



Department of Environmental Quality

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



Matthew H. Mead, Governor

John Corra, Director

NOTIFICATION OF COVERAGE

August 24, 2011

Wyoming Air National Guard
Michael Pachel, Capt.
217 Dell Range Boulevard (153 CES)
Cheyenne, WY 82009

RE: Building 31 – ROSC, Water and Sewer,
Application No. 11-301, Laramie County

Dear Mr. Pachel:

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 installation of approximately 120 ft of 4 inch PVC sanitary service, install one new fire hydrant, remove and replace one existing fire hydrant, install one- 4 inch fire sprinkler line, and abandoned in-place approximately 167 ft of 12 inch PVC water line, SW ¼, Section 19, T14N, R 66W; 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 August 24, 2013.

This **Notice of Coverage** is covered under the General Permits on the Wyoming Department of Environmental Quality webpage. The General Permits can be viewed at the following path: http://deq.state.wy.us/wqd/www/Permitting/Pages/general_permits.asp. Please reference Application No. 11-301 in any future correspondence.

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

Sincerely,

Richard R. Cripe P.E.
Southeast District Engineer
Water Quality Division

RRC/rm/11-0761

Enclosure: Certificate of Completion

cc: IPS, Cheyenne
Erin Gates, Benchmark Engineers, 1920 Thomes Ave., Suite 620, Cheyenne, WY 82001





Department of Environmental Quality

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Matthew H. Mead, Governor

152 N. Durbin St., Suite 100 · Casper, WY 82601 · (307) 473-3450

John Corra, Director

NOTIFICATION OF COVERAGE

August 11, 2011

Lance and Raquel Croell
P.O. Box 1047
Sundance, WY 82729

RE: Croell Residential Small Wastewater System, Crook County
Location: S ½, SW ¼, Section 26, Township 52 North, Range 62 West, Permit # 11-302

Dear Mr. and Mrs. Croell:

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. The General Permit requirements can be downloaded from the Wyoming Department of Environmental Quality webpage, http://deq.state.wy.us/wqd/www/Permitting/Pages/general_permits.asp

Additionally, the following permit condition applies:

1. Cleanouts are required every 100 feet and at all changes in direction 22.5 degrees and greater, both horizontal and vertical. This requirement includes both the pipeline from the house to the septic tank and from the septic tank to the leachfield.
2. Either a 6-inch diameter clean-out riser or a manway from each compartment of the septic tank must be extended to the ground surface from all septic tanks.

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.** Please contact me with questions at 307-473-3478.

Sincerely,

Karen L. Farley, P.E.
NE District Engineer
WDEQ/WQD

cc: IPS, Cheyenne
WYDEQ Casper File
Allen Schreier, P.E., 511 National Street, Suite 101, Belle Fourche, SD 57717
Tim Lyons, Crook County Growth and Development

Cheyenne
122 West 25th Street 82002
(307) 777-7937

Lander
510 Meadowview Drive 82520
(307) 332-3144

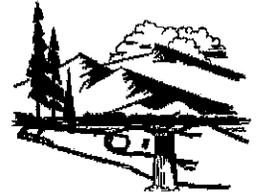
Sheridan
2100 W. 5th Street 82801
(307) 673-9337





Department of Environmental Quality

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Matthew H. Mead, Governor

John Corra, Director

NOTIFICATION OF COVERAGE

August 30, 2011

Daniel Harnish, DVM
172 West Frontage Road
Wheatland, WY 82201

RE: Harnish Residential Septic System,
Location: NE¼ SE¼ Section 26, T24N, R68W,

Application No. **11-303**
Platte County

Dear Mr. Harnish:

The above application for coverage under General Permit to Construct, Install, Modify or Operate a Small Wastewater Facility consisting of a 1500 gallon, two compartment concrete septic tank and about 106 feet of chamber type leachfield divided into two equal length trenches of 53 feet each for a **4 bedroom 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 25 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. 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.
2. Leachfield Layout – Two Trenches Required - a single chambered trench is too long to insure that effluent will be able to reach all the way to the far end of the trench to accomplish proper operation of the system. Therefore, a minimum of two(2) equal length trenches consisting of at least 10 units each of Biodiffuser brand, ARC 36HC model chambers shall be installed. Additionally, there shall be a minimum of five(5) feet of undisturbed soil between the sidewalls of the two trenches. See "Two Trench Chambered Leachfield" detail drawing attached.

