and intermittent drainages, irrigation canals, lakes and reservoirs.
- 7 of 7 Only the roads designated in this permit are authorized for application of the waste petroleum sludge. Additional or alternate sections of road meeting the requirements of the application and this permit may be utilized if a written description and maps are received and approved by the WQD.

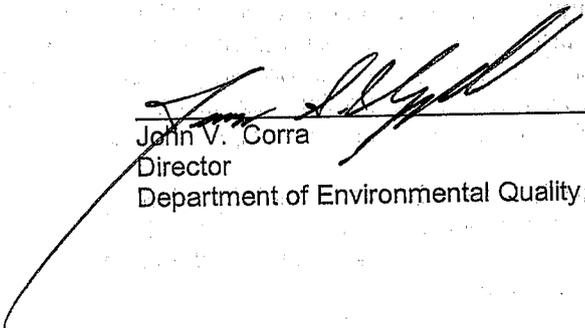
AUTHORIZED BY:

  
John F. Wagner  
Adminjstrator  
Water Quality Division

10-21-08  
Date of Issuance

JDL/kjm/bb/8-0806

cc: WDEQ Casper Field Office

  
John V. Corra  
Director  
Department of Environmental Quality

STATEMENT OF BASIS

- I. General information.
- A. Permit Number: 08-556
- II. Application reviewed for compliance with the following regulations. (Indicate yes or no for each section.)
- A. Chapter XI. No
- B. Chapter XII. No
- III. Basis for issuing permit. (Indicate yes or no for each section.)
- A. Review of application package indicates proposed facility will be in compliance with applicable regulations identified in Section II.  
No
- B. Permit includes deviation from applicable regulations in accordance with Section 5, Chapter XI, or XII.  
No
- C. Permit based on deviation from applicable regulations in accordance with approved policy statement.  
No
- IV. Facilities not specifically covered by regulations. (Indicate the section number of the regulations and briefly summarize the regulation.)
- A. Identify specific sections of the regulations for which a deviation is approved and briefly summarize the regulation.  
There are no numeric standards or criteria in Chapter XI for road application. W.S. 35-11-301 (a)(iii) requires a permit to be issued when any disposal system capable of causing or contributing to pollution is constructed, installed, modified, or operated.
- B. Briefly state the basis for the deviation.  
Road application is permitted when DEQ authorized disposal facilities are not readily available, a beneficial use of the waste to be applied is possible, and significant impact to waters of the State is minimized.
- C. Permit based on general or statewide deviation contained in approved policy statement (indicate the policy number and briefly summarize the nature of the deviation).  
District Policy numbers 10.1 (4/9/91), 10.2 (10/17/86), 10.3 (8/91), 10.4 (10/24/91), and 10.6 (1/18/91) address the statutory authority to regulate the road application of waste, establish criteria for characterizing the waste, and determine acceptable conditions for the application of the waste to roadbeds to minimize impact to waters of the State. District Policy 10.2 (10/17/86)
- V. Application requires review to determine groundwater impacts in accordance with Section 15, Chapter III. (Indicate either applicable or not applicable. If not applicable delete all of section VI. from the Statement of Basis.)  
NA

VI. If Section 15 of Chapter III is applicable, indicate the basis of determining groundwater will be protected. (Fill out only the applicable sections and indicate sections that are not applicable.)

A. Facility will not allow a discharge to groundwater. Briefly describe:

The opportunity for direct or indirect discharge, percolation, or filtration to groundwater is minimized by uniformly applying non-contact process water. Application is for dust control and as an aid in road construction (compaction).

B. Quality of waste is such that it will not cause a violation of groundwater standards. Briefly describe:

NA

C. Existing soils or geology will not allow a discharge to groundwater. Briefly describe:

NA

D. Basis of facility design is that it will be operated so as not to violate groundwater standards (example: maintenance of manure pack at animal waste treatment facility). Briefly describe:

NA

E. Discharge will result in groundwater concentrations in excess of standards but post discharge water quality can be returned to standards in accordance with Section 4 (d)(vi), Chapter VIII. Briefly describe:

NA

F. If water quality exceedances are allowed, briefly describe the parameter limits, property boundaries, places of withdrawal and any other information documenting that any users of affected aquifer will not be impacted.

NA

G. Briefly describe monitoring system (parameters, frequency, etc.). Clearly state the parameters to be utilized for determining compliance, what constitutes a violation and steps to be followed by the permittee in the event of a violation.

NA

VII. Documentation of Statement of Basis.

A. The archives file for this permit will include adequate documentation of all sections of this Statement of Basis.

#### CERTIFICATION

The issuance of this permit is based upon a review of the application package submitted in accordance with the requirements of Section 6, Chapter III, Wyoming Water Quality Rules and Regulations. This review was performed by Kim Medina, Senior Environmental Analyst, and completed on September 17, 2008. Permit issuance is recommended based upon statements, representations, and procedures presented in the permit application and supporting documents, permit conditions, and the items identified in this "Statement of Basis."

KJM/bb/8-0806

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY  
WATER QUALITY DIVISION  
"AS-BUILT" PERMIT TO CONSTRUCT

PERMIT NO. 08-558

Pumpkin Creek POD II

This permit hereby authorizes the applicant:

Bill Barrett Corporation  
Attn.: Mr. Paul McElvery  
1414 E. Lincoln Street  
Gillette, WY 82718

to have installed four (4) compliance monitoring wells according to the procedures and conditions of the application number **08-558**. The facility is proximal to coalbed methane produced water impoundments located in Township 46N, Range 76W, Section 3 and Township 47N, Range 76W, Sections 11 and 14 in the county of Campbell, in the State of Wyoming. All construction, installation, or modification allowed by this permit has been completed.

The issuance of this permit confirms that the Wyoming Department of Environmental Quality (DEQ) has evaluated the application submitted by the permittee and determined that it meets minimum applicable construction and design standards. The compliance with construction standards and the operation and maintenance of the facility to meet the engineer's design are the responsibility of the permittee, owner, and operator.

Nothing in this permit constitutes an endorsement by DEQ of the construction or the design of the facility described herein. This permit verifies only that the submitted application meets the design and construction standards imposed by Wyoming statutes, rules and regulations. The DEQ assumes no liability for, and does not in any way guarantee or warrant the performance or operation of the permitted facility. The permittee, owner and operator are solely responsible for any liability arising from the construction or operation of the permitted facility. By issuing this permit, the State of Wyoming does not waive its sovereign immunity.

The permittee shall allow authorized representatives from DEQ to enter and inspect any property, premise or place on or at which the facility is located or is being constructed or installed for the purpose of investigating actual or potential sources of water pollution, and for determining compliance or non-compliance with any rules, regulations, standards, permits or orders.

Nothing in this permit shall be construed to preclude the institution of any legal action or other proceeding to enforce any applicable provision of law or rules and regulations. It is the duty of the permittee, owner and operator to comply with all applicable federal, state and local laws or regulations in the exercise of its activities authorized by this permit.

The issuance of this permit does not convey any property rights in either real or personal property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations.

The permittee shall operate the permitted facility in accordance with the statements, representations, procedures, terms and conditions of the permit application, supporting documents and permit. This permit does not relieve the permittee from any duty to obtain any other permit or authorization that may be required by any provision of federal, state or local laws.

In carrying out its activities authorized by this permit, the permittee, owner and operator shall comply with all of the following permit conditions:

1 of 4 The applicant will provide immediate oral or written notice to the Wyoming Department of Environmental Quality/ Water Quality Division, Groundwater Program, 1866 South Sheridan Avenue, Sheridan, WY 82801, 307-673-9337, fax 307-672-2213, in accordance with the provisions of Section 11, Chapter 3, Wyoming Water Quality Rules and Regulations of any changes or modifications which are not consistent with the terms and conditions of this permit.

2 of 4 The applicant will provide immediate oral or written notice to the Wyoming Department of Environmental Quality/ Water Quality Division, Groundwater Program, 1866 South Sheridan Avenue, Sheridan, WY 82801, 307-673-9337, fax 307-672-2213 when discharge to each impoundment covered under this permit commences.

3 of 4 **Monitoring Requirements:**

Groundwater monitoring at the impoundments shall be performed on a quarterly basis until further notice and shall include the following information:

- Measurement of static water level and sampling and analysis of groundwater at down-gradient wells: MW3-1, MW14-3, MW14-3A, and MW12-11C3.
- Measurement of static water level at up-gradient wells: MW-14-2, MW-21-11, MW21-11C1 and MW21-11C2.
- Reporting results of quarterly monitoring and sampling to the department by January 15<sup>th</sup>, April 15<sup>th</sup>, July 15<sup>th</sup>, and October 15<sup>th</sup> of each year. The first set of data will be due by January 15, 2009.
- The parameters listed in the tables below are required for groundwater compliance monitoring beneath the listed impoundment:

**P3-1-46-76**

Parameter	MW3-1 Background Value	Class III
	(mg/L) (6/19/07)	Water Quality Standards (mg/L)
Arsenic	ND (0.005)	0.2
Selenium	ND (0.005)	0.05
Sulfate	2520	3000
Total Dissolved Solids	4240	5000
pH	7.01	6.5 – 8.5 (s.u.)

**14-2-47-76**

Parameter	MW11-1 Background Value	Class III
	(for MW14-3) (mg/L) (6/19/07)	Water Quality Standards (mg/L)
Arsenic	0.009	0.2
Selenium	ND (0.005)	0.05
Sulfate	441	3000
Total Dissolved Solids	1040	5000
pH	8.4	6.5 – 8.5 (s.u.)

14-2-47-76 cont.

Parameter	MW14-3A Background Value (mg/L) (2/1/08)	Class III Water Quality Standards (mg/L)
Arsenic	ND (0.005)	0.2
Selenium	ND (0.005)	0.05
Sulfate	2450	3000
Total Dissolved Solids	3730	5000
pH	7.58	6.5 – 8.5 (s.u)

Mankin Reservoir

Parameter	MW21-11C3 Background Value (mg/L) (2/1/08)	Class III Water Quality Standards (mg/L)
Arsenic	ND (0.005)	0.2
Selenium	ND (0.005)	0.05
Sulfate	705	3000
Total Dissolved Solids	1220	5000
pH	7.90	6.5 – 8.5 (s.u)

If groundwater monitoring reveals a pH measurement of 6.5 or less, the WDEQ may require sampling and analysis of groundwater for the following additional parameters: aluminum, boron, cadmium, chromium, copper, lead and zinc.

The analytical results for each sampling event, along with impoundment and monitor well location information must be submitted in the Excel spread sheet "Compliance Monitoring Data Reporting", which can be found on the WDEQ website at the following address: (<http://deq.state.wy.us/wqd/groundwater/pollution.asp>). These data shall be submitted electronically on the due dates established above to the following department address: DEQ-CBMGroundwater@WYO.GOV. In addition, the accompanying analytical laboratory reports and field documentation must also be submitted either electronically (pdf format) or hard copy via mail to the WDEQ, Sheridan office at the address listed above.

4 of 4 Any exceedence of the water quality standards listed above will be considered a violation of this permit. If an exceedence of groundwater standards occurs as a result of the operation of the impoundment, the WDEQ may require a more frequent monitoring schedule, further investigation of the groundwater impacts, remediation of the groundwater impacts, and cessation of discharge into the impoundment.

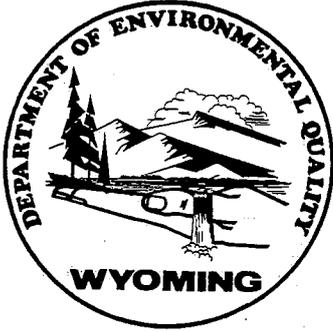
AUTHORIZED BY:

  
 John F. Wagner  
 Administrator  
 Water Quality Division

  
 John V. Corra  
 Director  
 Department of Environmental Quality

9-25-08  
 Date of Issuance

UMW/rm/8-0734



**GROUNDWATER PROGRAM**  
**REVIEW COMMENTS:**  
**PLANS/SPECIFICATIONS/PROPOSALS/REPORTS**

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY  
WATER QUALITY DIVISION  
1866 South Sheridan Avenue  
Sheridan, WY 82801  
Phone: 307-672-6457

**PERMIT TYPE:** CBM: Groundwater Compliance Monitoring Program

**WATER QUALITY DIVISION REFERENCE (PERMIT) NUMBER:** 08-558

**SITE (POD) NAME:** Pumpkin Creek POD II

**APPLICANT:** Bill Barrett Corporation  
Attn.: Mr. Paul McElvery  
1414 E. Lincoln St.  
Gillette, Wyoming 82718

**CONSULTANT:** WWC Engineering  
Attn.: Ben Schiffer  
1849 Terra Ave.  
Sheridan, Wyoming 82801

**LOCATION:** Drainage: Unnamed tributary to Pumpkin Creek and  
unnamed tributary to Beaver Creek, tributary to  
Powder River  
County: Campbell  
Township 46 and 47 North; Range 76 West  
**WYPDES No:** Discharge Permit: WY0055638

**DATE ON REPORT:** March 10, 2008

**REVIEWING OFFICIAL:** Ursula Williams, North District Geologic Analyst

**DATE OF THIS REVIEW:** September 22, 2008

**ACTION:** Compliance Monitoring Plan authorized for Pumpkin Creek POD II  
pursuant to conditions on permit # 08-558.

## COMMENTS: GROUNDWATER SECTION

### 1.0 SITE SUMMARY:

#### 1.1 Site Description.

Watershed Name: Unnamed tributary to Pumpkin Creek and unnamed tributary to Beaver Creek, tributary to Powder River

#### Groundwater Classification:

Class 1 (domestic) \_\_\_\_\_

Class 2 (agricultural) \_\_\_\_\_

Class 3 (livestock) 4

Basis for Classification: Laboratory analysis of groundwater indicates ambient water quality meets Water Quality Rules and Regulations Chapter 8 Class III standards and exceeds both Class I and Class II standards for Sulfate and TDS (Table 1- Chapter 8).

MW14-3 was not sampled prior to submittal of the permit application but MW11-1 which is nearby and completed in the same unit was sampled. The data from MW11-1 is considered representative of the water quality of MW14-3. MW-14-3 will be sampled prior to discharge into the reservoir to confirm ambient conditions.

**Table 1. Basis for Ground Water Classification by impoundment Name covered under Permit 08-558**

Impoundment Name	Monitoring Well Sampled	Sulfate (mg/l)	TDS (mg/l)
P3-1-46-76	MW3-1	2520	4240
	MW11-1 (for MW14-3)	441	1040
14-2-47-76	MW14-3A	2450	3730
Mankin Reservoir	MW21-11C3	705	1220

#### **Description of Hydrogeology:**

##### P3-1-46-76

Groundwater was first encountered in a sandstone which was intercepted from 102 to 142 ft bgs. The claystone above it is described as having increasing silt and sand fraction from 92 to 98 ft bgs. SWL in this well is 98 ft bgs. The groundwater in this sandstone is possibly slightly confined and flows to the west.

##### 14-2-47-76

The first water bearing zone is a medium-grained sandstone from 115 to 127 ft bgs. The strata above the sandstone consist of siltstones and sandstones with one ten (10) ft claystone and a one (1) ft coal. SWL is 75 ft bgs and

there is no obvious confining layer thus the water bearing zone is confined. Groundwater flow is to the north.

#### Mankin Reservoir

The first water bearing zone is a sandstone which was encountered from 176.5 to 214 feet bgs. Above the sandstone is a 78-foot claystone which acts as a confining layer. The static water level is 86 ft bgs, some 90 ft above the top of the aquifer. A total of four wells were drilled around the Mankin Reservoir to determine the direction of groundwater flow is to the northeast.

**Table 2. Names of Impoundments covered under Permit 08-558**

Impoundment Name	Capacity (acre/ft)					Range	Down-gradient Monitoring Well
		Qtr	Qtr	Section	Town.		
P3-1-46-76	9.6	SENE		3	46N	76W	MW3-1
14-2-47-76	17	NWNE		14	47N	76W	MW14-3 and MW14-3A
Mankin Reservoir	43.6	NENW		11	47N	76W	MW21-11C3

Two livestock/domestic wells are within about 1/4 -mile of P14-2-47-76. P14089P is located 0.26 miles from the impoundment. Its completion information is unknown, but the land owner has indicated that it is in poor repair and is no longer being used. It was replaced with an artesian well which is located 0.23 miles from the impoundment and is completed to a depth of 440 ft bgs. It is not likely that this well will be affected by infiltrating co-produced water. No seeps or springs are noted in the immediate area.

## 2.0 MONITORING AND REPORTING REQUIREMENTS

Groundwater monitoring at the impoundments shall be performed on a quarterly basis until further notice and shall include the following information:

- Measurement of static water level and sampling and analysis of groundwater at down-gradient wells: MW3-1, MW14-3, MW14-3A, and MW21-11C3.
- Measurement of static water level at up-gradient wells: MW-14-2, MW-21-11, MW21-11C1 and MW21-11C2.
- Reporting results of quarterly monitoring and sampling to the department by January 15<sup>th</sup>, April 15<sup>th</sup>, July 15<sup>th</sup>, and October 15<sup>th</sup> of each year. The first set of data will be due by January 15, 2009.
- The parameters listed in the tables below are required for groundwater compliance monitoring beneath the listed impoundment:

P3-1-46-76		
Parameter	MW3-1 Background Value (mg/L) (6/19/07)	Class III Water Quality Standards (mg/L)
Arsenic	ND (0.005)	0.2

Selenium	ND (0.005)	0.05
Sulfate	2520	3000
Total Dissolved Solids	4240	5000
pH	7.01	6.5 – 8.5 (s.u)

**14-2-47-76**

Parameter	MW11-1 Background Value	Class III
	(for MW14-3) (mg/L) (6/19/07)	Water Quality Standards (mg/L)
Arsenic	0.009	0.2
Selenium	ND (0.005)	0.05
Sulfate	441	3000
Total Dissolved Solids	1040	5000
pH	8.4	6.5 – 8.5 (s.u.)

**14-2-47-76 cont.**

Parameter	MW14-3A Background Value	Class III
	(mg/L) (2/1/08)	Water Quality Standards (mg/L)
Arsenic	ND (0.005)	0.2
Selenium	ND (0.005)	0.05
Sulfate	2450	3000
Total Dissolved Solids	3730	5000
pH	7.58	6.5 – 8.5 (s.u)

**Mankin Reservoir**

Parameter	MW21-11C3 Background	Class III
	Value (mg/L) (2/1/08)	Water Quality Standards (mg/L)
Arsenic	ND (0.005)	0.2
Selenium	ND (0.005)	0.05
Sulfate	705	3000
Total Dissolved Solids	1220	5000
pH	7.90	6.5 – 8.5 (s.u)

If groundwater monitoring reveals a pH measurement of 6.5 or less, the WDEQ may require sampling and analysis of groundwater for the following additional parameters: aluminum, boron, cadmium, chromium, copper, lead and zinc.

The analytical results for each sampling event, along with impoundment and monitor well location information must be submitted in the Excel spread sheet "Compliance Monitoring Data Reporting", which can be found on the WDEQ website at the following address: (<http://deq.state.wy.us/wqd/groundwater/pollution.asp>). These data shall be submitted electronically on the due dates established above to the following department address: [DEQ-CBMGroundwater@wyo.gov](mailto:DEQ-CBMGroundwater@wyo.gov). In addition, the accompanying analytical laboratory reports must also be submitted either electronically (pdf format) or hard copy via mail to the WDEQ, Sheridan office at the address listed above.