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

ADMIN/OUTREACH (307) 777-7758 FAX 777-7682	ABANDONED MINES (307) 777-6145 FAX 777-6462	AIR QUALITY (307) 777-7391 FAX 777-5616	INDUSTRIAL SITING (307) 777-7369 FAX 777-6937	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 approval granted under this Notification Of Coverage and the General Permit shall expire on August 29, 2013. Please reference Application Number **11-303** in any future correspondence.

If you have any questions, please contact me at ron.ewald@wyo.gov or (307) 777-6183.

Sincerely,



Ronald L. Ewald
Assistant Southeast District Engineer
Southeast District, Water & Wastewater Section
Water Quality Division

RLE/rm/11-0789

Enclosures: GENERAL PERMIT - Small Wastewater Facility
Certificate of Completion form

cc: IPS, Cheyenne
Platte County Planning Office, Dennis Becker, PO. Box 728, Wheatland, WY 82201
Joannette Wardell, 200 Dickenson Hill Road, Wheatland, WY 82201



Department of Environmental Quality

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Matt Mead, Governor

John Corra, Director

August 9, 2011

Howard Mortimore
P.O. Box 1257
Rawlins, WY 82301

RE: **Application Rejected: Number 11-304 / Action: Application Returned**

Facility: Mortimore Residential Septic System,
Location: Portions of Sections 13 & 14, T12N, R88W, **Routt County, COLORADO**

Dear Mr. Mortimore:

Your application, number 11-304, for a residential on-site septic system is being rejected and returned because the property is not located in Wyoming. The "SPECIAL WARRANTY DEED" that you submitted with the application clearly indicates that this property is located in Routt County, Colorado. A map of where the Wyoming Department of Environmental Quality (DEQ) / Water Quality Division (WQD) understands the property to be is attached for your confirmation. If you still think that the location where you plan to construct this septic system is in Wyoming, then you must resubmit this application with your property indicated on a 7½ minute U.S. Geological Survey quad map confirming that the property is indeed within Wyoming.

If you should have any questions, or if the WQD has gotten any of our conclusions about this situation wrong, or has made any errant assumptions, please contact Ronald Ewald at either (307) 777-6183 or ron.ewald@wyo.gov. Otherwise you will need to apply for your septic system permit to the appropriate authorities in Colorado.

Sincerely,

Ronald L. Ewald
Assistant Southeast District Engineer
SE District, Water Quality Division

RLE/rm/11-0730

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

Enclosures: Application package No. 11-304
Map of property located in Colorado

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

ADMIN/OUTREACH (307) 777-7758 FAX 777-7682	ABANDONED MINES (307) 777-6145 FAX 777-6452	AIR QUALITY (307) 777-7391 FAX 777-5616	INDUSTRIAL SITING (307) 777-7369 FAX 777-6937	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
PERMIT TO CONSTRUCT

PWS # 5601174

5601184

11/8/11
[Signature]

X

~~PERMIT NO. 11-305~~

REFERENCE PERMIT NO. 11-306

NARM – Rochelle Mine Water Treatment Improvements

This permit hereby authorizes the applicant:

Bryan Hanson
Powder River Coal, LLC
NARM – Rochelle Mine
339B Antelope Road
Wright, WY 82732

to construct, install, and/or modify the NARM – Rochelle Mine Water System Improvements, including installing a sodium silicate system to reduce lead and copper in the potable water system, according to the procedures and conditions of the application number 11-305. The facility is located in the NARM Complex in Campbell County, Latitude 43-31-50, Longitude 105-15-50. All construction, installation, or modification allowed by this permit shall be completed by December 31, 2012.

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 permit conditions or other operational requirements. Compliance with all applicable 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 Northeast District, Water Quality Division, 152 North Durbin, Suite 100, Casper, WY, 82601, Phone 307-473-3465, FAX 307-473-3458, 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

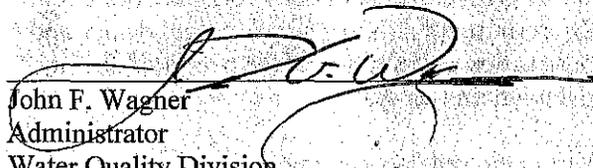
Within sixty days of completion of construction of the authorized facility, the applicant will submit to the Northeast District, Water Quality Division, 152 North Durbin, Suite 100, Casper, WY, 82601 a certification of completion signed by the Engineer of Record or the owner. A form titled "Certificate of Completion" has been provided.

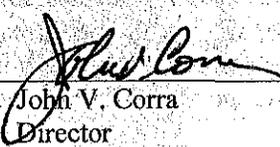
- a. Date that construction of the facility was completed; and
- b. Date that the facility was placed in operation; and
- c. Certification the facility was constructed in accordance with the terms and conditions of the permit; or
- d. Certification the facility was completed with changes or modifications. 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

11-7-11
Date of Issuance

KLF/rm/11-0978

cc: Steve Bruce, P.E., Bruce Engineering, Inc., P.O. Box 2284, Gillette, WY 82717

STATEMENT OF BASIS

1. Permit Number: **11-305**
2. Application reviewed for compliance with the following applicable regulations :
Chapter 3 and Chapter 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 or differing from applicable regulations and approval is based upon a deviation in accordance with Section 5.

YES. Water system is seeing an increase in lead and copper and have not been able to identify the source. Mine is attempting to remedy the problem before an MCL is exceeded. This method of controlling lead and copper is given in EPA's "Revised Guidance Manual for Selecting Lead and Copper Control Strategies".
5. A review to determine groundwater impacts in accordance with Section 17, Chapter 3 is not required.
6. 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 Karen L. Farley and completed on November 4, 2011. 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."

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY
WATER QUALITY DIVISION
PERMIT TO CONSTRUCT
PWS # 5600874

~~PERMIT NO. 11-306~~

REFERENCE PERMIT NO. 11-305

NARM – North Antelope Mine Water Treatment Improvements

This permit hereby authorizes the applicant:

Bryan Hanson
Powder River Coal, LLC
NARM – North Antelope Mine
339B Antelope Road
Wright, WY 82732

to construct, install, and/or modify the NARM – North Antelope Mine Water System Improvements, including installing a sodium silicate system to reduce lead and copper in the potable water system, according to the procedures and conditions of the application number 11-306. The facility is located in the NARM Complex in Campbell County, Latitude 43-31-50, Longitude 105-15-50. All construction, installation, or modification allowed by this permit shall be completed by December 31, 2012.

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 permit conditions or other operational requirements. Compliance with all applicable 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 Northeast District, Water Quality Division, 152 North Durbin, Suite 100, Casper, WY, 82601, Phone 307-473-3465, FAX 307-473-3458, 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

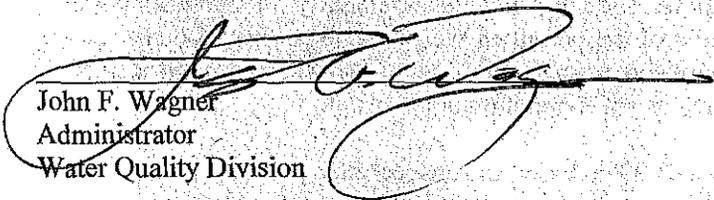
Within sixty days of completion of construction of the authorized facility, the applicant will submit to the Northeast District, Water Quality Division, 152 North Durbin, Suite 100, Casper, WY, 82601 a certification of completion signed by the Engineer of Record or the owner. A form titled "Certificate of Completion" has been provided.

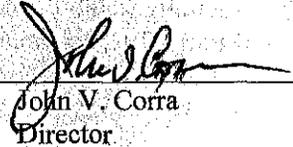
- a. Date that construction of the facility was completed; and
- b. Date that the facility was placed in operation; and
- c. Certification the facility was constructed in accordance with the terms and conditions of the permit; or
- d. Certification the facility was completed with changes or modifications. 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

11/5/14
Date of Issuance

KLF/rm/11-0979

cc: Steve Bruce, P.E., Bruce Engineering, Inc., P.O. Box 2284, Gillette, WY 82717

STATEMENT OF BASIS

1. Permit Number: **11-306**
2. Application reviewed for compliance with the following applicable regulations :
Chapter 3 and Chapter 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 or differing from applicable regulations and approval is based upon a deviation in accordance with Section 5.

YES. Water system is seeing an increase in lead and copper and have not been able to identify the source. Mine is attempting to remedy the problem before an MCL is exceeded. This method of controlling lead and copper is given in EPA's "Revised Guidance Manual for Selecting Lead and Copper Control Strategies".
5. A review to determine groundwater impacts in accordance with Section 17, Chapter 3 is not required.
6. 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 Karen L. Farley and completed on November 4, 2011. 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

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Matthew H. Mead, Governor

152 N. Durbin St., Suite 100 · Casper, WY 82601 · (307) 473-3450

John Corra, Director

NOTIFICATION OF COVERAGE

October 4, 2011

Scott N. Durgin
Peabody Powder River Mining, LLC
Caller Box 3034
Gillette, WY 82717

RE: NARM West Truck Shop Expansion, Sanitary Sewer Modifications, WDEQ #11-307
Campbell County, Wyoming

Dear Mr. Durgin:

The above application for coverage under General Permit to Construct, Install, Modify or Operate Extensions to or Modification of Existing Sewage Collection Systems in accordance with Chapter 3 and Chapter 11 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(ies) in accordance with the general permits and the materials submitted in your application package. The General Permit requirements can be downloaded from the Wyoming Department of Environmental Quality webpage,

http://deq.state.wy.us/wqd/www/Permitting/Pages/general_permits.asp

If you have any questions, please contact me at 307-473-3478.