**END OF REVIEW**

**UMW/rm/8-0734**



The State  
of Wyoming



## Department of Environmental Quality

Dave Freudenthal, Governor

John Corra, Director

152 N. Durbin Street • Suite 100 • Casper, Wyoming 82601

October 16, 2008

Barb and Gary Johnson  
P.O. Box 342  
Newcastle, WY 82701

RE: Return of Application for the Johnson Residential Septic System, WDEQ #08-560  
Crook County

Dear Mr. and Mrs. Johnson:

The Wyoming Department of Environmental Quality (DEQ) received an application on September 1, 2008 for a Permit to Construct a small wastewater system in Crook County for the proposed Johnson residential septic system. DEQ performed a review of the application and sent this review to the above address on September 4, 2008. The review stated that if DEQ did not receive the information requested within **one** month, the incomplete application would be returned. As of today, October 16, 2008, DEQ has not received the required information.

Therefore, in accordance with Wyoming Department of Environmental Quality/Water Quality Rules and Regulations Chapter 3, Section 14 – Denial of a Permit or Coverage under a General Permit, DEQ is returning all of the application materials to you, as DEQ is unable to process your application without the required information. A blank copy of the design instructions is enclosed for your use.

You can resubmit the application at any time. It will be assigned a new DEQ tracking number and will be reviewed in accordance with Chapter 3 of the Wyoming Department of Environmental Quality/Water Quality Rules and Regulations.

If you have any questions, please contact me at (307) 473-3473 or [spagor@wyo.gov](mailto:spagor@wyo.gov)

Sincerely,

Suzanne Pagorek  
WDEQ/WQD

Enclosures: application materials

cc: WDEQ File (w/o encl)  
IPS (w/o encl)  
Tim Lyons, Crook County Growth and Development (w/o enclosures)  
Bill Cudmore, Allstar Plumbing and Heating, Inc., 19996 Crow Cr. Rd. Spearfish, SD 57783 (w/o enclosures)



WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY  
WATER QUALITY DIVISION  
"AS-BUILT" PERMIT TO CONSTRUCT

PERMIT NO. 08-562

Homestead Draw II, Cleanout and Center Impoundments

This permit hereby authorizes the applicant:

Huber Energy  
Attn.: Mr. Sean Mullet  
2266 N. Main Street  
Sheridan, WY 82801

to have installed four (4) compliance monitoring wells according to the procedures and conditions of the application number 08-562. The facility is proximal to coalbed methane produced water impoundments located in Township 56N, Range 74W, Sections 13 and 14 in the county of Campbell, in the State of Wyoming. All construction, installation, or modification allowed by this permit has been completed.

The issuance of this permit confirms that the Wyoming Department of Environmental Quality (DEQ) has evaluated the application submitted by the permittee and determined that it meets minimum applicable construction and design standards. The compliance with construction standards and the operation and maintenance of the facility to meet the engineer's design are the responsibility of the permittee, owner, and operator.

Nothing in this permit constitutes an endorsement by DEQ of the construction or the design of the facility described herein. This permit verifies only that the submitted application meets the design and construction standards imposed by Wyoming statutes, rules and regulations. The DEQ assumes no liability for, and does not in any way guarantee or warrant the performance or operation of the permitted facility. The permittee, owner and operator are solely responsible for any liability arising from the construction or operation of the permitted facility. By issuing this permit, the State of Wyoming does not waive its sovereign immunity.

The permittee shall allow authorized representatives from DEQ to enter and inspect any property, premise or place on or at which the facility is located or is being constructed or installed for the purpose of investigating actual or potential sources of water pollution, and for determining compliance or non-compliance with any rules, regulations, standards, permits or orders.

Nothing in this permit shall be construed to preclude the institution of any legal action or other proceeding to enforce any applicable provision of law or rules and regulations. It is the duty of the permittee, owner and operator to comply with all applicable federal, state and local laws or regulations in the exercise of its activities authorized by this permit.

The issuance of this permit does not convey any property rights in either real or personal property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations.

The permittee shall operate the permitted facility in accordance with the statements, representations, procedures, terms and conditions of the permit application, supporting documents and permit. This permit does not relieve the permittee from any duty to obtain any other permit or authorization that may be required by any provision of federal, state or local laws.

In carrying out its activities authorized by this permit, the permittee, owner and operator shall comply with all of the following permit conditions:

1 of 4 The applicant will provide immediate oral or written notice to the Wyoming Department of Environmental Quality/ Water Quality Division, Groundwater Program, 1866 South Sheridan Avenue, Sheridan, WY 82801, 307-673-9337, fax 307-672-2213, in accordance with the provisions of Section 11, Chapter 3, Wyoming Water Quality Rules and Regulations of any changes or modifications which are not consistent with the terms and conditions of this permit.

2 of 4 The applicant will provide immediate oral or written notice to the Wyoming Department of Environmental Quality/ Water Quality Division, Groundwater Program, 1866 South Sheridan Avenue, Sheridan, WY 82801, 307-673-9337, fax 307-672-2213 when discharge to each impoundment covered under this permit commences.

3 of 4 **Monitoring Requirements:**  
Groundwater monitoring at the impoundments shall be performed on a quarterly basis until further notice and shall include the following information:

- Measurement of static water level and sampling and analysis of groundwater at potential down-gradient wells: Cleanout MW-01, Cleanout MW-02, Center MW-01, Center MW-02;
- Reporting results of quarterly monitoring and sampling to the department by January 15th, April 15th, July 15th, and October 15th of each year. The first set of data will be due by January 15, 2009
- The parameters listed in the tables below are required for groundwater compliance monitoring beneath the listed impoundment:

<b>Impoundment: Cleanout</b>			
<b>Parameter</b>	<b>Cleanout MW-01 Background</b>		<b>Class III</b>
	<b>Value (mg/L) (08/03/2006)</b>		<b>Water Quality Standards (mg/L)</b>
Arsenic	ND		0.2
Selenium	ND		0.05
Sulfate	1110		3000
Total Dissolved Solids (TDS)	2000		5000
pH	7.18		6.5 – 8.5 (s.u)

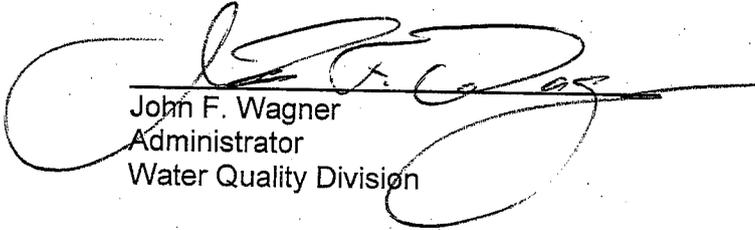
<b>Impoundment: 14-5-57-74 Pit</b>			
<b>Parameter</b>	<b>Center MW-01 Background</b>		<b>Class III</b>
	<b>Value (mg/L) (11/14/2006)</b>		<b>Water Quality Standards (mg/L)</b>
Arsenic	0.002		0.2
Selenium	ND		0.05
Sulfate	725		3000
Total Dissolved Solids (TDS)	1410		5000
pH	7.52		6.5 – 8.5 (s.u)

If groundwater monitoring reveals a pH measurement of 6.5 or less, the WDEQ may require sampling and analysis of groundwater for the following additional parameters: aluminum, boron, cadmium, chromium, copper, lead and zinc.

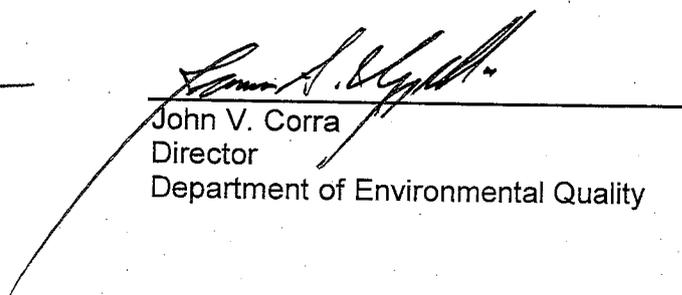
The analytical results for each sampling event, along with impoundment and monitor well location information must be submitted in the Excel spread sheet "Compliance Monitoring Data Reporting", which can be found on the WDEQ website at the following address: (<http://deq.state.wy.us/wqd/groundwater/pollution.asp>). These data shall be submitted electronically on the due dates established above to the following department address: DEQ-CBMGroundwater@WYO.GOV. In addition, the accompanying analytical laboratory reports and field documentation must also be submitted either electronically (pdf format) or hard copy via mail to the WDEQ, Sheridan office at the address listed above.

4 of 4 Any exceedence of the water quality standards listed above will be considered a violation of this permit. If an exceedence of groundwater standards occurs as a result of the operation of the impoundment, the WDEQ may require a more frequent monitoring schedule, further investigation of the groundwater impacts, remediation of the groundwater impacts, and cessation of discharge into the impoundment.

AUTHORIZED BY:



John F. Wagner  
Administrator  
Water Quality Division



John V. Corra  
Director  
Department of Environmental Quality

9-23-08  
Date of Issuance

CBD/rm/8-0713



**GROUNDWATER PROGRAM**  
**REVIEW COMMENTS:**  
**PLANS/SPECIFICATIONS/PROPOSALS/REPORTS**

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY  
WATER QUALITY DIVISION  
1866 South Sheridan Avenue  
Sheridan, WY 82801  
Phone: 307-672-6457

**PERMIT TYPE:** CBM: Groundwater Compliance Monitoring Program

**WATER QUALITY DIVISION REFERENCE (PERMIT) NUMBER:** 08-562

**SITE (POD) NAME:** Homestead Draw II

**APPLICANT:** J. M. Huber Corporation  
Attn.: Mr. Sean Mullet  
2266 N. Main St.  
Sheridan, Wyoming 82801

**CONSULTANT:** CBM Associates, Inc.  
Attn.: Luke McMahan  
500 W. Lott St.  
Buffalo, Wyoming 82834

**LOCATION:** Drainage: Unnamed tributary to Bitter Creek,  
tributary to Powder River  
County: Campbell  
Township 56 North; Range 74 West  
**WYPDES No:** Discharge Permit: WY0056561 (Pending)

**DATE ON REPORT:** August 11, 2008

**REVIEWING OFFICIAL:** Carrie Donnell, North District Geological Project Analyst

**DATE OF THIS REVIEW:** September 3, 2008

**ACTION:** Compliance Monitoring Plan authorized for Cleanout and Center Impoundments, pursuant to conditions on permit # 08-562.

## COMMENTS: GROUNDWATER SECTION

### 1.0 SITE SUMMARY:

#### 1.1 Site Description.

Watershed Name: Unnamed tributary to Bitter Creek, tributary to Powder River

Groundwater Classification:

Class 1 (domestic) \_\_\_\_\_

Class 2 (agricultural) \_\_\_\_\_

Class 3 (livestock) 2

Basis for Classification: Laboratory analysis of groundwater indicates ambient water quality meets Water Quality Rules and Regulations Chapter 8 Class III standards and exceeds both Class I and Class II standards for Sulfate (Table 1- Chapter 8).

**Table 1. Basis for Ground Water Classification by impoundment Name covered under Permit 08-562**

Impoundment Name	Compliance Monitoring Well	Sulfate (mg/l)
Cleanout	Cleanout MW-01 and MW-02	1110
Center	Center MW-01 and MW-02	725

#### **Description of Hydrogeology:**

First groundwater occurrences at the cited location are in sandstone units ranging in thickness from 30 ft to 100+ ft. The shallow aquifer exhibits unconfined characteristics. Static water elevations indicate that the groundwater flow direction is to the northwest, which is unexpected for an unconfined system in this topographic setting. Because the static water levels appear to be unsteady, a definitive groundwater flow direction cannot be conclusively determined at this time. Therefore, both wells at each site shall both be monitored for potential impacts to the groundwater until the flow direction can be established. Once the groundwater flow direction is established, monitoring requirements may be reduced.

**Table 2. Names of Impoundments covered under Permit 08-562**

Impoundment Name	Capacity (acre/ft)	Qtr	Qtr	Section	Town.	Range	Down gradient Monitoring Well
Cleanout	18.7	NE	SE	14	56N	74W	Cleanout MW-01 and MW-02
Center	16.9	SE	SW	13	56N	74W	Center MW-01 and MW-02

One stock well is noted in the area. It is very unlikely that the well will be impacted due to its distance from the proposed impoundments and depth of completion. No seeps or springs are noted in the immediate area.

## 2.0 MONITORING AND REPORTING REQUIREMENTS

Groundwater monitoring at the impoundments shall be performed on a quarterly basis until further notice and shall include the following information:

- Measurement of static water level and sampling and analysis of groundwater at potential downgradient wells: Cleanout MW-01, Cleanout MW-02, Center MW-01, and Center MW-02
- Reporting results of quarterly monitoring and sampling to the department by January 15<sup>th</sup>, April 15<sup>th</sup>, July 15<sup>th</sup>, and October 15<sup>th</sup> of each year. The first set of data will be due by January 15, 2009
- The parameters listed in the tables below are required for groundwater compliance monitoring beneath the listed impoundment:

**Cleanout Reservoir**

Parameter	Cleanout MW-01 Background Value (mg/L) (08/03/2006)	Class III Water Quality Standards (mg/L)
Arsenic	ND	0.2
Selenium	ND	0.05
Sulfate	1110	3000
Total Dissolved Solids (TDS)	2000	5000
pH	7.18	6.5 – 8.5 (s.u)

**Center Reservoir**

Parameter	Center MW-01 Background Value (mg/L) (11/14/2006)	Class III Water Quality Standards (mg/L)
Arsenic	0.002	0.2
Selenium	ND	0.05
Sulfate	725	3000
Total Dissolved Solids (TDS)	1410	5000
pH	7.52	6.5 – 8.5 (s.u.)

If groundwater monitoring reveals a pH measurement of 6.5 or less, the WDEQ may require sampling and analysis of groundwater for the following additional parameters: aluminum, boron, cadmium, chromium, copper, lead and zinc.

The analytical results for each sampling event, along with impoundment and monitor well location information must be submitted in the Excel spread sheet "Compliance Monitoring Data Reporting", which can be found on the WDEQ website at the

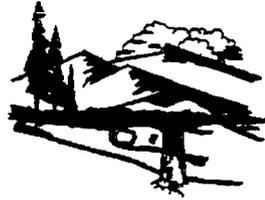
following address: (<http://deq.state.wy.us/wqd/groundwater/pollution.asp>). These data shall be submitted electronically on the due dates established above to the following department address: DEQ-CBMGroundwater@wyo.gov. In addition, the accompanying analytical laboratory reports must also be submitted either electronically (pdf format) or hard copy via mail to the WDEQ, Sheridan office at the address listed above.

**END OF REVIEW**

**CBD/rm/8-0713**



# Department of Environmental Quality



To protect, conserve and enhance the quality of Wyoming's environment for the benefit of current and future generations.

Dave Freudenthal, Governor

John Corra, Director

## NOTIFICATION OF COVERAGE

November 5, 2008

William Duncan  
P.O. Box 34  
Dixon, Wyoming 82323

RE: Duncan Residential Septic System,  
Location: NE¼, Section 9, T12N, R90W,

Application No. **08-563**  
Carbon County

Dear Mr. Duncan:

The above application for coverage under General Permit to Construct, Install, Modify or Operate a Small Wastewater Facility for a **3 bedroom** modular house in accordance with Chapter 3, Section 9 of the Wyoming Water Quality Rules and Regulations has been reviewed and is hereby approved. You are authorized to construct, install or modify the small wastewater system in accordance with Chapter 11, Part D of the Water Quality Division Rules and Regulations, the general permit, the conditions listed below, and the materials submitted in your application package. Your attention is directed to the mandatory reporting requirements outlined in Part V, Section O of the general permit. Additionally, the following project specific conditions also apply:

1. Minimum Leachfield Size Required - the percolation rate was slightly miscalculated from the percolation test data, resulting in the minimum size of the leachfield being calculated to small. The application proposed using 28 *Infiltrator* Brand, EQ36 Model chamber units in 4 trenches of 7 units each. Because of the slight under sizing of the leachfield, **the minimum leachfield size shall be at least 32 *Infiltrator* EQ36 chamber units installed in 4 trenches of 8 units each.**
2. Septic Tank Clean-Out Riser Requirement - Either a 6 inch diameter clean-out riser or the manway from **each compartment of the septic tank** must be extended to the ground surface.

Herschler Building • 122 West 25th Street • Cheyenne, WY 82002 • <http://deq.state.wy.us>

ADMIN/OUTREACH  
(307) 777-7937  
FAX 777-3610

ABANDONED MINES  
(307) 777-6145  
FAX 777-6462

AIR QUALITY  
(307) 777-7391  
FAX 777-5616

INDUSTRIAL SITING  
(307) 777-7369  
FAX 777-5973

LAND QUALITY  
(307) 777-7756  
FAX 777-5864

SOLID & HAZ. WASTE  
(307) 777-7752  
FAX 777-5973

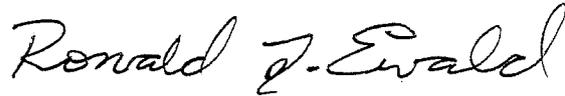
WATER QUALITY  
(307) 777-7781  
FAX 777-5973



The approval granted under this Notification Of Coverage and the General Permit shall expire on November 5, 2010. Please reference Application Number 08-563 in any future correspondence.

If you have any questions, please contact me at (307) 777-6183.

Sincerely,



Ronald L. Ewald  
Consulting Engineer  
Southeast District, Water Quality Division

RLE/rm/8-0866

Enclosures: GENERAL PERMIT - Small Wastewater Facility  
Certificate of Completion

cc: IPS, Cheyenne  
Carbon County Acting Planning Director, Kristy Rowan, Carbon Building, 215 West  
Buffalo Street, Suite 336, Rawlins, Wyoming 82301



# Department of Environmental Quality



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## NOTIFICATION OF COVERAGE

Dave Freudenthal, Governor

John Corra, Director

September 29, 2008

George McReynolds  
12930 U.S. HWY 189/191  
Pinedale, WY 82941

RE: Rim Station RV Park - Small Wastewater Treatment System – Permit Number 08-564, NE ¼ & SE ¼ Section 32, T37N, R111W, Sublette County

Dear Mr. McReynolds:

The above application for coverage under General Permit to Construct a 539 linear foot (LF) 6-inch PVC sewage collection main, RV dump station with 1500 gallon holding tank and septic system with a 2000 gallon septic tank, 1000 gallon pump tank, 200 LF of 2 -inch HDPE sewage effluent pressure line and a 113 unit Quick 4 standard infiltrator leach field, to serve a 12 space RV has been reviewed and is hereby approved with the following precaution.

You are authorized to construct the facilities in accordance with the general permits and the materials submitted in your application package. Your attention is directed to the mandatory reporting requirements outlined in Part V, Section O of the general permits.

If you have any questions, please contact me at 307-332-3144.