Sincerely,

Karen L. Farley, P.E.
Northeast District Engineer, Water Quality Division

Enclosures: Certificate of Completion

cc: Edward S. Scott, P.E., Consolidated Engineers, Inc., P.O. Box 1035, Gillette, WY 82717-1035
Philip A. Murphree, Peabody Energy, Box 3034, Gillette, WY 82717-3034
WDEQ File,



WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY
WATER QUALITY DIVISION
PERMIT TO CONSTRUCT

Permit No. 11-308

Reference # 08-029

Jess and Carol Gray, LLC
Holler 1-11 SWD Pit

This permit hereby authorizes the applicant:

Jess and Carol Gray, LLC
10277 S. Highway 59
Gillette, WY 82718

to construct, install or modify two (2) pond cells for retention of sediments in waste liquid prior to disposal in injection well Holler 1-11 WIW (UIC Permit #08-029), according to the procedures and conditions of the application number 11-308. The facility is located in the northwest quarter of the southeast quarter of Section 11, Township 52 North, Range 72 West, in the county of Campbell, in the State of Wyoming. The facility is located approximately 15 miles north of Gillette, Wyoming. All construction, installation, or modification allowed by this permit shall be completed by February 1, 2017.

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 11 The applicant will notify the CBM / Oil and Gas Group, Water Quality Division, 152 North Durbin Street, Suite 100, Casper, WY 82601, Phone 307-473-3465, FAX 307-473-3458 of the date construction will begin and the estimated completion date.
- 2 of 11 The applicant will provide the CBM / Oil and Gas Group, Water Quality Division, 152 North Durbin Street, Suite 100, Casper, WY 82601, the name of the type and brand of the primary and secondary liner, the liner manufacturer(s), the liner installation contractor(s), and all other required documentation related to the liners, at least two weeks prior to beginning construction. The manufacturer(s) will need to submit recommended installation methods that include cold weather installation. At a minimum, installation should be conducted in accordance with "Cold Weather Seaming of Geomembranes", Geosynthetic Institute, GRI Test Method GM9 or a comparable method.
- 3 of 11 The applicant will provide immediate oral or written notice to the CBM / Oil and Gas Group, Water Quality Division, 152 North Durbin Street, Suite 100, Casper, WY 82601, Phone 307-473-3465, FAX 307-473-3458, 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.
- 4 of 11 Within sixty days of completion of construction of the authorized facility, the applicant will submit to the CBM / Oil and Gas Group, Water Quality Division, 152 North Durbin Street, Suite 100, Casper, WY 82601, 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.
- 5 of 11 The review and approval of this permit is based upon the items identified in the attached "Statement of Basis".

6 of 11 Measurement of depth to groundwater and testing of groundwater is to be performed prior to filling any ponds at this facility. Groundwater monitoring will be conducted on a quarterly basis and results reported to DEQ within a month after receiving laboratory analytical reports. Samples will be submitted for the following analysis:

- a) electrical conductivity
- b) pH
- c) chloride
- d) sodium
- e) alkalinity
- f) sulfate
- g) total dissolved solids
- h) Total Organic Halides (TOX)

The analyte list and monitoring frequency are subject to revision as needed by CBM / Oil and Gas Group, Water Quality Division.

7 of 11 The leak detection system is to be checked weekly for the first month following filling of a pond and monthly thereafter with a log kept of the inspection results. As new ponds are constructed, the leak detection system is to be checked weekly for the first month. If fluid is found, the DEQ CBM / Oil and Gas Group is to be notified immediately, and samples are to be pulled from the inspection pipes and tested for total petroleum hydrocarbons (TPH) by EPA Method 8015 (modified), chlorides, total dissolved solids (TDS) and sulfates. Results are to be reported to DEQ as soon as they are available. Testing requirements are subject to revision as needed.

If a leak is confirmed, the pond(s) will be pumped dry of all wastewater. No additional wastewater will be placed into the pond(s) until a complete inspection and test of the liner is completed.

8 of 11 A composite and representative sample of the fluid in the ponds is to be collected annually and submitted for laboratory analysis of the constituents listed on Table 4, UIC Permit #08-029 (attached).

The analyte list and monitoring frequency are subject to revision by CBM / Oil and Gas Group, Water Quality Division.

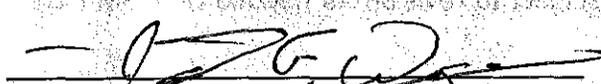
9 of 11 The facility is authorized to receive wastes authorized under UIC Permit #08-029, with the exception of sump wastes. Disposal of any sump wastes in this facility will require prior approval from WDEQ/WQD CBM / Oil and Gas Group. Prior to approval for disposal by DEQ/WQD, all other waste will be subject to rules, regulations, policies, and/or procedures related to hazardous waste determination and disposal, as issued or promulgated by DEQ/Solid and Hazardous Waste Division (SHWD).

This permit **does not** allow for the acceptance or storage of any hazardous wastes as defined in 40 CFR 261.2 and in Wyoming Solid Waste Management Rules and Regulations, Chapter 2.

10 of 11 The validity of this permit is subject to the owner maintaining a bond acceptable to the State of Wyoming, DEQ/WQD for the amount of the facility closure and post-closure costs. The bonding amount is subject to review on an annual basis.

11 of 11 An annual report will be submitted to DEQ CBM / Oil and Gas Group by April 1 of each year. The annual report will include relevant details of the construction, modification, and operation details of the facility from the previous year, any anticipated construction, modification and/or operational changes for the upcoming year. The report will include a copy of the annual report submitted to the UIC program, including monitoring results of waste accepted. The annual report will also include a review of the closure and post closure requirements, including financial costs. A renewal of the bond will be required as part of the annual report. Reporting requirements are subject to modification by DEQ.

AUTHORIZED BY:


John F. Wagner
Administrator
Water Quality Division


John V. Corra
Director
Department of Environmental Quality

2-1-12
Date of Issuance

JDL/KJM/rm/12-0052

cc: Tyler Vanderhoef, Gene R. George & Associates, Inc., P.O. Box 2775, Casper, WY 82602
David Nicolarsen, Gene R. George & Associates, Inc., 50 East Loucks, Sheridan, WY 82801

STATEMENT OF BASIS

1. Permit Number: **11-308**

2. Application reviewed for compliance with the following applicable regulations :

Chapters 3 and 11 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 or differing from applicable regulations and approval is based upon a deviation in accordance with Section 5.

a. The permit includes approval to deviate from the following regulatory requirements:

Not applicable

b. Briefly state the basis for the deviation.

Not applicable

c. Permit approval is based upon deviation from applicable regulations in accordance with approved policy statement.

Not applicable

5. A review to determine groundwater impacts in accordance with Section 17, Chapter 3 was required.

6. If Section 17 of Chapter 3 review is required, indicate the basis for determining groundwater will be protected.

The facility will not allow a discharge to groundwater.

Each pond will have a primary liner of 60 mil high density polyethylene with a 40 mil high density polyethylene secondary liner. A compacted clay subgrade will be installed under the secondary liner. A leak detection system will be installed between the two liners. Groundwater monitoring wells will also be installed at the facility to monitor groundwater on a quarterly basis.

Quality of wastewater is such that it will not cause a violation of groundwater standards.

Not applicable

Existing soils or geology will not allow a discharge to groundwater.

Not applicable

The facility is designed and will be operated so that it will not to violate groundwater standards.

Not applicable

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:

Not applicable

If any groundwater quality standards are to be exceeded, briefly describe how any users of the affected aquifer will be protected. The description should include the water quality standard affected, the anticipated maximum concentration, the property boundaries, places of groundwater withdrawal and any other relevant information.

Not applicable

Briefly describe monitoring plan. The groundwater monitoring plan includes the monitoring wells or other sampling points, the parameters to be analyzed, the sampling frequency and reporting methods.

The leak detection system will be checked weekly for the first month after the ponds are filled. A log will be kept of the inspection results. The leak detection system is also monitored by a high level alarm system. If fluid is found, DEQ will be notified immediately. If a leak is confirmed, the pond(s) will be pumped dry of all wastewater. No additional wastewater will be placed into the pond(s) until a complete inspection and test of the liner is completed.

Measurement of depth to groundwater and testing of groundwater is to be performed prior to filling any ponds at this facility. Groundwater monitoring will be conducted on a quarterly basis and results reported to DEQ within a month after receiving laboratory analytical reports. If groundwater monitoring indicates a release to groundwater, a plan to investigate the extent of the release will be submitted to DEQ within 30 days after confirming the release for DEQ's approval. Following approval, the plan will be implemented.