Sincerely,

Mark Baron, P.E.  
Southwest District Engineer  
Water Quality Division

xc: IPS, Cheyenne

Mark C. Eatinger, P.E., Rio Verde Engineering, P.O. Box 642, Pinedale, WY 82941  
Keith Raney, Sublette County Environmental Health, P.O. Box 722, Pinedale, WY 82941

Encl: General permit for one Small Waste Water Systems

Page 1 of 1

Lander Field Office • 510 Meadowview Drive • Lander, WY 82520 • <http://deq.state.wy.us>

ABANDONED MINES  
(307) 332-5085  
FAX 332-7726

AIR QUALITY  
(307) 332-6755  
FAX 332-7726

LAND QUALITY  
(307) 332-3047  
FAX 332-7726

SOLID & HAZARDOUS WASTE  
(307) 332-6924  
FAX 332-7726

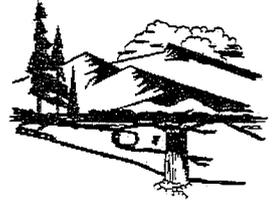
WATER QUALITY  
(307) 332-3144  
FAX 332-3183





# Department of Environmental Quality

To protect, conserve and enhance the quality of Wyoming's environment for the benefit of current and future generations.



John Corra, Director

Dave Freudenthal, Governor

## NOTIFICATION OF COVERAGE

October 20, 2008

Gary Lee, Managing Member  
700 East Redlands Blvd U213  
Redlands, CA 92373

RE: Grandview Mobile Home Community Water and Sewer Lines, DEQ Permit #08-565R, Latitude 43.6312 North, Longitude 108.2238 West, Hot Springs County

Dear Mr. Lee:

This project involves the installation of approximately 612 linear feet of 8-inch PVC sewer main, four manholes and 835 linear feet of 6-inch PVC water main and two fire hydrants to serve twenty-two mobile home spaces. The above application for coverage under General Permit has been reviewed in accordance with Chapter 3, Section 7; Chapter 11, Section 9; and Chapter 12, Section 14 of the Wyoming Water Quality Rules and Regulations and is hereby approved.

You are authorized to construct, the facility in accordance with the general permit and the materials submitted in your application package. Your attention is directed to the mandatory reporting requirements outlined in Part V, Section O of the general permit.

If you have any questions, please contact James Brough at 307-332-3144.

Sincerely,

James Brough, P.E.  
Northwest District Engineer  
Water Quality Division

xc: IPS, Cheyenne  
Gregory Meinecke, Meinecke Engineering, 1527 Rumsey Ave., Cody, WY 82414  
Heath Overfield, Engineering Associates, 429 Broadway, Thermopolis, WY 82443

encl: General Permits an Public Water Supply and Existing Sewage Collection Systems

Lander Field Office • 510 Meadowview Drive • Lander, WY 82520 • <http://deq.state.wy.us>

ABANDONED MINES  
(307) 332-5085  
FAX 332-7726

AIR QUALITY  
(307) 332-6755  
FAX 332-7726

LAND QUALITY  
(307) 332-3047  
FAX 332-7726

SOLID & HAZARDOUS WASTE  
(307) 332-6924  
FAX 332-7726

WATER QUALITY  
(307) 332-3144  
FAX 332-3183



WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY  
WATER QUALITY DIVISION  
"AS-BUILT" PERMIT TO CONSTRUCT

PERMIT NO. 08-569

Arvada 1, Phase I

This permit hereby authorizes the applicant:

Comet Energy Services, LLC  
Attn.: Mr. Kent Fink  
919 N. Main  
Buffalo, WY 82834

to have installed two (2) compliance monitoring wells according to the procedures and conditions of the application number 08-569. The facility is proximal to coalbed methane produced water impoundments located in Township 54N, Range 77W, Sections 5 and 9 in the county of Sheridan, in the State of Wyoming. All construction, installation, or modification allowed by this permit has been completed.

The issuance of this permit confirms that the Wyoming Department of Environmental Quality (DEQ) has evaluated the application submitted by the permittee and determined that it meets minimum applicable construction and design standards. The compliance with construction standards and the operation and maintenance of the facility to meet the engineer's design are the responsibility of the permittee, owner, and operator.

Nothing in this permit constitutes an endorsement by DEQ of the construction or the design of the facility described herein. This permit verifies only that the submitted application meets the design and construction standards imposed by Wyoming statutes, rules and regulations. The DEQ assumes no liability for, and does not in any way guarantee or warrant the performance or operation of the permitted facility. The permittee, owner and operator are solely responsible for any liability arising from the construction or operation of the permitted facility. By issuing this permit, the State of Wyoming does not waive its sovereign immunity.

The permittee shall allow authorized representatives from DEQ to enter and inspect any property, premise or place on or at which the facility is located or is being constructed or installed for the purpose of investigating actual or potential sources of water pollution, and for determining compliance or non-compliance with any rules, regulations, standards, permits or orders.

Nothing in this permit shall be construed to preclude the institution of any legal action or other proceeding to enforce any applicable provision of law or rules and regulations. It is the duty of the permittee, owner and operator to comply with all applicable federal, state and local laws or regulations in the exercise of its activities authorized by this permit.

The issuance of this permit does not convey any property rights in either real or personal property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations.

The permittee shall operate the permitted facility in accordance with the statements, representations, procedures, terms and conditions of the permit application, supporting documents and permit. This permit

does not relieve the permittee from any duty to obtain any other permit or authorization that may be required by any provision of federal, state or local laws.

In carrying out its activities authorized by this permit, the permittee, owner and operator shall comply with all of the following permit conditions:

- 1 of 4 The applicant will provide immediate oral or written notice to the Wyoming Department of Environmental Quality/ Water Quality Division, Groundwater Program, 1866 South Sheridan Avenue, Sheridan, WY 82801, 307-673-9337, fax 307-672-2213, in accordance with the provisions of Section 11, Chapter 3, Wyoming Water Quality Rules and Regulations of any changes or modifications which are not consistent with the terms and conditions of this permit.
- 2 of 4 The applicant will provide immediate oral or written notice to the Wyoming Department of Environmental Quality/ Water Quality Division, Groundwater Program, 1866 South Sheridan Avenue, Sheridan, WY 82801, 307-673-9337, fax 307-672-2213 when discharge to each impoundment covered under this permit commences.
- 3 of 4 **Monitoring Requirements:**  
Groundwater monitoring at the impoundments shall be performed on a quarterly basis until further notice and shall include the following information:
  - Measurement of static water level and sampling and analysis of groundwater at down-gradient well: MWD3-5, and MWB1-9.
  - Reporting results of quarterly monitoring and sampling to the department by January 15th, April 15th, July 15th, and October 15th of each year. The first set of data will be due by January 15, 2009.
  - The parameters listed in the tables below are required for groundwater compliance monitoring beneath the listed impoundment:

**D3-5-5477**

Parameter	MWD3-5 Background Value (mg/L) (3/19/08)	Class III Water Quality Standards (mg/L)
Arsenic	ND (0.005)	0.2
Selenium	ND (0.005)	0.05
Sulfate	172	3000
Total Dissolved Solids	1740	5000
pH	8.05	6.5 – 8.5 (s.u)

**B1-9-5477**

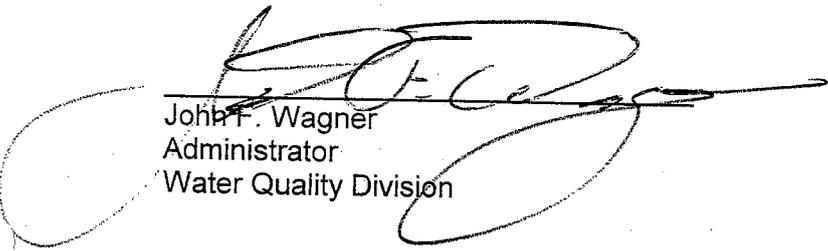
Parameter	MWB1-9 Background Value (mg/L) (3/19/08)	Class-III Water Quality Standards (mg/L)
Arsenic	ND (0.005)	0.2
Selenium	ND (0.005)	0.05
Sulfate	1150	3000
Total Dissolved Solids	2460	5000
pH	7.72	6.5 – 8.5 (s.u.)

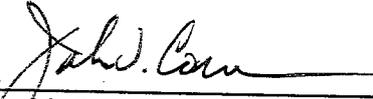
If groundwater monitoring reveals a pH measurement of 6.5 or less, the WDEQ may require sampling and analysis of groundwater for the following additional parameters: aluminum, boron, cadmium, chromium, copper, lead and zinc.

The analytical results for each sampling event, along with impoundment and monitor well location information must be submitted in the Excel spread sheet "Compliance Monitoring Data Reporting", which can be found on the WDEQ website at the following address: (<http://deq.state.wy.us/wqd/groundwater/pollution.asp>). These data shall be submitted electronically on the due dates established above to the following department address: DEQ-CBMGroundwater@WYO.GOV. In addition, the accompanying analytical laboratory reports and field documentation must also be submitted either electronically (pdf format) or hard copy via mail to the WDEQ, Sheridan office at the address listed above.

- 4 of 4 Any exceedence of the water quality standards listed above will be considered a violation of this permit. If an exceedence of groundwater standards occurs as a result of the operation of the impoundment, the WDEQ may require a more frequent monitoring schedule, further investigation of the groundwater impacts, remediation of the groundwater impacts, and cessation of discharge into the impoundment.

AUTHORIZED BY:

  
John F. Wagner  
Administrator  
Water Quality Division

  
John V. Corra  
Director  
Department of Environmental Quality

11/10/08  
Date of Issuance

UMW/rm/8-0877



**GROUNDWATER PROGRAM**  
**REVIEW COMMENTS:**  
**PLANS/SPECIFICATIONS/PROPOSALS/REPORTS**

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY  
WATER QUALITY DIVISION  
1866 South Sheridan Avenue  
Sheridan, WY 82801  
Phone: 307-672-6457

**PERMIT TYPE:** CBM: Groundwater Compliance Monitoring Program

**WATER QUALITY DIVISION REFERENCE (PERMIT) NUMBER:** 08-569

**SITE (POD) NAME:** Arvada 1, Phase I

**APPLICANT:** Comet Energy Services, LLC  
Attn.: Mr. Kent Fink  
919 N. Main St.  
Buffalo, Wyoming 82834

**CONSULTANT:** WWC Engineering  
Attn.: Ben Schiffer  
1849 Terra Ave.  
Sheridan, Wyoming 82801

**LOCATION:** Drainage: Unnamed tributary to North Prong  
Deadman Creek, tributary to Powder River  
County: Sheridan  
Township 57 North; Range 79 West

**WYPDES No:** Discharge Permit: WY0056367

**DATE ON ORIGINAL REPORT:** April 18, 2008

**REVIEWING OFFICIAL:** Ursula Williams, N. District Geologic Analyst

**DATE OF THIS REVIEW:** November 5, 2008

**ACTION:** Compliance Monitoring Plan authorized for Arvada 1, Phase I  
pursuant to conditions on permit # 08-569.

## COMMENTS: GROUNDWATER SECTION

### 1.0 SITE SUMMARY:

#### 1.1 Site Description.

Watershed Name: Unnamed tributary to North Prong Deadman Creek,  
tributary to Powder River

Groundwater Classification:

Class 1 (domestic) \_\_\_\_\_

Class 2 (agricultural) \_\_\_\_\_

Class 3 (livestock) 2

Basis for Classification: Laboratory analysis of groundwater indicates ambient water quality meets Water Quality Rules and Regulations Chapter 8 Class III standards and exceeds both Class I and Class II standards for one or more of the following parameters: SAR, Sulfate and TDS (Table 1- Chapter 8).

**Table 1. Basis for Ground Water Classification**

Impoundment Name	Monitoring Well	Sulfate (mg/l)	Total Dissolved Solids (mg/l)	Sodium-adsorption Ratio
D3-5-5477	MWD3-5	172	1740	29
B1-9-5477	MWB1-9	1150	2460	21

#### **Description of Hydrogeology:**

At both locations the first water bearing zone is a coal the top of which was encountered at 3652.2 and 3665 feet amsl. The coal is confined with approximately 25 to 45 feet of head above the bottom of the claystone confining layer. There is good correlation of stratigraphy across this site therefore it was possible to develop a potentiometric surface using wells drilled in association with other projects. Groundwater flows to the southeast. (See cross-section for Arvada 1, Phase II.)

**Table 2. Names of Impoundments covered under Permit 08-569**

Impoundment Name	Capacity (acre/ft)	Qtr Qtr	Section	Town.	Range	Compliance Monitoring Well
D3-5-5477	18.7	SWSE	5	55N	77W	MWD3-5
B1-9-5477	13.7	SWNW	9	55N	77W	MWB1-9

One stock well is located within ¼ mile of a proposed impoundment. This well is completed to 700 ft bgs and therefore is not likely to be affected by infiltrating co-produced water. No seeps or springs are noted in the immediate area.

### 2.0 MONITORING AND REPORTING REQUIREMENTS

Groundwater monitoring at the impoundments shall be performed on a quarterly basis until further notice and shall include the following information:

- Measurement of static water level and sampling and analysis of groundwater at down-gradient wells: MWD3-5, and MWB1-9.
- Reporting results of quarterly monitoring and sampling to the department by January 15<sup>th</sup>, April 15<sup>th</sup>, July 15<sup>th</sup>, and October 15<sup>th</sup> of each year. The first set of data will be due by January 15, 2009.
- The parameters listed in the tables below are required for groundwater compliance monitoring beneath the listed impoundment:

**D3-5-5477**

<b>Parameter</b>	<b>MWD3-5 Background Value (mg/L) (3/19/08)</b>	<b>Class III Water Quality Standards (mg/L)</b>
Arsenic	ND (0.005)	0.2
Selenium	ND (0.005)	0.05
Sulfate	172	3000
Total Dissolved Solids	1740	5000
pH	8.05	6.5 – 8.5 (s.u.)

**B1-9-5477**

<b>Parameter</b>	<b>MWB1-9 Background Value (mg/L) (3/19/08)</b>	<b>Class III Water Quality Standards (mg/L)</b>
Arsenic	ND (0.005)	0.2
Selenium	ND (0.005)	0.05
Sulfate	1150	3000
Total Dissolved Solids	2460	5000
pH	7.72	6.5 – 8.5 (s.u.)

If groundwater monitoring reveals a pH measurement of 6.5 or less, the WDEQ may require sampling and analysis of groundwater for the following additional parameters: aluminum, boron, cadmium, chromium, copper, lead and zinc.

The analytical results for each sampling event, along with impoundment and monitor well location information must be submitted in the Excel spread sheet "Compliance Monitoring Data Reporting", which can be found on the WDEQ website at the following address: (<http://deq.state.wy.us/wqd/groundwater/pollution.asp>). These data shall be submitted electronically on the due dates established above to the following department address: [DEQ-CBMGroundwater@wyo.gov](mailto:DEQ-CBMGroundwater@wyo.gov). In addition, the accompanying analytical laboratory reports must also be submitted either electronically (pdf format) or hard copy via mail to the WDEQ, Sheridan office at the address listed above.

**END OF REVIEW**

**UMW/rm/8-0877**

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY  
WATER QUALITY DIVISION  
PERMIT TO CONSTRUCT

PERMIT NO. 08-571

REFERENCE PERMIT NO. 07-118

OAK TREE INN & PENNY'S DINER  
PWS Not Assigned

This permit hereby authorizes the applicant:

Mr. William Burgess  
LODGING ENTERPRISES  
8110 E 32ND ST N 100  
WICHITA, KS 67226

to construct, install or modify a waste water system consisting of a two stage single cell lagoon, and grading improvements to the site according to the procedures and conditions of the application number 08-571. The facility is located in NW ¼ NW 1/4 Section 34 T38N R70W; Converse County, in the State of Wyoming. All construction, installation, or modification allowed by this permit shall be completed September 29, 2010.

The issuance of this permit confirms that the Wyoming Department of Environmental Quality (DEQ) has evaluated the application submitted by the permittee and determined that it meets minimum applicable construction and design standards. The compliance with construction standards and the operation and maintenance of the facility to meet the engineer's design are the responsibility of the permittee, owner, and operator.

Granting this permit does not imply that DEQ guarantees or ensures that the permitted facility, when constructed, will meet applicable discharge permit conditions or other effluent or operational requirements. Compliance with discharge standards remains the responsibility of the permittee.

Nothing in this permit constitutes an endorsement by DEQ of the construction or the design of the facility described herein. This permit verifies only that the submitted application meets the design and construction standards imposed by Wyoming statutes, rules and regulations. The DEQ assumes no liability for, and does not in any way guarantee or warrant the performance or operation of the permitted facility. The permittee, owner and operator are solely responsible for any liability arising from the construction or operation of the permitted facility. By issuing this permit, the State of Wyoming does not waive its sovereign immunity.

The permittee shall allow authorized representatives from DEQ to enter and inspect any property, premise or place on or at which the facility is located or is being constructed or installed for the purpose of investigating actual or potential sources of water pollution, and for determining compliance or non-compliance with any rules, regulations, standards, permits or orders.

Nothing in this permit shall be construed to preclude the institution of any legal action or other proceeding to enforce any applicable provision of law or rules and regulations. It is the duty of the permittee, owner and operator to comply with all applicable federal, state and local laws or regulations in the exercise of its activities authorized by this permit.

The issuance of this permit does not convey any property rights in either real or personal property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations.

The permittee shall construct and operate the permitted facility in accordance with the statements, representations, procedures, terms and conditions of the permit application, supporting documents and permit. This permit does not relieve the permittee from any duty to obtain any other permit or authorization that may be required by any provision of federal, state or local laws.

In carrying out its activities authorized by this permit, the permittee, owner and operator shall comply with all of the following permit conditions:

- 1 The applicant will provide immediate oral or written notice to the Southeast District, Water Quality Division, Herschler Building 4 West, Cheyenne, WY, 82002, Phone 307-777-7088, FAX 307-777-5973, in accordance with the provisions of Section 11, Chapter 3, Wyoming Water Quality Rules and Regulations of any changes or modifications which are not consistent with the terms and conditions of this permit.
- 2 An operation and maintenance manual for the water and wastewater systems must be submitted to the Southeast District Engineer of the Water Quality Division for approval before the vegetation is placed and prior to modifications to the water system. This permit does not cover modification to the water system. It may be submitted at the same time operation and maintenance manual is submitted.
- 3 The 60 mil HDPE Lagoon Liner will be installed with a thirty inch deep anchor trench and will be vented at the upper edge as recommended by the installer.
- 4 After all modification to the waste water system are complete; an as-built set of plans will be submitted to the Southeast District Engineer of the Water Quality Division for approval. The as-built plans will be certified by the Engineer that the waste water system was constructed in compliance with all terms and conditions of the permit including the design report, plans and specifications, design data or other information submitted in support of the application.
- 5 Within sixty days of completion of construction of the authorized facility, the applicant will submit to the Southeast District, Water Quality Division, Herschler Building 4 West, Cheyenne, WY, 82002 a certification of completion signed by the Engineer of Record or the owner. A form titled "Certificate of Completion" has been provided.
  - a. Date that construction of the facility was completed; and
  - b. Date that the facility was placed in operation; and
  - c. Certification the facility was constructed in accordance with the terms and conditions of the permit; or
  - d. Certification the facility was completed with changes or modifications. Submittal of as-constructed plans and specifications for the system as it was constructed, certified by an engineer if appropriate is required. All modifications or deviations from the authorized plans must be highlighted.

## STATEMENT OF BASIS

1. Permit Number: 08-571
2. This application was reviewed for compliance with the applicable regulations ;

Chapters 3, and 11

3. Does the permit comply with all applicable regulations identified above?

Yes

4. A review to determine groundwater impacts in accordance with Section 17, Chapter 3 was not required.

Public water supplies are exempted from review by Chapter 3, Section 17.

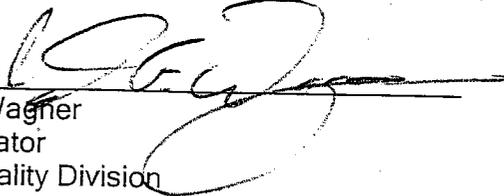
5. Documentation of Statement of Basis: The archive file for this permit includes adequate documentation of all sections of this Statement of Basis.

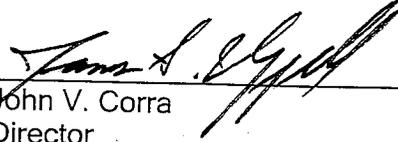
## CERTIFICATION

The issuance of this permit is based upon a review of the application package submitted in accordance with the requirements of Chapter 3, Section 6, Wyoming Water Quality Rules and Regulations. This review was performed by Rich Cripe, Southeast District Engineer, Water and Wastewater Section, Wyoming Department of Environmental Quality /Water Quality Division, and completed on October 1, 2008. Permit issuance is recommended based upon statements, representations, and procedures presented in the permit application and supporting documents, permit conditions, and the items identified in this "Statement of Basis."

6 The review and approval of this permit is based upon the items identified in the attached "Statement of Basis".

AUTHORIZED BY:

  
John F. Wagner  
Administrator  
Water Quality Division

  
John V. Corra  
Director  
Department of Environmental Quality

Date of Issuance Oct 2, 2008

RRC/rm/8-0748

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY  
WATER QUALITY DIVISION  
"AS-BUILT" PERMIT TO CONSTRUCT

PERMIT NO. 08-572

LX Bar, Bow and Arrow Impoundment

This permit hereby authorizes the applicant:

Storm Cat Energy (USA)  
Attn.: Mr. Keith Knapstad  
1125 17<sup>th</sup> Street, Suite 2310  
Denver, CO 80202

to have installed one (1) compliance monitoring well according to the procedures and conditions of the application number 08-572. The facility is proximal to a coalbed methane produced water impoundment located in Township 57N, Range 76W, Section 12 in the county of Campbell, in the State of Wyoming. All construction, installation, or modification allowed by this permit has been completed.

The issuance of this permit confirms that the Wyoming Department of Environmental Quality (DEQ) has evaluated the application submitted by the permittee and determined that it meets minimum applicable construction and design standards. The compliance with construction standards and the operation and maintenance of the facility to meet the engineer's design are the responsibility of the permittee, owner, and operator.

Nothing in this permit constitutes an endorsement by DEQ of the construction or the design of the facility described herein. This permit verifies only that the submitted application meets the design and construction standards imposed by Wyoming statutes, rules and regulations. The DEQ assumes no liability for, and does not in any way guarantee or warrant the performance or operation of the permitted facility. The permittee, owner and operator are solely responsible for any liability arising from the construction or operation of the permitted facility. By issuing this permit, the State of Wyoming does not waive its sovereign immunity.

The permittee shall allow authorized representatives from DEQ to enter and inspect any property, premise or place on or at which the facility is located or is being constructed or installed for the purpose of investigating actual or potential sources of water pollution, and for determining compliance or non-compliance with any rules, regulations, standards, permits or orders.

Nothing in this permit shall be construed to preclude the institution of any legal action or other proceeding to enforce any applicable provision of law or rules and regulations. It is the duty of the permittee, owner and operator to comply with all applicable federal, state and local laws or regulations in the exercise of its activities authorized by this permit.

The issuance of this permit does not convey any property rights in either real or personal property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations.

The permittee shall operate the permitted facility in accordance with the statements, representations, procedures, terms and conditions of the permit application, supporting documents and permit. This permit does not relieve the permittee from any duty to obtain any other permit or authorization that may be required by any provision of federal, state or local laws.

In carrying out its activities authorized by this permit, the permittee, owner and operator shall comply with all of the following permit conditions:

1 of 4 The applicant will provide immediate oral or written notice to the Wyoming Department of Environmental Quality/ Water Quality Division, Groundwater Program, 1866 South Sheridan Avenue, Sheridan, WY 82801, 307-673-9337, fax 307-672-2213, in accordance with the provisions of Section 11, Chapter 3, Wyoming Water Quality Rules and Regulations of any changes or modifications which are not consistent with the terms and conditions of this permit.

2 of 4 The applicant will provide immediate oral or written notice to the Wyoming Department of Environmental Quality/ Water Quality Division, Groundwater Program, 1866 South Sheridan Avenue, Sheridan, WY 82801, 307-673-9337, fax 307-672-2213 when discharge to each impoundment covered under this permit commences.

3 of 4 Monitoring Requirements:

Groundwater monitoring at the impoundments shall be performed on a quarterly basis until further notice and shall include the following information:

- Measurement of static water level and sampling and analysis of groundwater at potential down-gradient well: Bow and Arrow MW-01;
- Reporting results of quarterly monitoring and sampling to the department by January 15th, April 15th, July 15th, and October 15th of each year. The first set of data will be due by January 15, 2009
- The parameters listed in the tables below are required for groundwater compliance monitoring beneath the listed impoundment:

**Impoundment: Bow and Arrow**

Parameter	Bow and Arrow MW-01	Class III
	Background Value (mg/L) (08/03/2006)	Water Quality Standards (mg/L)
Arsenic	ND	0.2
Selenium	ND	0.05
Sulfate	12	3000
Total Dissolved Solids (TDS)	1580	5000
pH	7.41	6.5 – 8.5 (s.u)

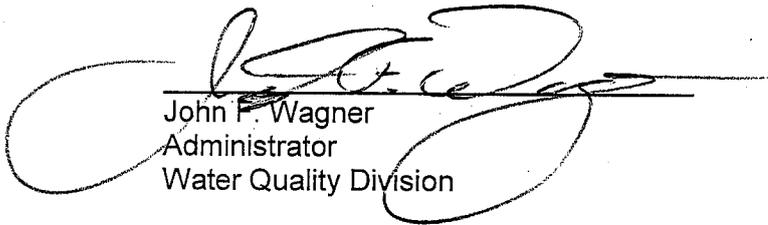
If groundwater monitoring reveals a pH measurement of 6.5 or less, the WDEQ may require sampling and analysis of groundwater for the following additional parameters: aluminum, boron, cadmium, chromium, copper, lead and zinc.

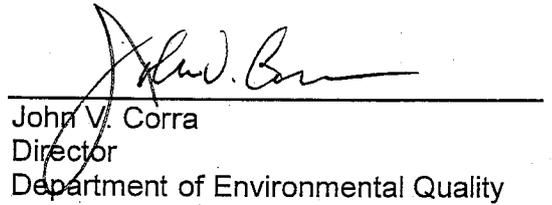
The analytical results for each sampling event, along with impoundment and monitor well location information must be submitted in the Excel spread sheet "Compliance Monitoring Data Reporting", which can be found on the WDEQ website at the following address: (<http://deq.state.wy.us/wqd/groundwater/pollution.asp>). These data shall be submitted electronically on the due dates established above to the following department address: DEQ-CBMGroundwater@WYO.GOV. In addition, the accompanying analytical laboratory reports and

field documentation must also be submitted either electronically (pdf format) or hard copy via mail to the WDEQ, Sheridan office at the address listed above.

4 of 4 Any exceedence of the water quality standards listed above will be considered a violation of this permit. If an exceedence of groundwater standards occurs as a result of the operation of the impoundment, the WDEQ may require a more frequent monitoring schedule, further investigation of the groundwater impacts, remediation of the groundwater impacts, and cessation of discharge into the impoundment.

AUTHORIZED BY:

  
\_\_\_\_\_  
John F. Wagner  
Administrator  
Water Quality Division

  
\_\_\_\_\_  
John V. Corra  
Director  
Department of Environmental Quality

9/11/08  
\_\_\_\_\_  
Date of Issuance

CBD/rm/8-0681



**GROUNDWATER PROGRAM**  
**REVIEW COMMENTS:**  
**PLANS/SPECIFICATIONS/PROPOSALS/REPORTS**

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY  
WATER QUALITY DIVISION  
1866 South Sheridan Avenue  
Sheridan, WY 82801  
Phone: 307-672-6457

**PERMIT TYPE:** CBM: Groundwater Compliance Monitoring Program

**WATER QUALITY DIVISION REFERENCE (PERMIT) NUMBER:** 08-572

**SITE (POD) NAME:** LX Bar CBM Development Area

**APPLICANT:** Storm Cat Energy (USA)  
Attn.: Mr. Keith Knapstad  
1125 17<sup>th</sup> St., Suite 2310  
Denver, CO 80202

**CONSULTANT:** CBM Associates, Inc.  
Attn.: Luke McMahan  
500 W. Lott St.  
Buffalo, Wyoming 82834

**LOCATION:** Drainage: Unnamed tributary to Powder River  
County: Campbell  
Township 57 North; Range 76 West

**WYPDES No:** Discharge Permit: WY0055344

**DATE ON REPORT:** August 6, 2008

**REVIEWING OFFICIAL:** Carrie Donnell, North District Geological Project Analyst

**DATE OF THIS REVIEW:** September 5, 2008

**ACTION:** Compliance Monitoring Plan authorized for Bow and Arrow Impoundment, pursuant to conditions on permit # 08-572.

## COMMENTS: GROUNDWATER SECTION

### 1.0 SITE SUMMARY:

#### 1.1 Site Description.

Watershed Name: Unnamed tributary to Powder River

Groundwater Classification:

Class 1 (domestic) \_\_\_\_\_

Class 2 (agricultural) \_\_\_\_\_

Class 3 (livestock) 1 \_\_\_\_\_

Basis for Classification: Laboratory analysis of groundwater indicates ambient water quality meets Water Quality Rules and Regulations Chapter 8 Class III standards and exceeds both Class I and Class II standards for Sodium Adsorption Ration (SAR) and Residual Sodium Content (RSC) (Table 1- Chapter 8).

**Table 1. Basis for Ground Water Classification by impoundment Name covered under Permit 08-572**

Impoundment Name	Compliance Monitoring Well	SAR (unitless)	RSC (meq/L)
Bow and Arrow	Bow and Arrow MW-01	22	25.6

#### **Description of Hydrogeology:**

The first groundwater occurrence at the cited location is in coal overlain by approximately 28 feet of bedrock claystone. The shallow aquifer exhibits unconfined characteristics. The proposed impoundment is near the Powder River Alluvium. The reach of the Powder River immediately adjacent to the proposed impoundment is interpreted to be a gaining reach. Monitor well Bow and Arrow MW-01 is therefore positioned adequately to monitor water quality in the shallow aquifer.

**Table 2. Names of Impoundments covered under Permit 08-572**

Impoundment Name	Capacity (acre/ft)	Qtr Qtr	Section	Town.	Range	Down gradient Monitoring Well
Bow and Arrow	10.87	NESE	12	57	76	Bow and Arrow MW-01

No other domestic, agricultural or livestock wells are noted in the immediate area that will be impacted. No seeps or springs are noted in the immediate area.

## 2.0 MONITORING AND REPORTING REQUIREMENTS

Groundwater monitoring at the impoundment shall be performed on a quarterly basis until further notice and shall include the following information:

- Measurement of static water level and sampling and analysis of groundwater at downgradient well: Bow and Arrow MW-01;
- Reporting results of quarterly monitoring and sampling to the department by January 15<sup>th</sup>, April 15<sup>th</sup>, July 15<sup>th</sup>, and October 15<sup>th</sup> of each year. The first set of data will be due by January 15, 2009;
- The parameters listed in the tables below are required for groundwater compliance monitoring beneath the listed impoundment:

**Bow and Arrow Reservoir**

<b>Parameter</b>	<b>Bow and Arrow MW-01 Background Value (mg/L) (06/12/2008)</b>	<b>Class III Water Quality Standards (mg/L)</b>
Arsenic	ND	0.2
Selenium	ND	0.05
Sulfate	12	3000
Total Dissolved Solids (TDS)	1580	5000
pH	7.41	6.5 – 8.5 (s.u)

If groundwater monitoring reveals a pH measurement of 6.5 or less, the WDEQ may require sampling and analysis of groundwater for the following additional parameters: aluminum, boron, cadmium, chromium, copper, lead and zinc.

The analytical results for each sampling event, along with impoundment and monitor well location information must be submitted in the Excel spread sheet "Compliance Monitoring Data Reporting", which can be found on the WDEQ website at the following address: (<http://deq.state.wy.us/wqd/groundwater/pollution.asp>). These data shall be submitted electronically on the due dates established above to the following department address: [DEQ-CBMGroundwater@wyo.gov](mailto:DEQ-CBMGroundwater@wyo.gov). In addition, the accompanying analytical laboratory reports must also be submitted either electronically (pdf format) or hard copy via mail to the WDEQ, Sheridan office at the address listed above.

**END OF REVIEW**

**CBD/rm/8-0681**



# Department of Environmental Quality



To protect, conserve and enhance the quality of Wyoming's environment for the benefit of current and future generations.

Dave Freudenthal, Governor

John Corra, Director

## NOTIFICATION OF COVERAGE

October 8, 2008

Jim Fornstrom  
Laramie County Weed and Pest Control District  
P.O. Box 899  
Pine Bluffs, Wyoming 82082

RE: Small Waste Water Treatment Septic System  
Application No. **08-573**, Laramie County

Dear Mr. Fornstrom:

The above application for coverage under General Permit to Construct, Install, Modify or Operate a Small Wastewater Facility in accordance with Chapter 3, Section 9 of the Wyoming Water Quality Rules and Regulations described as Small Waste Water Treatment Septic System N 1/2 SW 1/4 Section 14 T14N R60W Laramie County, in accordance with Chapter 3, Section 9 of the Wyoming Water Quality Rules and Regulations has been reviewed and is hereby approved. You are authorized to construct, install or modify the small wastewater system in accordance with Chapter 11, Part D of the Water Quality Division Rules and Regulations, the general permit, and the materials submitted in your application package. Please complete and return the enclosed Certificate of Completion. All construction, installation, or modification allowed by this notification of coverage shall be completed by October 8, 2010. Please reference Application No. **08-573** in any future correspondence.

If you have any questions, please contact me at 307-777-7075.

Sincerely,

Richard R. Cripe PE  
Southeast District Engineer  
Water Quality Division

RRC/rm/8-0784

Enclosure: Certificate of Completion

cc: IPS, Cheyenne  
Larry McCaslin, M.C. Schaff & Associates, 818 Beltline Hwy East, Scottsbluff, NE 69361

Herschler Building • 122 West 25th Street • Cheyenne, WY 82002 • <http://deq.state.wy.us>

ADMIN/OUTREACH (307) 777-7937 FAX 777-3610	ABANDONED MINES (307) 777-6145 FAX 777-6462	AIR QUALITY (307) 777-7391 FAX 777-5616	INDUSTRIAL SITING (307) 777-7369 FAX 777-5973	LAND QUALITY (307) 777-7756 FAX 777-5864	SOLID & HAZ. WASTE (307) 777-7752 FAX 777-5973	WATER QUALITY (307) 777-7781 FAX 777-5973
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WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY  
WATER QUALITY DIVISION  
"AS-BUILT" PERMIT TO CONSTRUCT

PERMIT NO. 08-574

Middle Prong Wild Horse Creek

This permit hereby authorizes the applicant:

Williams Production RMT Company  
Attn.: Ms. Peggy Carter  
300 North Works St.  
Gillette, WY 82716

to have installed two (2) compliance monitoring wells according to the procedures and conditions of the application number 08-574. The facility is proximal to a coalbed methane produced water impoundment located in Township 53N, Range 74W, Section 28 in the county of Campbell, in the State of Wyoming. All construction, installation, or modification allowed by this permit has been completed.

The issuance of this permit confirms that the Wyoming Department of Environmental Quality (DEQ) has evaluated the application submitted by the permittee and determined that it meets minimum applicable construction and design standards. The compliance with construction standards and the operation and maintenance of the facility to meet the engineer's design are the responsibility of the permittee, owner, and operator.

Nothing in this permit constitutes an endorsement by DEQ of the construction or the design of the facility described herein. This permit verifies only that the submitted application meets the design and construction standards imposed by Wyoming statutes, rules and regulations. The DEQ assumes no liability for, and does not in any way guarantee or warrant the performance or operation of the permitted facility. The permittee, owner and operator are solely responsible for any liability arising from the construction or operation of the permitted facility. By issuing this permit, the State of Wyoming does not waive its sovereign immunity.

The permittee shall allow authorized representatives from DEQ to enter and inspect any property, premise or place on or at which the facility is located or is being constructed or installed for the purpose of investigating actual or potential sources of water pollution, and for determining compliance or non-compliance with any rules, regulations, standards, permits or orders.

Nothing in this permit shall be construed to preclude the institution of any legal action or other proceeding to enforce any applicable provision of law or rules and regulations. It is the duty of the permittee, owner and operator to comply with all applicable federal, state and local laws or regulations in the exercise of its activities authorized by this permit.

The issuance of this permit does not convey any property rights in either real or personal property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations.

The permittee shall operate the permitted facility in accordance with the statements, representations, procedures, terms and conditions of the permit application, supporting documents and permit. This permit does not relieve the permittee from any duty to obtain any other permit or authorization that may be required by any provision of federal, state or local laws.

In carrying out its activities authorized by this permit, the permittee, owner and operator shall comply with all of the following permit conditions:

- 1 of 4 The applicant will provide immediate oral or written notice to the Wyoming Department of Environmental Quality/ Water Quality Division, Groundwater Section, 1866 South Sheridan Avenue, Sheridan, WY 82801, 307-673-9337, fax 307-672-2213, in accordance with the provisions of Section 11, Chapter 3, Wyoming Water Quality Rules and Regulations of any changes or modifications which are not consistent with the terms and conditions of this permit.
- 2 of 4 The applicant will provide immediate oral or written notice to the Wyoming Department of Environmental Quality/ Water Quality Division, Groundwater Section, 1866 South Sheridan Avenue, Sheridan, WY 82801, 307-673-9337, fax 307-672-2213 when discharge to each impoundment covered under this permit commences.
- 3 of 4 **Monitoring Requirements:**  
Groundwater monitoring at the impoundments shall be performed on a quarterly basis until further notice and shall include the following information:
  - Measurement of static water level in both wells: Scott 11-28-5374 MW-01 and Scott 11-28-5374 MW-02;
  - Sampling and analysis of groundwater at both wells: Scott 11-28-5374 MW-01 and Scott 11-28-5374 MW-02;
  - Reporting results of quarterly monitoring and sampling to the department by January 15<sup>th</sup>, April 15<sup>th</sup>, July 15<sup>th</sup>, and October 15<sup>th</sup> of each year. The first set of data will be due by January 15, 2009. A background sample will be required at the MW-02 prior to discharge;
  - The parameters listed in the tables below are required for groundwater compliance monitoring beneath the listed impoundment:

**Impoundment: Scott 11-28-5374**

Parameter	Scott 11-28-5374 MW-01 Background Value (mg/L) (11/16/2006)	Class III Water Quality Standards (mg/L)
Arsenic	ND	0.2
Selenium	ND	0.05
Sulfate	1700	3000
Total Dissolved Solids (TDS)	3040	5000
pH	7.74	6.5 – 8.5 (s.u)

**Impoundment: Scott 11-28-5374**

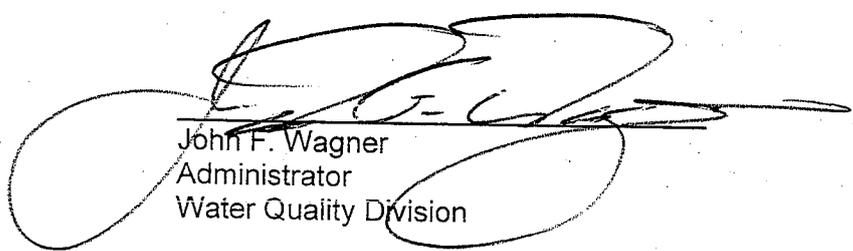
Parameter	Scott 11-28-5374 MW-02 Background Value (mg/L)	Class III Water Quality Standards (mg/L)
Arsenic	No sample as of date of review	0.2
Selenium	No sample as of date of review	0.05
Sulfate	No sample as of date of review	3000
Total Dissolved Solids (TDS)	No sample as of date of review	5000
pH	No sample as of date of review	6.5 – 8.5 (s.u)

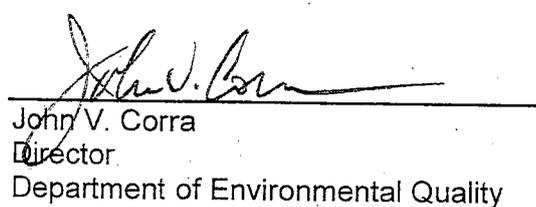
If groundwater monitoring reveals a pH measurement of 6.5 or less, the WDEQ may require sampling and analysis of groundwater for the following additional parameters: aluminum, boron, cadmium, chromium, copper, lead and zinc.