Fluids in the pond are to be checked annually for hazardous constituents by collecting a sample from each pond in operation.

Operational concerns will be identified in an annual report to be submitted to DEQ by April 1 of each year. Any changes in operations, a discussion of groundwater monitoring, leak detection system operation, and pond characterization is to be included in the annual report.

The permit should clearly state the parameters to be utilized for determining compliance and what occurrences constitute a violation. The permit should identify the corrective actions to be taken in the event of a violation of a groundwater standard.

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 Kim Medina and Denis Lamb, CBM / Oil and Gas Group and completed on November 30, 2011. 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."

Attachment "A"
UIC Permit # 08-029
UIC Permit Facility # WYS-005-00494



Department of Environmental Quality



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

Matt Mead, Governor

John Corra, Director

NOTIFICATION OF COVERAGE

August 12, 2011

Bret George, Mayor
Town of Byron
P.O. Box 5
Byron, WY 82412

RE: West Platte Avenue Water and Sewer Lines, Permit Number: 11-309, OS 27, T. 56 N., R. 97 E., Big Horn County

Dear Mayor George:

This project involves the installation of about 550 linear feet of 8-inch sewer line and 601 linear feet of 6-inch water line and appurtenances to serve a rural area. This 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 facilities in accordance with the general permits and 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 which can be downloaded from the Wyoming Department of Environmental Quality webpage at:

http://deq.state.wy.us/wqd/www/Permitting/Pages/general_permits.asp

If you have any questions, please contact me at 307-335-6961.

Sincerely,

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

xc: Grant Sanders, P.E., Inberg-Miller Engineers, 428 Alan Road, Powell, WY 82435
IPS, Cheyenne



STATE OF WYOMING
DEPARTMENT OF ENVIRONMENTAL QUALITY
UNDERGROUND INJECTION CONTROL PERMIT ISSUED UNDER
WYOMING WATER QUALITY RULES AND REGULATIONS
CHAPTER 16

CLASS V INJECTION WELL

(X) New
() Modified

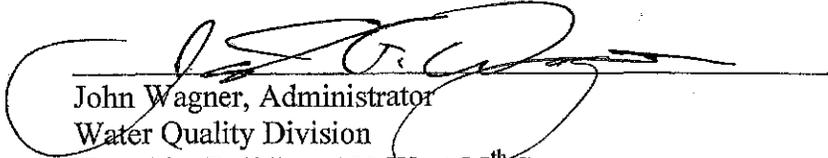
Permit Number **11-310**
UIC Facility Number WYS-013-00109

In compliance with the Wyoming Environmental Quality act (W.S. 35-11-101 through 1104, specifically 301(a)(i) through 301 (a)(iv), Laws 1973, Ch. 250, Section 1) and Wyoming Water Quality Rules and Regulations, Chapter 16.

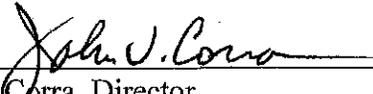
Applicant: Cameco Resources
550 North Poplar, Suite 100
Casper, WY 82601
(307) 237-2128

Cameco Resources, hereafter referred to as the Permittee, is authorized to construct and operate Gas Hills DDW #1 in Section 29; Township 33 North; Range 89 West, and Gas Hills DDW #2 in Section 3; Township 32 North; Range 90 West, of the 6th Principal Meridian, Fremont County; according to the procedures and conditions of application **11-310** and requirements and other conditions of this permit. Issuance of this permit does not obligate the Department of Environmental Quality to approve injection if doing so would endanger human health or the environment or if the well does not comply with all the terms and conditions of this permit.

This permit shall become effective on date of issuance and be valid for a period of two (2) years.


John Wagner, Administrator
Water Quality Division
Herschler Building, 122 West 25th Street
Cheyenne, WY 82002
(307)-777-7781

11/3/11
Date


John V. Corra, Director
Department of Environmental Quality
Herschler Building, 122 West 25th Street
Cheyenne, WY 82002

11/3/11
Date

JP/rm/11-0965

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A. Discharge Zone(s)

Gas Hills DDW #1 injection well is authorized to inject into the Phosphoria formation, Tensleep formation, Madison formation, and Flathead formation within the intervals specified in **Table 1**.

Table 1. Discharge Zone(s)

Formation Names	Surface Elevation	Depth to Top of Discharge Zone	Depth to Bottom of Discharge Zone	Gross Discharge Zone Thickness	Well Depth
Phosphoria	6,775 ft	1,613 ft	1,783 ft	170 ft	
Tensleep		1,951 ft	2,269 ft	318 ft	
Madison		2,472 ft	2,786 ft	314 ft	
Flathead		3,488 ft	3,645 ft	157 ft	3,850 ft

Gas Hills DDW #2 injection well is authorized to inject into the Cloverly formation, Morrison formation, Nugget formation, Phosphoria formation, Tensleep formation, Madison formation, and Flathead formation within the intervals specified in **Table 2**:

Table 2. Discharge Zone(s)

Formation Names	Surface Elevation	Depth to Top of Discharge Zone	Depth to Bottom of Discharge Zone	Gross Discharge Zone Thickness	Well Depth
Cloverly	6,915 ft	830 ft	880 ft	50 ft	
Morrison		904 ft	1,129 ft	225 ft	
Nugget		1,355 ft	1,645 ft	290 ft	
Phosphoria		2,753 ft	2,922 ft	169 ft	
Tensleep		3,091 ft	3,404 ft	313 ft	
Madison		3,607 ft	3,921 ft	314 ft	
Flathead		4,323 ft	4,480 ft	157 ft	4,750 ft

Additional perforations in addition to those listed in the application may be installed within the intervals given above. Estimated depths and gross thicknesses are based on sparse well control in the area and may vary by (+ -) 50 feet. As such, completions in excess of (+ -) 50 feet above or below the intervals identified in **Table 1** and **Table 2** require the prior written approval of the Administrator.

B. Well Location and Area of Review

The injection wells authorized by this permit are identified in **Table 3** as follows:

Table 3 (Injection Well Public Land Survey Locations)

Well Name	Legal Description	Latitude	Longitude
Gas Hills DDW #1	SWNE S29;T33;R89	42.80506356	-107.52816233
Gas Hills DDW #2	NENW S3; T32; R90	42.77995739	-107.59524881

*NAD83 (meters)

The Area of Review (radius of volumetric fillup) was calculated as follows:

Table 4 (Areas of Review Information)

Gas Hills DDW #1	Phosphoria Hensleep Madison Flathead
Porosity (%)	12-20
Time of Operation	5 days
Maximum Injection Rate per Well (barrels/day)	5,143
Approximate Length of Perforated Intervals (feet)	15-150
Radius (feet)	2,234*
Gas Hills DDW #2	Mottison Cloverly Nugget Phosphoria Hensleep Madison Flathead
Porosity (%)	10-25
Time of Operation	5 days
Maximum Injection Rate per Well (barrels/day)	5,143
Approximate Length of Perforated Intervals (feet)	10-150
Radius (feet)	2,234*

* Largest for any formation (360 acre circle)

There are no wells which penetrate the confining units of the proposed injection wells within the Areas of Review. Due to the limited nature of the testing, the total volume of injected fluid will not exceed 282,865 barrels for both wells (11 formations * 5 days/formation * 5,143 bbl/day) and the injection rate will not exceed 5,143 bbl/day/well/formation. After testing has been completed, both wells will be shut in.

C. Groundwater Classification

The groundwater quality in the tested formations will be variable and likely to be classified between Class III and Class VI. One objective of the proposed test wells is to classify the groundwater in each formation by water quality. Water samples will be collected from all perforated formations for both wells to confirm groundwater classifications.

Confinement above the uppermost discharge zone (Cloverly formation) is provided by a marine siltstone of the Dinwoody formation which is at least 88 feet thick.

Confinement below the lowermost discharge zone (Flathead formation) is provided by Precambrian igneous rocks.

D. Authorized Operations

The Permittee is authorized to drill and construct the wells and conduct testing as follows:

1. Drill and complete the wells as identified in Exhibits 4 and 5 of the application submittal dated July 22, 2011.

2. Conduct drill stem tests and/or wireline sampling of formation fluids as described on **page 13** of the application and **Exhibit 12** of the application submittal dated July 22, 2011.
3. Run open-hole and cased-hole geophysical logs as described on **page 13** of the application submittal dated July 22, 2011.
4. Install casing and complete cement jobs as per **Exhibits 4** and **5** of the application submittal dated July 22, 2011.
5. Measure and record surface and down-hole pressures.
6. Conduct step-rate injection tests of perforated intervals identified in **Exhibits 4** and **5** of the application submittal dated July 22, 2011.
7. Conduct pressure fall-off tests by injecting permitted fluids and then shutting the well in and measuring the pressure decline. For the first test of each formation, the minimum duration of injection and fall-off shall be calculated according to the equations on page A-4 of the "UIC Pressure Falloff Testing Guideline" (USEPA Region 6, August 2002), or the equivalent equations in subsequent editions. To inject at sustained rates of more than 5,143 bbl/day for the fall-off test, the Permittee shall first obtain the written approval of the Administrator.
8. The injectate water quality parameters may not exceed any primary drinking water standard listed under 40 CFR part 142 or the baseline groundwater standard for each parameter **for each formation**, whichever is greater.
9. Fluid injection during testing shall not make the affected water unsuitable for its intended use or uses, at any place or places of withdrawal or natural flow to the surface.
10. Prior to injection, the Permittee shall obtain the approval of the Administrator for the proposed injectate composition.
11. The Permittee shall notify the Water Quality Division of the various stages of well construction and testing and water sampling, as requested by the Water Quality Division.