The analytical results for each sampling event, along with impoundment and monitor well location information must be submitted in the Excel spread sheet "Compliance Monitoring Data Reporting", which can be found on the WDEQ website at the following address: (<http://deq.state.wy.us/wqd/groundwater/pollution.asp>). These data shall be submitted electronically on the due dates established above to the following department address: DEQ-CBMGroundwater@WYO.GOV. In addition, the accompanying analytical laboratory reports and field documentation must also be submitted either electronically (pdf format) or hard copy via mail to the WDEQ, Sheridan office at the address listed above.

4 of 4 Any exceedence of the water quality standards listed above will be considered a violation of this permit. If an exceedence of groundwater standards occurs as a result of the operation of the impoundment, the WDEQ may require a more frequent monitoring schedule, further investigation of the groundwater impacts, remediation of the groundwater impacts, and cessation of discharge into the impoundment.

AUTHORIZED BY:

  
 John F. Wagner  
 Administrator  
 Water Quality Division

  
 John V. Corra  
 Director  
 Department of Environmental Quality

12/13/08  
 Date of Issuance

CBD/rm/8-0800



**GROUNDWATER PROGRAM**  
**REVIEW COMMENTS:**  
**PLANS/SPECIFICATIONS/PROPOSALS/REPORTS**

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY  
WATER QUALITY DIVISION  
1866 South Sheridan Avenue  
Sheridan, WY 82801  
Phone: 307-672-6457

**PERMIT TYPE:** CBM: Groundwater Compliance Monitoring Program

**WATER QUALITY DIVISION REFERENCE (PERMIT) NUMBER:** 08-574

**SITE (POD) NAME:** Middle Prong Wild Horse Creek

**APPLICANT:** Williams Production RMT Company  
Attn.: Ms. Peggy Carter  
300 N. Works Avenue  
Gillette, Wyoming 82716

**CONSULTANT:** CMBA Associates, Inc.  
Attn.: Mr. Luke McMahan  
500 W. Lott St.  
Buffalo, Wyoming 82834

**LOCATION:** Drainage: Unnamed tributary to Long Draw,  
tributary to Middle Prong Wild Horse Creek, tributary  
to Wild Horse Creek, tributary to Powder River  
County: Campbell  
Township 53 North; Range 74 West  
**WYPDES No:** Discharge Permit: WY0055409

**DATE ON REPORT:** August 11, 2008

**REVIEWING OFFICIAL:** Carrie Donnell, North District Geological Project  
Analyst

**DATE OF THIS REVIEW:** October 13, 2008

**ACTION:** Compliance Monitoring Plan authorized for Scott 11-28-5374 Reservoir  
pursuant to conditions on permit # 08-574.

## COMMENTS: GROUNDWATER SECTION

### 1.0 SITE SUMMARY:

#### 1.1 Site Description.

Watershed Name: Unnamed tributary to Long Draw, tributary to Middle Prong Wild Horse Creek, tributary to Wild Horse Creek, tributary to Powder River

Groundwater Classification:

Class 1 (domestic) \_\_\_\_\_

Class 2 (agricultural) \_\_\_\_\_

Class 3 (livestock) 1

Basis for Classification: Laboratory analysis of groundwater indicates ambient water quality meets Water Quality Rules and Regulations Chapter 8 Class III standards and exceeds both Class I and Class II standards for Sulfate, TDS, and Sodium Adsorption Ratio (SAR) (Table 1- Chapter 8).

**Table 1. Basis for Ground Water Classification by impoundment Name covered under Permit 08-574**

Impoundment Name	Compliance Monitoring Well	Sulfate (mg/l)	TDS (mg/l)	SAR (unitless)
Scott 11-28-5374	Scott 11-28-5374 MW-01	1700	3040	10.2

An initial report was submitted to WDEQ on February 26, 2007. This report was submitted without supporting documentation of groundwater flow directions. A deficiency letter was written and no further work was done on this project pending additional supporting documentation.

A supplemental report containing a computer generated potentiometric map along with structural cross-sections supporting the generalized ground water gradients was then submitted to the WDEQ on January 4, 2008. The lone monitor well, Scott 11-28-5374, was not adequately located to monitor the shallow groundwater. WDEQ supplied a second deficiency letter on January 16, 2008 suggesting two options: 1) install two more monitoring wells to determine the down-gradient well, or 2) install a second well north of the reservoir and monitor both wells. WPC chose the latter. A second supplemental report was submitted to the WDEQ on August 11, 2008 containing information on the additional monitor well.

#### **Description of Hydrogeology:**

The first groundwater occurrence at the cited location is in sandstone (overlain by saturated coal at MW-02). The shallow aquifer exhibits confined conditions. Depths to the sandstones coincide approximately with the first occurrence of ground water. Groundwater flow is interpreted to be to the north

based on static water levels measured in preexisting monitor wells in the surrounding area.

**Table 2. Names of Impoundments covered under Permit 08-574**

Impoundment Name	Capacity (acre/ft)	Qtr	Qtr	Section	Town.	Range	Down gradient Monitoring Wells
Scott 11-28-5374	9.3	NWNW		28	53N	74W	Scott 11-28-5374 MW-01 Scott 11-28-5374 MW-02

No other domestic, agricultural or livestock wells are noted in the immediate area that will be impacted. No seeps or springs are noted in the immediate area.

## 2.0 MONITORING AND REPORTING REQUIREMENTS

Groundwater monitoring at the impoundments shall be performed on a quarterly basis until further notice and shall include the following information:

- Measurement of static water level in both wells: Scott 11-28-5374 MW-01 and Scott 11-28-5374 MW-02;
- Sampling and analysis of groundwater at both wells: Scott 11-28-5374 MW-01 and Scott 11-28-5374 MW-02;
- Reporting results of quarterly monitoring and sampling to the department by January 15<sup>th</sup>, April 15<sup>th</sup>, July 15<sup>th</sup>, and October 15<sup>th</sup> of each year. The first set of data will be due by January 15, 2009. A background sample will be required at the MW-02 prior to discharge;
- The parameters listed in the tables below are required for groundwater compliance monitoring beneath the listed impoundment:

### Impoundment: Scott 11-28-5374

Parameter	Scott 11-28-5374 MW-01 Background Value (mg/L) (11/16/2006)	Class III Water Quality Standards (mg/L)
Arsenic	ND	0.2
Selenium	ND	0.05
Sulfate	1700	3000
Total Dissolved Solids (TDS)	3040	5000
pH	7.74	6.5 – 8.5 (s.u)

### Impoundment: Scott 11-28-5374

Parameter	Scott 11-28-5374 MW-02 Background Value (mg/L)	Class III Water Quality Standards (mg/L)
Arsenic	No sample as of date of review	0.2
Selenium	No sample as of date of review	0.05
Sulfate	No sample as of date of review	3000
Total Dissolved Solids (TDS)	No sample as of date of review	5000
pH	No sample as of date of review	6.5 – 8.5 (s.u)

If groundwater monitoring reveals a pH measurement of 6.5 or less, the WDEQ may require sampling and analysis of groundwater for the following additional parameters: aluminum, boron, cadmium, chromium, copper, lead and zinc.

The analytical results for each sampling event, along with impoundment and monitor well location information must be submitted in the Excel spread sheet "Compliance Monitoring Data Reporting", which can be found on the WDEQ website at the following address: (<http://deq.state.wy.us/wqd/groundwater/pollution.asp>). These data shall be submitted electronically on the due dates established above to the following department address: [DEQ-CBMGroundwater@wyo.gov](mailto:DEQ-CBMGroundwater@wyo.gov). In addition, the accompanying analytical laboratory reports must also be submitted either electronically (pdf format) or hard copy via mail to the WDEQ, Sheridan office at the address listed above.

**END OF REVIEW**

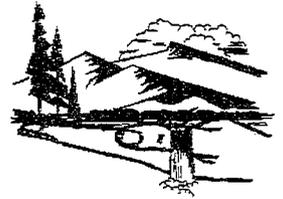
**CBD/rm/8-0800**



Dave Freudenthal, Governor

# Department of Environmental Quality

To protect, conserve and enhance the quality of Wyoming's environment for the benefit of current and future generations.



John Corra, Director

## NOTIFICATION OF COVERAGE

September 15, 2008

Sean Scarlett  
P.O. Box 4198  
Jackson, WY 83001

RE: Kelly East Townhouses Water and Sewer Lines, Permit Number: 08-575, SW ¼, NE ¼, Section 34, T41N, R116E, Teton County

Dear Mr. Scarlett:

This project involves the installation of 6-inch PVC sewer main and 4-inch ductile iron water main to serve four new and four existing town home units. The above application for coverage under General Permit has been reviewed in accordance with Chapter 3, Section 7; Chapter 11, Section 9; and Chapter 12, Section 14 of the Wyoming Water Quality Rules and Regulations and is hereby approved with the following stipulation:

*At water and sewer line crossings where the sewer line crosses above the water line, either line (preferably the water main) shall be placed in a separate casing that extends at least 9 feet on either side of the main. The water main shall be further protected by providing adequate structural support for the sewer main. The structural support should consist of cement treated backfill which extends to the dimensions of the trench and bears on undisturbed soil.*

You are authorized to construct, the facility in accordance with the general permit and the materials submitted in your application package. Your attention is directed to the mandatory reporting requirements outlined in Part V, Section O of the general permit.

If you have any questions, please contact James Brough at 307-332-3144.

Sincerely,

James Brough, P.E.  
Northwest District Engineer  
Water Quality Division

xc: IPS, Cheyenne  
Amy Ramage, Valley West Engineering, P.O. Box 4852, Jackson, WY 83001  
Shawn O'Malley, Town of Jackson, P.O. Box 1687, Jackson, WY 83001

enci: General Permits an Public Water Supply and Existing Sewage Collection Systems

Lander Field Office • 510 Meadowview Drive • Lander, WY 82520 • <http://deq.state.wy.us>

ABANDONED MINES  
(307) 332-5085  
FAX 332-7726

AIR QUALITY  
(307) 332-6755  
FAX 332-7726

LAND QUALITY  
(307) 332-3047  
FAX 332-7726

SOLID & HAZARDOUS WASTE  
(307) 332-6924  
FAX 332-7726

WATER QUALITY  
(307) 332-3144  
FAX 332-3183





# Department of Environmental Quality



To protect, conserve and enhance the quality of Wyoming's environment for the benefit of current and future generations.

Dave Freudenthal, Governor

John Corra, Director

## NOTIFICATION OF COVERAGE

September 17, 2008

R. Bryan Hoggan  
P.O. Box 187  
Kemmerer, WY 83101

RE: Hoggan Septic System - Permit Number 08-577, Rolling Hills 1<sup>st</sup> Addition, Lot 7-L-3, SE+SW1/4, Sec 22, T21N, R116W, Kemmerer, Lincoln County

Dear Craig Smith:

The above application for coverage under General Permit to Construct a small wastewater septic system consisting of a 1500 gallon septic tank, 3 trench leach field 164 feet in length to serve a 6 bedroom home, in accordance with Chapter 3, Section 7 and Chapter 11, Part D of the Wyoming Water Quality Rules and Regulations has been reviewed and is hereby approved. You are authorized to construct, the facility in accordance with the general permit and the materials submitted in your application package. Your attention is directed to the mandatory reporting requirements outlined in Part V, Section O of the general permit.

If you have any questions, please contact me at 307-332-3144.

Sincerely,

Perry Roberson  
Consulting Engineer  
Water Quality Division

Mark Baron, P.E.  
Southwest District Engineer

xc: IPS, Cheyenne  
Thomas Easley, P.E. P.O. Box 177, Frontier, WY 83121  
Terry Vetos, Building Inspector/Code Compliance Officer, 220 Wyoming Highway 233,  
Kemmerer, WY 83101

encl: General Permit for Small Wastewater Treatment Systems

Lander Field Office • 510 Meadowview Drive • Lander, WY 82520 • <http://deq.state.wy.us>

ABANDONED MINES  
(307) 332-5085  
FAX 332-7726

AIR QUALITY  
(307) 332-6755  
FAX 332-7726

LAND QUALITY  
(307) 332-3047  
FAX 332-7726

SOLID & HAZARDOUS WASTE  
(307) 332-6924  
FAX 332-7726

WATER QUALITY  
(307) 332-3144  
FAX 332-3183



WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY  
WATER QUALITY DIVISION  
PERMIT TO CONSTRUCT

PERMIT NO. 08-578

Town of Jackson Water and Sewer Line Projects  
PWS: 5600213

This permit hereby authorizes the applicant:

Town Engineer  
Town of Jackson  
P.O. Box 1687  
Jackson, WY 83001

to construct, install or modify Town of Jackson water and sewer line projects for lines that are no larger than 8 inches in diameter and no longer than 250 feet in length through out the water distribution system or sewage collection according to the procedures and conditions of the application number 08-578. Jackson's standard plans and technical specifications were approved previously under DEQ permit #06-450. The facility is located in the county of Teton, in the State of Wyoming. All construction, installation, or modification allowed by this permit shall be completed by November 1, 2013.

The issuance of this permit confirms that the Wyoming Department of Environmental Quality (DEQ) has evaluated the application submitted by the permittee and determined that it meets minimum applicable construction and design standards. The compliance with construction standards and the operation and maintenance of the facility to meet the engineer's design are the responsibility of the permittee, owner, and operator.

Granting this permit does not imply that DEQ guarantees or ensures that the permitted facility, when constructed, will meet applicable discharge permit conditions or other effluent or operational requirements. Compliance with discharge standards remains the responsibility of the permittee.

Nothing in this permit constitutes an endorsement by DEQ of the construction or the design of the facility described herein. This permit verifies only that the submitted application meets the design and construction standards imposed by Wyoming statutes, rules and regulations. The DEQ assumes no liability for, and does not in any way guarantee or warrant the performance or operation of the permitted facility. The permittee, owner and operator are solely responsible for any liability arising from the construction or operation of the permitted facility. By issuing this permit, the State of Wyoming does not waive its sovereign immunity.

The permittee shall allow authorized representatives from DEQ to enter and inspect any property, premise or place on or at which the facility is located or is being constructed or installed for the purpose of investigating actual or potential sources of water pollution, and for determining compliance or non-compliance with any rules, regulations, standards, permits or orders.

Nothing in this permit shall be construed to preclude the institution of any legal action or other proceeding to enforce any applicable provision of law or rules and regulations. It is the duty of the permittee, owner and operator to comply with all applicable federal, state and local laws or regulations in the exercise of its activities authorized by this permit.

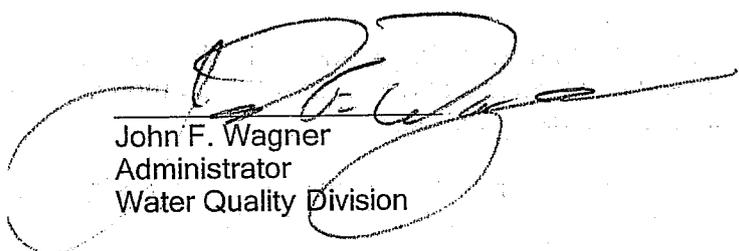
The issuance of this permit does not convey any property rights in either real or personal property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations.

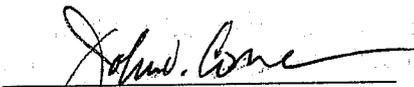
The permittee shall construct and operate the permitted facility in accordance with the statements, representations, procedures, terms and conditions of the permit application, supporting documents and permit. This permit does not relieve the permittee from any duty to obtain any other permit or authorization that may be required by any provision of federal, state or local laws.

In carrying out its activities authorized by this permit, the permittee, owner and operator shall comply with all of the following permit conditions:

- 1 of 4 The applicant will provide immediate oral or written notice to the Wyoming Department of Environmental Quality, Water Quality Division (WQD), Northwest District Engineer, 510 Meadowview Drive, Lander, WY 82520, 307-332-3144, FAX 307-332-3183, in accordance with the provisions of Section 11, Chapter 3, Wyoming Water Quality Rules and Regulations of any changes or modifications which are not consistent with the terms and conditions of this permit.
- 2 of 4. Installation of fire hydrants under this permit will be limited to construction that includes hydrant leads that are six (6) inches in diameter or less and fire hydrant leads' piping that are 250 lineal feet and shorter. The plans for such installations shall be reviewed by a Wyoming Professional Engineer employed or retained by the Town of Jackson.
- 3 of 4. This permit shall be effective for a period not to exceed November 1, 2013. At that time the DEQ and the Town of Jackson will evaluate the need, desire and appropriateness to issue a new permit.
- 4 of 4. The review and approval of this permit is based upon the items identified in the attached "Statement of Basis".

AUTHORIZED BY:

  
John F. Wagner  
Administrator  
Water Quality Division

  
John V. Corra  
Director  
Department of Environmental Quality

11/10/08  
Date of Issuance

JSB/rm/8-0873

## STATEMENT OF BASIS

1. Permit Number: 08-578
2. Application reviewed for compliance with the following regulations:  
Chapters 3 and 12 of the Wyoming Water Quality Rules and Regulations.
3. Does the permit comply with all applicable regulations identified above?  
Yes.
4. Facilities include components not specifically covered by regulations and approval is based upon a deviation from applicable regulations in accordance with Section 5 of applicable regulations.  
No.
5. Documentation of Statement of Basis: The archive file for this permit includes adequate documentation of all sections of this Statement of Basis.

## CERTIFICATION

The issuance of this permit is based upon a review of the application package submitted in accordance with the requirements of Chapter 3, Section 6, Wyoming Water Quality Rules and Regulations. This review was performed by James S. Brough, [jbroug@state.wy.us](mailto:jbroug@state.wy.us), Northwest District Engineer and completed on November 6, 2008. Permit issuance is recommended based upon statements, representations, and procedures presented in the permit application and supporting documents permit conditions, and the items identified in this "Statement of Basis."

Cc: Larry Pardee, Public Works Director  
Town of Jackson  
P.O. Box 1687  
Jackson, WY 83001



# Department of Environmental Quality



To protect, conserve and enhance the quality of Wyoming's environment for the benefit of current and future generations.

Dave Freudenthal, Governor

John Corra, Director

## NOTIFICATION OF COVERAGE

September 23, 2008

Herman Noe, Engineering Manager  
Cheyenne BOPU  
2406 Snyder Avenue  
Cheyenne, WY 82003

RE: Hutchins Drive Access Water Extension  
Application No. **08-579**

Dear Mr. Noe:

The above application for coverage under General Permit to Construct, Install, Modify or Operate Extensions to or Modifications of Existing Public Water Supply Distribution Systems in accordance with Chapter 3, Section 9 of the Wyoming Water Quality Rules and Regulations has been reviewed and is hereby approved. You are authorized to construct, install or modify the water distribution system in accordance with Chapter 12, Section 14 of the Water Quality Division Rules and Regulations in accordance with the general permit, and the materials submitted in your application package. Your attention is directed to the mandatory reporting requirements outlined in Part V, Section O of the general permits.

The approval granted under this Notification Of Coverage and the General Permit shall expire on October 1, 2009. Please reference Application Number **08-579** in any future correspondence.

If you have any questions, please contact me at (307) 777-6371.

Sincerely,

Brian Mark  
Staff Engineer  
Water Quality Division

BDM/rm/8-0731

Enclosures: GENERAL PERMIT - Extensions/Modifications of Existing Public Water  
Supply Distribution Systems  
Certificate of Completion form

cc: Bruce Perryman, AVI, p.c., 2035 Westland Road, Cheyenne, WY 82001  
John Volk, 222 E 18<sup>th</sup> Street, Cheyenne, WY 82001

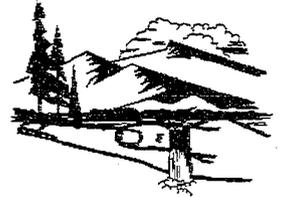
Herschler Building • 122 West 25th Street • Cheyenne, WY 82002 • <http://deq.state.wy.us>

ADMIN/OUTREACH (307) 777-7937 FAX 777-3610	ABANDONED MINES (307) 777-6145 FAX 777-6462	AIR QUALITY (307) 777-7391 FAX 777-5616	INDUSTRIAL SITING (307) 777-7369 FAX 777-5973	LAND QUALITY (307) 777-7756 FAX 777-5864	SOLID & HAZ. WASTE (307) 777-7752 FAX 777-5973	WATER QUALITY (307) 777-7781 FAX 777-5973
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# Department of Environmental Quality



Dave Freudenthal, Governor

To protect, conserve and enhance the quality of Wyoming's environment for the benefit of current and future generations.

John Corra, Director

## NOTIFICATION OF COVERAGE

September 16, 2008

Jeff Sheridan  
TJR Ventures, LLC  
925 E. Washington St.  
Powell, WY 82435

RE: Water Tower West, 2<sup>nd</sup> Addition Water and Sewer Lines, DEQ Permit #08-580,  
Tract 1, Lot 63 Resurvey, T55N, R99W, Park County

Dear Mr. Sheridan:

This project involves the installation of approximately 515 linear feet of 6-inch PVC sewer main, two manholes and 750 linear feet of 8-inch ductile iron water main and one fire hydrant to a church and six residential connections. The above application for coverage under General Permit has been reviewed in accordance with Chapter 3, Section 7; Chapter 11, Section 9; and Chapter 12, Section 14 of the Wyoming Water Quality Rules and Regulations and is hereby approved.

You are authorized to construct, the facility in accordance with the general permit and the materials submitted in your application package. Your attention is directed to the mandatory reporting requirements outlined in Part V, Section O of the general permit.

If you have any questions, please contact James Brough at 307-332-3144.

Sincerely,

James Brough, P.E.  
Northwest District Engineer  
Water Quality Division

xc: IPS, Cheyenne  
Jeremy Easum, Sage Civil Engineering, 2824 Big Horn Ave., Cody, WY 82414  
Sean Christensen, Town of Powell, P.O. Box 1008, Powell, WY 82435

encl: General Permits an Public Water Supply and Existing Sewage Collection Systems

Lander Field Office • 510 Meadowview Drive • Lander, WY 82520 • <http://deq.state.wy.us>

ABANDONED MINES  
(307) 332-5085  
FAX 332-7726

AIR QUALITY  
(307) 332-6755  
FAX 332-7726

LAND QUALITY  
(307) 332-3047  
FAX 332-7726

SOLID & HAZARDOUS WASTE  
(307) 332-6924  
FAX 332-7726

WATER QUALITY  
(307) 332-3144  
FAX 332-3183





# Department of Environmental Quality



Dave Freudenthal, Governor

To protect, conserve and enhance the quality of Wyoming's environment for the benefit of current and future generations.

John Corra, Director

## NOTIFICATION OF COVERAGE

September 15, 2008

Jerry Thiel, President  
Jerry Thiel & Sons Construction  
P.O. Box 1566  
Cody, WY 82414

RE: Heart Mountain Condominiums Water Lines, Permit Number: 08-581, Lot 14,  
Amended Greenwing Addition, Park County

Dear Mr. Thiel:

This project involves the installation of 2-inch and 4-inch PVC water mains to serve two 12-unit condominiums for domestic and fire suppression purposes. The above application for coverage under General Permit has been reviewed in accordance with Chapter 3, Section 7; and Chapter 12, Section 14 of the Wyoming Water Quality Rules and Regulations and is hereby approved.

You are authorized to construct, the facility in accordance with the general permit and the materials submitted in your application package. Your attention is directed to the mandatory reporting requirements outlined in Part V, Section O of the general permit.

If you have any questions, please contact James Brough at 307-332-3144.

Sincerely,

James Brough, P.E.  
Northwest District Engineer  
Water Quality Division

xc: IPS, Cheyenne  
Gregory Meinecke, Meinecke Consulting Engineering, 1527 Rumsey Ave., Cody, WY 82414  
Stephen Payne, City of Cody, P.O. Box 2200, Cody, WY 82414

encl: General Permit an Public Water Supply System



WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY  
WATER QUALITY DIVISION  
"AS-BUILT" PERMIT TO CONSTRUCT

PERMIT NO. 08-582

Carr Draw Hayden CBM Development Area, Wind Channel Reservoir

This permit hereby authorizes the applicant:

Williams Production RMT Company  
Attn.: Ms. Peggy Carter  
300 North Works St.  
Gillette, WY 82716

to have installed three (3) compliance monitoring wells according to the procedures and conditions of the application number **08-582**. The facility is proximal to a coalbed methane produced water impoundment located in Township 50N, Range 75W, Section 17 in the county of Campbell, in the State of Wyoming. All construction, installation, or modification allowed by this permit has been completed.

The issuance of this permit confirms that the Wyoming Department of Environmental Quality (DEQ) has evaluated the application submitted by the permittee and determined that it meets minimum applicable construction and design standards. The compliance with construction standards and the operation and maintenance of the facility to meet the engineer's design are the responsibility of the permittee, owner, and operator.

Nothing in this permit constitutes an endorsement by DEQ of the construction or the design of the facility described herein. This permit verifies only that the submitted application meets the design and construction standards imposed by Wyoming statutes, rules and regulations. The DEQ assumes no liability for, and does not in any way guarantee or warrant the performance or operation of the permitted facility. The permittee, owner and operator are solely responsible for any liability arising from the construction or operation of the permitted facility. By issuing this permit, the State of Wyoming does not waive its sovereign immunity.

The permittee shall allow authorized representatives from DEQ to enter and inspect any property, premise or place on or at which the facility is located or is being constructed or installed for the purpose of investigating actual or potential sources of water pollution, and for determining compliance or non-compliance with any rules, regulations, standards, permits or orders.

Nothing in this permit shall be construed to preclude the institution of any legal action or other proceeding to enforce any applicable provision of law or rules and regulations. It is the duty of the permittee, owner and operator to comply with all applicable federal, state and local laws or regulations in the exercise of its activities authorized by this permit.

The issuance of this permit does not convey any property rights in either real or personal property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations.

The permittee shall operate the permitted facility in accordance with the statements, representations, procedures, terms and conditions of the permit application, supporting documents and permit. This permit does not relieve the permittee from any duty to obtain any other permit or authorization that may be required by any provision of federal, state or local laws.

In carrying out its activities authorized by this permit, the permittee, owner and operator shall comply with all of the following permit conditions:

1 of 4 The applicant will provide immediate oral or written notice to the Wyoming Department of Environmental Quality/ Water Quality Division, Groundwater Section, 1866 South Sheridan Avenue, Sheridan, WY 82801, 307-673-9337, fax 307-672-2213, in accordance with the provisions of Section 11, Chapter 3, Wyoming Water Quality Rules and Regulations of any changes or modifications which are not consistent with the terms and conditions of this permit.

2 of 4 The applicant will provide immediate oral or written notice to the Wyoming Department of Environmental Quality/ Water Quality Division, Groundwater Section, 1866 South Sheridan Avenue, Sheridan, WY 82801, 307-673-9337, fax 307-672-2213 when discharge to each impoundment covered under this permit commences.

3 of 4 **Monitoring Requirements:**  
Groundwater monitoring at the impoundments shall be performed on a quarterly basis until further notice and shall include the following information:

- Measurement of static water level in all wells: Wind Channel MW-01, Wind Channel MW-02, and Wind Channel MW-03;
- Sampling and analysis of groundwater at down-gradient well: Wind Channel MW-02;
- A background groundwater sample at Wind Channel MW-02 will be required prior to discharge;
- Reporting results of quarterly monitoring and sampling to the department by January 15th, April 15th, July 15th, and October 15th of each year. The first set of data will be due by January 15, 2009;
- The parameters listed in the tables below are required for groundwater compliance monitoring beneath the listed impoundment:

**Impoundment: Wind Channel Reservoir**

Parameter	Wind Channel MW-02	Class III
	Background Value (mg/L)	Water Quality Standards (mg/L)
Arsenic	No sample as of date of review	0.2
Selenium	No sample as of date of review	0.05
Sulfate	No sample as of date of review	3000
Total Dissolved Solids (TDS)	No sample as of date of review	5000
pH	No sample as of date of review	6.5 – 8.5 (s.u)

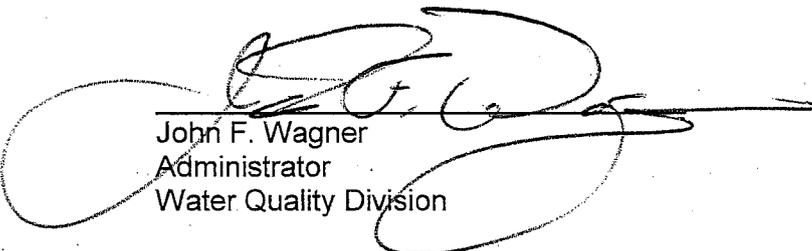
If groundwater monitoring reveals a pH measurement of 6.5 or less, the WDEQ may require sampling and analysis of groundwater for the following additional parameters: aluminum, boron, cadmium, chromium, copper, lead and zinc.

The analytical results for each sampling event, along with impoundment and monitor well location information must be submitted in the Excel spread sheet "Compliance Monitoring Data Reporting", which can be found on the WDEQ website at the following address:

(<http://deq.state.wy.us/wqd/groundwater/pollution.asp>). These data shall be submitted electronically on the due dates established above to the following department address: DEQ-CBMGroundwater@WYO.GOV. In addition, the accompanying analytical laboratory reports and field documentation must also be submitted either electronically (pdf format) or hard copy via mail to the WDEQ, Sheridan office at the address listed above.

4 of 4 Any exceedence of the water quality standards listed above will be considered a violation of this permit. If an exceedence of groundwater standards occurs as a result of the operation of the impoundment, the WDEQ may require a more frequent monitoring schedule, further investigation of the groundwater impacts, remediation of the groundwater impacts, and cessation of discharge into the impoundment.

AUTHORIZED BY:



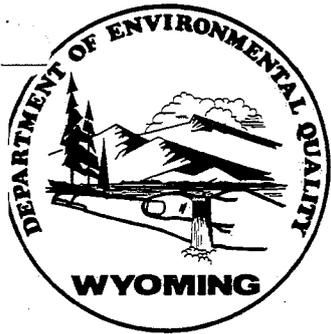
John F. Wagner  
Administrator  
Water Quality Division



John V. Corra  
Director  
Department of Environmental Quality

10/13/08  
Date of Issuance

CBD/rm/8-0801



**GROUNDWATER PROGRAM**  
**REVIEW COMMENTS:**  
**PLANS/SPECIFICATIONS/PROPOSALS/REPORTS**

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY  
WATER QUALITY DIVISION  
1866 South Sheridan Avenue  
Sheridan, WY 82801  
Phone: 307-672-6457

**PERMIT TYPE:** CBM: Groundwater Compliance Monitoring Program

**WATER QUALITY DIVISION REFERENCE (PERMIT) NUMBER:** 08-582

**SITE (POD) NAME:** Carr Draw Hayden CBM Development Area

**APPLICANT:** Williams Production RMT Company  
Attn.: Ms. Peggy Carter  
300 North Works  
Gillette, WY 82716

**CONSULTANT:** CBM Associates, Inc.  
Attn.: Luke McMahan  
500 W. Lott St.  
Buffalo, Wyoming 82834

**LOCATION:** Drainage: Carr Draw, tributary to Fortification  
Creek, tributary to Powder River  
County: Campbell  
Township 50 North; Range 75 West

**WYPDES No:** Discharge Permit: WY0054356

**DATE ON REPORT:** August 19, 2008

**REVIEWING OFFICIAL:** Carrie Donnell, North District Geological Project  
Analyst

**DATE OF THIS REVIEW:** October 13, 2008

**ACTION:** Compliance Monitoring Plan authorized for Wind Channel  
Impoundment pursuant to conditions on permit # 08-582.

## COMMENTS: GROUNDWATER SECTION

### 1.0 SITE SUMMARY:

#### 1.1 Site Description.

Watershed Name: Carr Draw, tributary to Fortification Creek, tributary to Powder River

Groundwater Classification:

Class 1 (domestic) \_\_\_\_\_  
Class 2 (agricultural) \_\_\_\_\_  
Class 3 (livestock) 1

Basis for Classification: Laboratory analysis of groundwater indicates ambient water quality meets Water Quality Rules and Regulations Chapter 8 Class III standards and exceeds both Class I and Class II standards for Sulfate and Total Dissolved Solids (TDS) (Table 1- Chapter 8).

**Table 1. Basis for Ground Water Classification by impoundment Name covered under Permit 08-582**

Impoundment Name	Compliance Monitoring Well	Sulfate (mg/L)	TDS (mg/L)
Wind Channel	Wind Channel MW-01	1210	2040

#### **Description of Hydrogeology:**

The first groundwater occurrence in three gradient wells at the cited location is in sandstone, ranging from 7 to 27 ft thick. The water-bearing zone underlying the cited reservoir exhibits confined conditions. Monitor well Wind Channel MW-02 is determined to be appropriately placed to monitor groundwater quality.

**Table 2. Names of Impoundments covered under Permit 08-582**

Impoundment Name	Capacity (acre/ft)	Qtr	Qtr	Section	Town.	Range	Down gradient Monitoring Well
Wind Channel	11.50	NESE		17	50	75	Wind Channel MW-02

No other domestic, agricultural or livestock wells are noted in the immediate area that will be impacted. No seeps or springs are noted in the immediate area.

### 2.0 MONITORING AND REPORTING REQUIREMENTS

Groundwater monitoring at the impoundments shall be performed on a quarterly basis until further notice and shall include the following information:

- Measurement of static water level in all wells: Wind Channel MW-01, Wind Channel MW-02, and Wind Channel MW-03;
- Sampling and analysis of groundwater at down-gradient well: Wind Channel MW-02;
- A background groundwater sample at Wind Channel MW-02 will be required prior to discharge;
- Reporting results of quarterly monitoring and sampling to the department by January 15<sup>th</sup>, April 15<sup>th</sup>, July 15<sup>th</sup>, and October 15<sup>th</sup> of each year. The first set of data will be due by January 15, 2009;
- The parameters listed in the tables below are required for groundwater compliance monitoring beneath the listed impoundment:

**Wind Channel Reservoir**

Parameter	Wind Channel MW-02 Background Value (mg/L)	Class III Water Quality Standards (mg/L)
Arsenic	No sample as of date of review	0.2
Selenium	No sample as of date of review	0.05
Sulfate	No sample as of date of review	3000
Total Dissolved Solids (TDS)	No sample as of date of review	5000
pH	No sample as of date of review	6.5 – 8.5 (s.u)

If groundwater monitoring reveals a pH measurement of 6.5 or less, the WDEQ may require sampling and analysis of groundwater for the following additional parameters: aluminum, boron, cadmium, chromium, copper, lead and zinc.

The analytical results for each sampling event, along with impoundment and monitor well location information must be submitted in the Excel spread sheet "Compliance Monitoring Data Reporting", which can be found on the WDEQ website at the following address: (<http://deq.state.wy.us/wqd/groundwater/pollution.asp>). These data shall be submitted electronically on the due dates established above to the following department address: [DEQ-CBMGroundwater@wyo.gov](mailto:DEQ-CBMGroundwater@wyo.gov). In addition, the accompanying analytical laboratory reports must also be submitted either electronically (pdf format) or hard copy via mail to the WDEQ, Sheridan office at the address listed above.

**END OF REVIEW**

**CBD/rm/8-0801**

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY  
WATER QUALITY DIVISION  
"AS-BUILT" PERMIT TO CONSTRUCT

PERMIT NO. 08-583

Carr Draw, Love CBM Development Area Phase IV, Love 11-20-5075 and Love 22-10-5075 Reservoirs

This permit hereby authorizes the applicant:

Williams Production RMT Company  
Attn.: MS. Peggy Carter  
300 N. Works Avenue  
Gillette, WY 82716

to have installed five (5) compliance monitoring wells according to the procedures and conditions of the application number 08-583. The facilities are proximal to coalbed methane produced water impoundments located in Township 50N, Range 75W, Sections 9 and 10 in the county of Campbell, in the State of Wyoming. All construction, installation, or modification allowed by this permit has been completed.

The issuance of this permit confirms that the Wyoming Department of Environmental Quality (DEQ) has evaluated the application submitted by the permittee and determined that it meets minimum applicable construction and design standards. The compliance with construction standards and the operation and maintenance of the facility to meet the engineer's design are the responsibility of the permittee, owner, and operator.

Nothing in this permit constitutes an endorsement by DEQ of the construction or the design of the facility described herein. This permit verifies only that the submitted application meets the design and construction standards imposed by Wyoming statutes, rules and regulations. The DEQ assumes no liability for, and does not in any way guarantee or warrant the performance or operation of the permitted facility. The permittee, owner and operator are solely responsible for any liability arising from the construction or operation of the permitted facility. By issuing this permit, the State of Wyoming does not waive its sovereign immunity.

The permittee shall allow authorized representatives from DEQ to enter and inspect any property, premise or place on or at which the facility is located or is being constructed or installed for the purpose of investigating actual or potential sources of water pollution, and for determining compliance or non-compliance with any rules, regulations, standards, permits or orders.

Nothing in this permit shall be construed to preclude the institution of any legal action or other proceeding to enforce any applicable provision of law or rules and regulations. It is the duty of the permittee, owner and operator to comply with all applicable federal, state and local laws or regulations in the exercise of its activities authorized by this permit.

The issuance of this permit does not convey any property rights in either real or personal property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations.

The permittee shall operate the permitted facility in accordance with the statements, representations, procedures, terms and conditions of the permit application, supporting documents and permit. This permit does not relieve the permittee from any duty to obtain any other permit or authorization that may be required by any provision of federal, state or local laws.

In carrying out its activities authorized by this permit, the permittee, owner and operator shall comply with all of the following permit conditions:

1 of 4 The applicant will provide immediate oral or written notice to the Wyoming Department of Environmental Quality/ Water Quality Division, Groundwater Program, 1866 South Sheridan Avenue, Sheridan, WY 82801, 307-673-9337, fax 307-672-2213, in accordance with the provisions of Section 11, Chapter 3, Wyoming Water Quality Rules and Regulations of any changes or modifications which are not consistent with the terms and conditions of this permit.

2 of 4 The applicant will provide immediate oral or written notice to the Wyoming Department of Environmental Quality/ Water Quality Division, Groundwater Program, 1866 South Sheridan Avenue, Sheridan, WY 82801, 307-673-9337, fax 307-672-2213 when discharge to each impoundment covered under this permit commences.

3 of 4 **Monitoring Requirements:**  
Groundwater monitoring at the impoundments shall be performed on a quarterly basis until further notice and shall include the following information:

- Measurement of static water level in all wells: Love 11-20-5075 MW-01, Love 11-20-5075 MW-02, Love 22-10-5075 MW-01, Love 22-10-5075 MW-02, Love 22-10-5075 MW-03;
- Sampling and analysis of groundwater at down-gradient wells: Love 11-20-5075 MW-02 and Love 22-10-5075 MW-01;
- Reporting results of quarterly monitoring and sampling to the department by January 15<sup>th</sup>, April 15<sup>th</sup>, July 15<sup>th</sup>, and October 15<sup>th</sup> of each year. The first set of data will be due by January 15, 2009;
- The parameters listed in the tables below are required for groundwater compliance monitoring beneath the listed impoundment; a background sample will be required at Love 11-10-5075 MW-02 prior to discharge:

**Impoundment: Love 11-20-5075**

<b>Parameter</b>	<b>Love 11-20-5075 MW-01 Background Value (mg/L) (11/28/2006)</b>	<b>Class III Water Quality Standards (mg/L)</b>
Arsenic	ND	0.2
Selenium	ND	0.05
Sulfate	1420	3000
Total Dissolved Solids (TDS)	2240	5000
pH	7.92	6.5 – 8.5 (s.u)

**Impoundment: love 11-20-5075**

Parameter	Love 11-20-5075 MW-01	Class III
	Background Value (mg/L)	Water Quality Standards (mg/L)
Arsenic	No sample as of date of review	0.2
Selenium	No sample as of date of review	0.05
Sulfate	No sample as of date of review	3000
Total Dissolved Solids (TDS)	No sample as of date of review	5000
pH	No sample as of date of review	6.5 – 8.5 (s.u)

**Impoundment: love 22-20-5075**

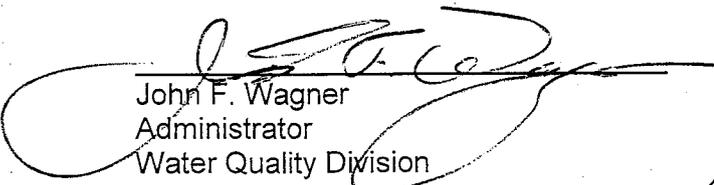
Parameter	Love 22-20-5075 MW-01	Class III
	Background Value (mg/L) (11/27/2006)	Water Quality Standards (mg/L)
Arsenic	ND	0.2
Selenium	ND	0.05
Sulfate	1920	3000
Total Dissolved Solids (TDS)	2930	5000
pH	5.81	6.5 – 8.5 (s.u)

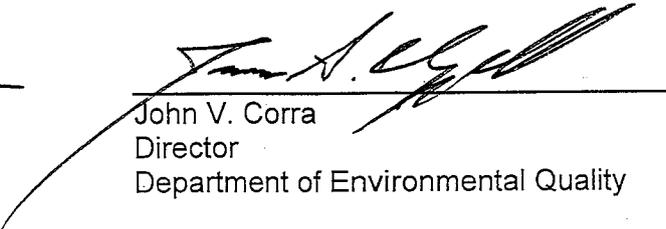
If groundwater monitoring reveals a pH measurement of 6.5 or less, the WDEQ may require sampling and analysis of groundwater for the following additional parameters: aluminum, boron, cadmium, chromium, copper, lead and zinc.

The analytical results for each sampling event, along with impoundment and monitor well location information must be submitted in the Excel spread sheet "Compliance Monitoring Data Reporting", which can be found on the WDEQ website at the following address: (<http://deq.state.wy.us/wqd/groundwater/pollution.asp>). These data shall be submitted electronically on the due dates established above to the following department address: DEQ-CBMGroundwater@WYO.GOV. In addition, the accompanying analytical laboratory reports and field documentation must also be submitted either electronically (pdf format) or hard copy via mail to the WDEQ, Sheridan office at the address listed above.

4 of 4 Any exceedence of the water quality standards listed above will be considered a violation of this permit. If an exceedence of groundwater standards occurs as a result of the operation of the impoundment, the WDEQ may require a more frequent monitoring schedule, further investigation of the groundwater impacts, remediation of the groundwater impacts, and cessation of discharge into the impoundment.

AUTHORIZED BY:

  
John F. Wagner  
Administrator  
Water Quality Division

  
John V. Corra  
Director  
Department of Environmental Quality

9-23-08  
Date of Issuance

CBD/rm/8-0712



**GROUNDWATER PROGRAM**  
**REVIEW COMMENTS:**  
**PLANS/SPECIFICATIONS/PROPOSALS/REPORTS**

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY  
WATER QUALITY DIVISION  
1866 South Sheridan Avenue  
Sheridan, WY 82801  
Phone: 307-672-6457

**PERMIT TYPE:** CBM: Groundwater Compliance Monitoring Program

**WATER QUALITY DIVISION REFERENCE (PERMIT) NUMBER:** 08-583

**SITE (POD) NAME:** Carr Draw Love CBM Development Area

**APPLICANT:** Williams Production RMT Company  
Attn.: Ms. Peggy Carter  
300 N. Works Avenue  
Gillette, Wyoming 82716

**CONSULTANT:** CMBA Associates, Inc.  
Attn.: Mr. Luke McMahan  
500 W. Lott St.  
Buffalo, Wyoming 82834

**LOCATION:** Drainage: Unnamed tributary to Fortification Creek,  
tributary to Powder River  
County: Campbell  
Township 50 North; Range 75 West

**WYPDES No:** Discharge Permit: WY0055026

**DATE ON REPORT:** August 22, 2008

**REVIEWING OFFICIAL:** Carrie Donnell, North District Geological Project  
Analyst

**DATE OF THIS REVIEW:** September 9, 2008

**ACTION:** Compliance Monitoring Plan authorized for Love 11-10-5075 and Love 22-10-5075 Reservoirs pursuant to conditions on permit # 08-583.

## COMMENTS: GROUNDWATER SECTION

### 1.0 SITE SUMMARY:

#### 1.1 Site Description.

Watershed Name: Unnamed tributary to Fortification Creek, tributary to Powder River

Groundwater Classification:

Class 1 (domestic) \_\_\_\_\_  
Class 2 (agricultural) \_\_\_\_\_  
Class 3 (livestock) 2

Basis for Classification: Laboratory analysis of groundwater indicates ambient water quality meets Water Quality Rules and Regulations Chapter 8 Class III standards and exceeds both Class I and Class II standards for Sulfate, TDS, manganese, Selenium, and/or Sodium Adsorption Ratio (SAR) (Table 1- Chapter 8).

**Table 1. Basis for Ground Water Classification by impoundment Name covered under Permit 08-583**

Impoundment Name	Compliance Monitoring Well	Sulfate (mg/l)	TDS (mg/l)	Fe (mg/l)	Mn (mg/l)	SAR
Love 11-10-5075	Love 11-10-5075 MW-02	1420	2240		0.35	8.9
Love 22-10-5075	Love 22-10-5075 MW-01	1920	2930	7.55	1.05	

An initial report was submitted to WDEQ on October 9, 2007. This report was submitted without supporting documentation of groundwater flow directions for the love 11-10-5075 and the love 22-10-5075. The two sites were therefore not included in the subsequent compliance monitoring plan. No further work was done on this project pending additional supporting documentation.

Supplementary data detailing groundwater flow direction at the two sites was submitted to the WDEQ on August 22, 2008. The data are considered adequate to determine an appropriately placed compliance monitor well at each site.

#### **Description of Hydrogeology:**

The first groundwater occurrence in one borehole (Love 11-20-5075 MW-02) at the Love 11-20-5075 Impoundment is in a 15 ft thick sandstone overlain by claystone and coal. The sandstone is not present in the subsurface at three additional drill sites surrounding the proposed impoundment. The first

groundwater occurrence in Love 11-20-5075 MW-01 is in coal overlain by claystone. Elevationally, the coal is below the sandstone encountered in MW-02. However, static water elevations indicate that the coal and sandstone are in hydraulic communication. The coal is present in two additional boreholes (11-20-5075 SB-01 and 11-20-5075B SB-01); however, groundwater was not encountered in either borehole and wells were not installed at these locations. Groundwater flow direction is interpreted to be to the west based on static water elevations in the two wells.

The first groundwater occurrence at the Love 22-10-5075 Impoundment is in coal overlain by sandstone. The static water levels in three wells surrounding the site indicate that the water-bearing zone is unconfined. Groundwater flow is interpreted to be topographically controlled and to the northwest.

**Table 2. Names of Impoundments covered under Permit 08-583**

Impoundment Name	Capacity (acre/ft)	Qtr Qtr	Section	Town.	Range	Down gradient Monitoring Well
Love 11-10-5075	9.45	NWNW	10	50	75	Love 11-10-5075 MW-02
Love 22-10-5075	14.3	SENW	10	50	75	Love 22010-5075 MW-01

No other domestic, agricultural or livestock wells are noted in the immediate area that will be impacted. No seeps or springs are noted in the immediate area.

## **2.0 MONITORING AND REPORTING REQUIREMENTS**

Groundwater monitoring at the impoundments shall be performed on a quarterly basis until further notice and shall include the following information:

- Measurement of static water level in all wells: Love 11-20-5075 MW-01, Love 11-20-5075 MW-02, Love 22-10-5075 MW-01, Love 22-10-5075 MW-02, Love 22-10-5075 MW-03;
- Sampling and analysis of groundwater at downgradient wells: Love 11-20-5075 MW-02 and Love 22-10-5075 MW-01;
- Reporting results of quarterly monitoring and sampling to the department by January 15<sup>th</sup>, April 15<sup>th</sup>, July 15<sup>th</sup>, and October 15<sup>th</sup> of each year. The first set of data will be due by January 15, 2009;
- A background sample is required at Love 11-10-5075 MW-02 prior to discharge;
- The parameters listed in the tables below are required for groundwater compliance monitoring beneath the listed impoundment:

**Love 11-10-5075**

Parameter	Love 11-20-5075 MW-01 Background Value (mg/L) (06/20/2007)	Class III Water Quality Standards (mg/L)
Arsenic	ND	0.2
Selenium	ND	0.05
Sulfate	1420	3000
Total Dissolved Solids (TDS)	2240	5000
pH	7.92	6.5 – 8.5 (s.u)

**Love 11-10-5075**

Parameter	Love 11-20-5075 MW-01 Background Value (mg/L)	Class III Water Quality Standards (mg/L)
Arsenic	No sample as of date of review	0.2
Selenium	No sample as of date of review	0.05
Sulfate	No sample as of date of review	3000
Total Dissolved Solids (TDS)	No sample as of date of review	5000
pH	No sample as of date of review	6.5 – 8.5 (s.u)

**Love 22-10-5075**

Parameter	Love 22-10-5075 MW-01 Background Value (mg/L) (06/26/2007)	Class III Water Quality Standards (mg/L)
Arsenic	ND	0.2
Selenium	ND	0.05
Sulfate	1920	3000
Total Dissolved Solids (TDS)	2930	5000
pH	5.81	6.5 – 8.5 (s.u)

If groundwater monitoring reveals a pH measurement of 6.5 or less, the WDEQ may require sampling and analysis of groundwater for the following additional parameters: aluminum, boron, cadmium, chromium, copper, lead and zinc.

The analytical results for each sampling event, along with impoundment and monitor well location information must be submitted in the Excel spread sheet "Compliance Monitoring Data Reporting", which can be found on the WDEQ website at the following address: (<http://deq.state.wy.us/wqd/groundwater/pollution.asp>). These data shall be submitted electronically on the due dates established above to the following department address: [DEQ-CBMGroundwater@wyo.gov](mailto:DEQ-CBMGroundwater@wyo.gov). In addition, the accompanying analytical laboratory reports must also be submitted either electronically (pdf format) or hard copy via mail to the WDEQ, Sheridan office at the address listed above.

**END OF REVIEW**

**CBD/rm/8-0712**

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY  
WATER QUALITY DIVISION  
PERMIT TO CONSTRUCT

PERMIT NO. 08-584

WELL #10 - TOWN OF LUSK  
PWS WY5600032

This permit hereby authorizes the applicant:

TOWN OF LUSK  
P.O. BOX 390  
LUSK, WY 82225

to construct, install or modify a Drilling, Construction, Developing and Testing the Well No. 10 according to the procedures and conditions of the application number 08-584. The facility is located in NE1/4 Section15 T32N R63W; Niobrara County, in the State of Wyoming. All construction, installation, or modification allowed by this permit shall be completed October 9, 2011.

The issuance of this permit confirms that the Wyoming Department of Environmental Quality (DEQ) has evaluated the application submitted by the permittee and determined that it meets minimum applicable construction and design standards. The compliance with construction standards and the operation and maintenance of the facility to meet the engineer's design are the responsibility of the permittee, owner, and operator.

Granting this permit does not imply that DEQ guarantees or ensures that the permitted facility, when constructed, will meet applicable discharge permit conditions or other effluent or operational requirements. Compliance with discharge standards remains the responsibility of the permittee.

Nothing in this permit constitutes an endorsement by DEQ of the construction or the design of the facility described herein. This permit verifies only that the submitted application meets the design and construction standards imposed by Wyoming statutes, rules and regulations. The DEQ assumes no liability for, and does not in any way guarantee or warrant the performance or operation of the permitted facility. The permittee, owner and operator are solely responsible for any liability arising from the construction or operation of the permitted facility. By issuing this permit, the State of Wyoming does not waive its sovereign immunity.

The permittee shall allow authorized representatives from DEQ to enter and inspect any property, premise or place on or at which the facility is located or is being constructed or installed for the purpose of investigating actual or potential sources of water pollution, and for determining compliance or non-compliance with any rules, regulations, standards, permits or orders.

Nothing in this permit shall be construed to preclude the institution of any legal action or other proceeding to enforce any applicable provision of law or rules and regulations. It is the duty of the permittee, owner and operator to comply with all applicable federal, state and local laws or regulations in the exercise of its activities authorized by this permit.

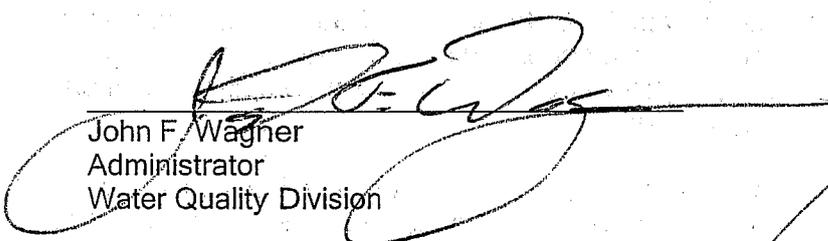
The issuance of this permit does not convey any property rights in either real or personal property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations.

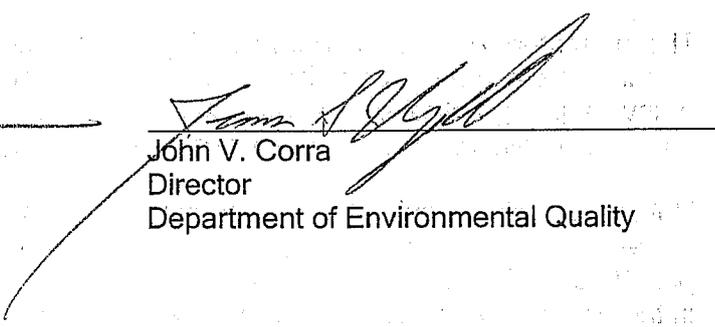
The permittee shall construct and operate the permitted facility in accordance with the statements, representations, procedures, terms and conditions of the permit application, supporting documents and permit. This permit does not relieve the permittee from any duty to obtain any other permit or authorization that may be required by any provision of federal, state or local laws.

In carrying out its activities authorized by this permit, the permittee, owner and operator shall comply with all of the following permit conditions:

- 1 The applicant will provide immediate oral or written notice to the Southeast District, Water Quality Division, Herschler Building 4 West, Cheyenne, WY, 82002, Phone 307-777-7088, FAX 307-777-5973, in accordance with the provisions of Section 11, Chapter 3, Wyoming Water Quality Rules and Regulations of any changes or modifications which are not consistent with the terms and conditions of this permit.
- 2 The well will need a locking well cover or a welded cover to prevent unauthorized use or entry into the well until it is connect to the existing water system.
- 2 Within sixty days of completion of construction of the authorized facility, the applicant will submit to the Southeast District, Water Quality Division, Herschler Building 4 West, Cheyenne, WY, 82002 a certification of completion signed by the Engineer of Record or the owner. A form titled "Certificate of Completion" has been provided.
  - a. Date that construction of the facility was completed; and
  - b. Date that the facility was placed in operation; and
  - c. Certification the facility was constructed in accordance with the terms and conditions of the permit; or
  - d. Certification the facility was completed with changes or modifications. Submittal of as-constructed plans and specifications for the system as it was constructed, certified by an engineer if appropriate is required. All modifications or deviations from the authorized plans must be highlighted.
- 3 The review and approval of this permit is based upon the items identified in the attached "Statement of Basis".

AUTHORIZED BY:

  
John F. Wagner  
Administrator  
Water Quality Division

  
John V. Corra  
Director  
Department of Environmental Quality

Date of Issuance 10/10/08

RRC/rm/8-0792

cc: Dale Anderson, WWDC

## STATEMENT OF BASIS

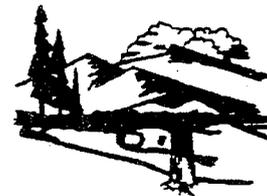
1. Permit Number:       **08-584**
2. This application was reviewed for compliance with the applicable regulations ;  
Chapters 3, 12
3. Does the permit comply with all applicable regulations identified above?  
Yes
4. A review to determine groundwater impacts in accordance with Section 17, Chapter 3 was not required.  
  
Public water supplies are exempted from review by Chapter 3 Section 17.
5. Documentation of Statement of Basis: The archive file for this permit includes adequate documentation of all sections of this Statement of Basis.

## CERTIFICATION

The issuance of this permit is based upon a review of the application package submitted in accordance with the requirements of Chapter 3, Section 6, Wyoming Water Quality Rules and Regulations. This review was performed by Rich Cripe, Southeast District Engineer, Water and Wastewater Section, Wyoming Department of Environmental Quality /Water Quality Division, and completed on October 9, 2008. Permit issuance is recommended based upon statements, representations, and procedures presented in the permit application and supporting documents, permit conditions, and the items identified in this "Statement of Basis."



# Department of Environmental Quality



To protect, conserve and enhance the quality of Wyoming's environment for the benefit of current and future generations.

Dave Freudenthal, Governor

John Corra, Director

## NOTIFICATION OF COVERAGE

October 9, 2008

Bill Craig  
P.O. Box 5  
Encampment, WY 82325

RE: Town of Encampment- Heizer Ave (Sixth-Eight) & Sixth St. (McCffrey-Heizer),  
Application No. **08-585**, Carbon County

Dear Bill Craig:

The above application for coverage under General Permit to Construct, Install, Modify or Operate Extensions to or Modifications of Existing Public Water Supply Distribution Systems and or Existing Sewage Collection Systems described as replacement of approximately 1450 feet of existing 4" water line with 6" and 8" water lines and add a fire hydrant, SW ¼ Section 1 T14N R84W; Carbon County, in accordance with Chapter 3, Section 9 of the Wyoming Water Quality Rules and Regulations has been reviewed and is hereby approved. You are authorized to construct, install or modify the water distribution system in accordance with Chapter 12, Section 14 of the Water Quality Division Rules and Regulations, the general permit and the materials submitted in your application package. All construction, installation, or modification allowed by this notification of coverage shall be completed by October 8, 2008.

Your attention is directed to the mandatory reporting requirements outlined in Part V, Section O of the general permit. Please reference Application No. **08-585** in any future correspondence.

If you have any questions, please contact me at 307-777-7075.

Sincerely,

Richard R. Cripe PE  
Southeast District Engineer  
Water Quality Division

RRC/rm/8-0789

cc: IPS, Cheyenne  
Jon L. Anderson, PMPC Civil Engineers, P.O. Box 370, Saratoga, WY 82331

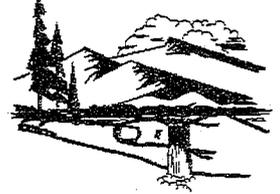
Herschler Building • 122 West 25th Street • Cheyenne, WY 82002 • <http://deq.state.wy.us>

ADMIN/OUTREACH (307) 777-7937 FAX 777-3610	ABANDONED MINES (307) 777-6145 FAX 777-6462	AIR QUALITY (307) 777-7391 FAX 777-5616	INDUSTRIAL SITING (307) 777-7369 FAX 777-5973	LAND QUALITY (307) 777-7756 FAX 777-5864	SOLID & HAZ. WASTE (307) 777-7752 FAX 777-5973	WATER QUALITY (307) 777-7781 FAX 777-5973
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# Department of Environmental Quality



Dave Freudenthal, Governor

To protect, conserve and enhance the quality of Wyoming's environment for the benefit of current and future generations.

John Corra, Director

## NOTIFICATION OF COVERAGE

September 26, 2008

Terrance Alexander, Executive Director  
University of Michigan  
326 E. Hoover Ave., Mail Stop B  
Ann Arbor, MI 48109-1102

RE: Camp Davis Phase I Water and Sewer Lines, Permit Number: 08-588R, E ½,  
Section 5, T38N, R115W, Teton County

Dear Mr. Alexander:

This project involves the installation of about 580 linear feet of 6-inch PVC sewer main and 580 linear feet of 2.5-inch polyethylene water main to serve twenty campus cabins. The above application for coverage under General Permit has been reviewed in accordance with Chapter 3, Section 7; Chapter 11, Section 9; and Chapter 12, Section 14 of the Wyoming Water Quality Rules and Regulations and is hereby approved.

You are authorized to construct the facility in accordance with the general permit and the materials submitted in your application package. Your attention is directed to the mandatory reporting requirements outlined in Part V, Section O of the general permit.

If you have any questions, please contact James Brough at 307-332-3144.

Sincerely,

James Brough, P.E.  
Northwest District Engineer  
Water Quality Division

xc: IPS, Cheyenne  
David Dufault, Nelson Engineering, P.O. Box 1599, Jackson, WY 83001

encl: General Permits an Public Water Supply and Existing Sewage Collection Systems

Lander Field Office • 510 Meadowview Drive • Lander, WY 82520 • <http://deq.state.wy.us>

ABANDONED MINES  
(307) 332-5085  
FAX 332-7726

AIR QUALITY  
(307) 332-6755  
FAX 332-7726

LAND QUALITY  
(307) 332-3047  
FAX 332-7726

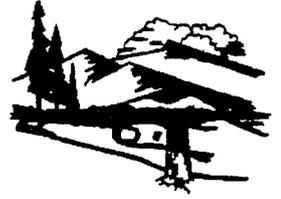
SOLID & HAZARDOUS WASTE  
(307) 332-6924  
FAX 332-7726

WATER QUALITY  
(307) 332-3144  
FAX 332-3183





# Department of Environmental Quality



To protect, conserve and enhance the quality of Wyoming's environment for the benefit of current and future generations.

Dave Freudenthal, Governor

John Corra, Director

## NOTIFICATION OF COVERAGE

October 10, 2008

Jason D. Kaul  
5500 Bishop Blvd  
Cheyenne, WY 82009

RE: Joint Forces Readiness center and Field Maintenance Shop,  
Application No. **08-589**, Laramie County

Dear Jason Kaul:

The above application for coverage under General Permit to Construct, Install, Modify or Operate Extensions to or Modifications of Existing Public Water Supply Distribution Systems and of Existing Sewage Collection Systems described as install 2,810 LF of 8" water main, install 180 LF of 6" fire line, and install 1,355 LF of 8" sanitary sewer main, Section 24 T14N R67W; Laramie County, in accordance with Chapter 3, Section 9 of the Wyoming Water Quality Rules and Regulations has been reviewed and is hereby approved. You are authorized to construct, install or modify the water distribution system in accordance with Chapter 12, Section 14 of the Water Quality Division Rules and Regulations, the sewage collection system in accordance with Chapter 11, Section 9 of the Water Quality Division Rules and Regulations, and both systems in accordance with the general permit and the materials submitted in your application package. All construction, installation, or modification allowed by this notification of coverage shall be completed by October 10, 2010.

Your attention is directed to the mandatory reporting requirements outlined in Part V, Section O of the general permit. Please reference Application No. **08-589**, in any future correspondence.

If you have any questions, please contact me at 307-777-7088.

Sincerely,

Richard R. Cripe PE  
Southeast District Engineer  
Water Quality Division

RRC/rm/8-0797

cc: IPS, Cheyenne  
Bruce Perryman, AVI, 2035 Westland Road, Cheyenne, WY 82001.

Herschler Building • 122 West 25th Street • Cheyenne, WY 82002 • <http://deq.state.wy.us>

ADMIN/OUTREACH (307) 777-7937 FAX 777-3610	ABANDONED MINES (307) 777-6145 FAX 777-6462	AIR QUALITY (307) 777-7391 FAX 777-5616	INDUSTRIAL SITING (307) 777-7369 FAX 777-5973	LAND QUALITY (307) 777-7756 FAX 777-5864	SOLID & HAZ. WASTE (307) 777-7752 FAX 777-5973	WATER QUALITY (307) 777-7781 FAX 777-5973
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The State  
of Wyoming



## Department of Environmental Quality

Dave Freudenthal, Governor

John Corra, Director

152 N. Durbin Street • Suite 100 • Casper, Wyoming 82601

### NOTIFICATION OF COVERAGE

October 10, 2008

Curtis and Robin Wendling  
P.O. Box 889  
Moorcroft, WY 82721

RE: Wendling Small Residential Waste Water System, Crook County  
Permit # 08-592

Dear Mr. and Mrs. Wendling:

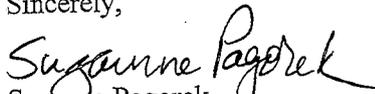
The above application for coverage under General Permit to Construct, Install, Modify or Operate a Small Wastewater Facility in accordance with Chapter 3, Section 9 of the Wyoming Water Quality Rules and Regulations has been reviewed and is hereby approved. You are authorized to construct, install, or modify the facility in accordance with general permit and the materials submitted in your application package. Your attention is directed to the mandatory reporting requirements outlined in Part V, Section O, of the general permit.

Please be advised that Crook County inspects all small wastewater systems permitted through WDEQ. Please contact Crook County Growth and Development at 307.283.4548 to arrange an inspection of the system.

**Septic systems shall not be installed during adverse weather. This includes rain, snow, severely cold temperatures, or excessively moist soils.**

If you have any questions, please contact me at 152 North Durbin Street, Suite 100, Casper, WY, 82601, or at (307) 473-3473. Thank you.

Sincerely,

  
Suzanne Pagorek  
WDEQ/WQD

Enclosures: General Permit  
Certificate of Completion

cc: IPS, Cheyenne  
WYDEQ File  
Tim Lyons, Crook County Growth and Development



WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY  
WATER QUALITY DIVISION  
PERMIT TO CONSTRUCT

PERMIT NO. 08-594

Land Application of Produced Water  
Dry Willow Station

This permit hereby authorizes the applicant:

Anadarko Petroleum Corporation  
1400 East Lincoln Street  
Gillette, Wyoming 82716

to construct, install or modify a land application water system for produced water to provide drip irrigation for a natural snow fence/wind break at the Dry Willow Station, according to the procedures and conditions of the application number 08-594. The facility is located in the southeast quarter of the northwest quarter, Section 35, Township 44 North, Range 76 West in the county of Campbell, in the State of Wyoming. The facility is located approximately 17 miles northeast of Sussex, Wyoming. This permit shall be effective until October 1, 2013.

The issuance of this permit confirms that the Wyoming Department of Environmental Quality (DEQ) has evaluated the application submitted by the permittee and determined that it meets minimum applicable construction and design standards. The compliance with construction standards and the operation and maintenance of the facility to meet the engineer's design are the responsibility of the permittee, owner, and operator.

Granting this permit does not imply that DEQ guarantees or ensures that the permitted facility, when constructed, will meet applicable discharge permit conditions or other effluent or operational requirements. Compliance with discharge standards remains the responsibility of the permittee.

Nothing in this permit constitutes an endorsement by DEQ of the land application described herein. This permit verifies only that the submitted application meets the design and construction standards imposed by Wyoming statutes, rules and regulations. The DEQ assumes no liability for, and does not in any way guarantee or warrant the performance or operation of the permitted facility. The permittee, owner and operator are solely responsible for any liability arising from the construction or operation of the permitted facility. By issuing this permit, the State of Wyoming does not waive its sovereign immunity.

The permittee shall allow authorized representatives from DEQ to enter and inspect any property, premise or place on or at which the land application is located for the purpose of investigating actual or potential sources of water pollution, and for determining compliance or non-compliance with any rules, regulations, standards, permits or orders.

Nothing in this permit shall be construed to preclude the institution of any legal action or other proceeding to enforce any applicable provision of law or rules and regulations. It is the duty of the permittee, owner and operator to comply with all applicable federal, state and local laws or regulations in the exercise of its activities authorized by this permit.

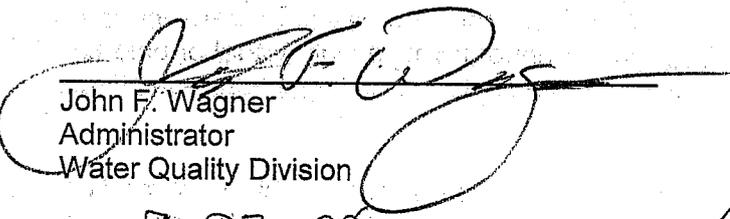
The issuance of this permit does not convey any property rights in either real or personal property or any invasion of personal rights, nor: any infringement of federal, state or local laws or regulations.

The permittee shall conduct permitted land application in accordance with the statements, representations, procedures, terms and conditions of the permit application, supporting documents and permit. This permit does not relieve the permittee from any duty to obtain any other permit or authorization that may be required by any provision of federal, state or local laws.

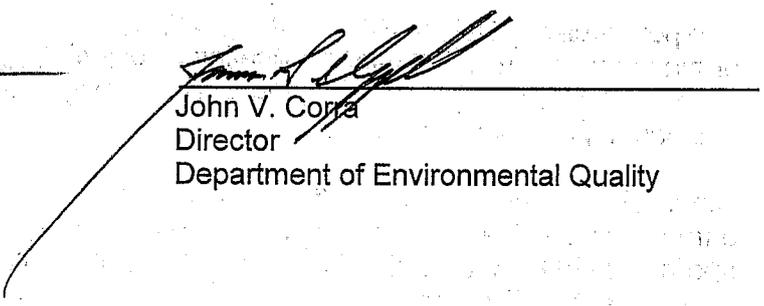
In carrying out its activities authorized by this permit, the permittee, owner and operator shall comply with all of the following permit conditions:

- 1 of 4 The applicant will provide immediate oral or written notice to the DEQ/WQD CBM/Oil and Gas Group in accordance with the provisions of Section 11, Chapter 3, Wyoming Water Quality Rules and Regulations of any changes or modifications which are not consistent with the terms and conditions of this permit.
- 2 of 4 The applicant shall submit an annual report to the department providing relevant details of the land application, including quantity of water applied, quality of water applied, type and quantity of soil amendments applied, any violations of DEQ regulations (WYPDES or groundwater), soil sampling data from the land receiving the water, and any other information deemed applicable by the department.
- 3 of 4 Within sixty days of completion of the land application, the applicant will submit to the DEQ/WQD Northeast District Office on the form provided (CERTIFICATION OF COMPLETION), the following information:
  - a. Dates that the land application was initiated and terminated for the irrigation season; and
  - b. Certification the land application was performed in accordance with the terms and conditions of the permit; or
  - c. Certification the land application was completed with changes or modifications. Submittal of documentation of the land application sites where the changes or modifications were performed if appropriate. All modifications or deviations from the authorized plans must be highlighted; and
  - d. Landowner certification and applicable documentation that the site has been properly reclaimed.
- 4 of 4 The review and approval of this permit is based upon the items identified in the attached "Statement of Basis"

AUTHORIZED BY:

  
John F. Wagner  
Administrator  
Water Quality Division

9-23-08  
Date of Issuance

  
John V. Corra  
Director  
Department of Environmental Quality

KJM/rm/8-0721  
cc: WDEQ Casper Field Office

## STATEMENT OF BASIS

1. Permit Number: 08-594
2. Application reviewed for compliance with the following applicable regulations :
  - a. Chapter 11.
3. Does the permit comply with all applicable regulations identified above?

Yes

Application requires review to determine groundwater impacts in accordance with Section 17, Chapter 3.

The water is being applied at an agronomic rate determined by soil testing to prevent groundwater impacts. Applicant has submitted annual permits as required under previous permit.

### Documentation of Statement of Basis.

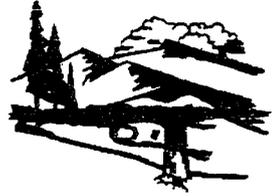
The archive file for this permit will include adequate documentation of all sections of this Statement of Basis.

## CERTIFICATION

The issuance of this permit is based upon a review of the application package submitted in accordance with the requirements of Section 6, Chapter III, Wyoming Water Quality Rules and Regulations. This review was performed by Dennis Lamb, and completed on September 19, 2008. Permit issuance is recommended based upon statements, representations, and procedures presented in the permit application and supporting documents permit conditions, and the items identified in this "Statement of Basis."



# Department of Environmental Quality



To protect, conserve and enhance the quality of Wyoming's environment for the benefit of current and future generations.

Dave Freudenthal, Governor

John Corra, Director

## NOTIFICATION OF COVERAGE

September 23, 2008

Jeffrey Pecenka  
Cheyenne BOPU  
2406 Snyder Avenue  
Cheyenne, WY 82003

RE: The Bluffs 7<sup>th</sup> Filing Water and Sewer Project  
Application No. **08-595**

Dear Mr. Pecenka:

The above application for coverage under General Permit to Construct, Install, Modify or Operate Extensions to or Modifications of Existing Public Water Supply Distribution Systems and Existing Sewage Collection Systems in accordance with Chapter 3, Section 9 of the Wyoming Water Quality Rules and Regulations has been reviewed and is hereby approved. You are authorized to construct, install or modify the water distribution system in accordance with Chapter 12, Section 14 of the Water Quality Division Rules and Regulations, the sewage collection system in accordance with Chapter 11, Section 9 of the Water Quality Division Rules and Regulations, and both systems in accordance with the general permits, and the materials submitted in your application package. Your attention is directed to the mandatory reporting requirements outlined in Part V, Section O of the general permits.

The approval granted under this Notification Of Coverage and the General Permit shall expire on October 1, 2010. Please reference Application Number **08-595** in any future correspondence.

If you have any questions, please contact me at (307) 777-6371.

Sincerely,

Brian Mark  
Staff Engineer  
Water Quality Division

BDM/rm/8-0730

Enclosures: GENERAL PERMIT - Extensions/Modifications of Existing Public Water  
Supply Distribution Systems  
GENERAL PERMIT - Extensions/Modifications of Existing Sewage  
Collection Systems  
Certificate of Completion form

cc: Kelly Hafner, BenchMark Engineers, PC, 1920 Thomes Avenue, Suite 620, Cheyenne, WY  
82001  
Frank Cole, 425 Cole Shopping Center, Cheyenne, WY 82001

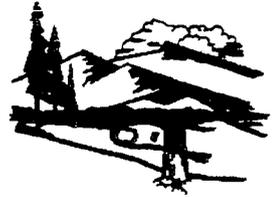
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ADMIN/OUTREACH (307) 777-7937 FAX 777-3610	ABANDONED MINES (307) 777-6145 FAX 777-6462	AIR QUALITY (307) 777-7391 FAX 777-5616	INDUSTRIAL SITING (307) 777-7369 FAX 777-5973	LAND QUALITY (307) 777-7756 FAX 777-5864	SOLID & HAZ. WASTE (307) 777-7752 FAX 777-5973	WATER QUALITY (307) 777-7781 FAX 777-5973
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# Department of Environmental Quality



To protect, conserve and enhance the quality of Wyoming's environment for the benefit of current and future generations.

Dave Freudenthal, Governor

John Corra, Director

## NOTIFICATION OF COVERAGE

November 3, 2008

Mayor Jay Collins  
204 S. Yellowstone Highway  
P.O. Box 396  
Glendo, WY 82213

RE: Town of Glendo-2008 Sani-Swr Main Rehab Project,  
Application No. **08-597**, Platte County

Dear Jay Collins:

The above application for coverage under General Permit to Construct, Install, Modify or Operate Extensions to or Modifications of Existing Public Water Supply Distribution Systems and or Existing Sewage Collection Systems described as 2008 Sanitary Sewer Main Rehabilitation, NW1/4 Section 9 AND SW1/4 Section 4 T29N R68W; Platte County, in accordance with Chapter 3, Section 9 of the Wyoming Water Quality Rules and Regulations has been reviewed and is hereby approved. You are authorized to construct, install or modify the sewage collection system in accordance with Chapter 11, Section 9 of the Water Quality Division Rules and Regulations, the general permit and the materials submitted in your application package. All construction, installation, or modification allowed by this notification of coverage shall be completed by November 3, 2010.

Your attention is directed to the mandatory reporting requirements outlined in Part V, Section O of the general permit. Please reference Application No. **08-597** in any future correspondence.

If you have any questions, please contact me at 307-777-7075.

Sincerely,

Richard R. Cripe PE  
Southeast District Engineer  
Water Quality Division

RRC/rm/8-0857

Enclosure: Certificate of Completion

cc: IPS, Cheyenne  
Murray T. Schroeder, WWC Engineering, 611 Skyline Road, Laramie, WY 82070

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