E. Hazardous Waste

This permit does not allow for the injection of any hazardous waste as defined in 40 CFR 261.3 and in Wyoming Solid Waste Management Rules and Regulations, Chapter 2. Injection of any substance defined as a hazardous waste, whether hazardous by listing or by characteristic is a violation of this permit.

F. Proper Operation and Maintenance

The Permittee shall take all reasonable steps to minimize or correct any adverse impact on the environment resulting from noncompliance with this permit. The Permittee shall operate and

maintain all facilities and systems of treatment and control which are installed or used by the Permittee to achieve compliance with the conditions of the permit. Proper operation and maintenance includes mechanical integrity of the wells, effective performance, adequate funding, Permittee staffing and training, and laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems only when necessary to achieve compliance with the conditions of this permit.

The injection wells covered by this permit shall meet all construction requirements outlined in Wyoming Water Quality Rules and Regulations, Chapter 16, Section 10 and Chapter 13, Section 11, paragraphs a, b, and c.

The Permittee is required to operate in accordance with statements, representations and procedures presented in the permit application and supporting documents as accepted and approved by the Administrator. Any modifications which will result in a violation of permit conditions shall be reported by submission of a new or amended permit application and shall not be implemented until a new or modified permit has been issued. Injection may not begin until construction is complete and written approval is obtained from the Administrator.

G. Entry and Inspection

The Permittee shall allow personnel designated by the Administrator (upon presentation of credentials and during normal working hours) to enter the premises where a regulated facility is located, or where records are kept under the conditions of this permit and inspect and photograph the discharge and related facilities, review and copy reports and records required by this permit, collect fluid samples for analysis, measure and record water levels, and perform any other function authorized by law or regulation.

H. Environmental Monitoring Program for Groundwaters of the State

General Requirements:

1. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.
2. Electronic Data Deliverable (EDD) Reporting – The permittee shall use EDD reporting if required by the Administrator.
3. The Permittee shall retain records of all monitoring information including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of the reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least three years from the date of the sample measurement, report, or application. This period may be extended by request of the Administrator at any time.
4. Records of monitoring information shall include:
 - a. The date, exact place, and time of sampling or measurements;

- b. The initials or name(s) of the individual(s) who performed the sampling or measurements;
 - c. The date(s) analyses were performed;
 - d. The time(s) analyses were initiated;
 - e. The initials or name(s) of the individual(s) who performed the analyses;
 - f. References and written procedures for the analytical techniques or methods used;
 - g. The results of such analyses, including the bench sheets, instrument readouts, computer disks or tapes, etc., used to determine these results.
5. Monitoring must be conducted according to test procedures approved under 40 CFR Part 136, unless other test procedures have been specified in this permit.
 6. The Permittee shall retain all records concerning the nature and composition of injected fluids until five (5) years after completion of any specified plugging and abandonment procedures. The Administrator may require the owner/Permittee to deliver the records to the Administrator at the conclusion of the retention period.
 7. The Permittee shall report any noncompliance which may endanger health or the environment within twenty-four (24) hours from the time the Permittee becomes aware of the circumstances. The report should include:
 - a. Any monitoring or other information which indicates that any contaminant may cause an endangerment to a usable groundwater of the state;
 - b. Any noncompliance with a permit condition or malfunction of the discharge (injection) system which may cause fluid migration into or between usable ground waters of the state;
 - c. A written submission shall be provided within five (5) days of the time the Permittee becomes aware of the circumstances. This written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected; the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.
 8. The Permittee shall report all instances of noncompliance not reported otherwise, at the time monitoring reports are submitted.
 9. Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than thirty (30) days following each schedule date.
 10. The Permittee shall notify the Department fifteen (15) days prior to the spudding of each new injection well so that a joint field inspection may be coordinated between both parties during well construction.
 11. The Permittee shall notify the Department thirty (30) days prior to conducting the two-part mechanical integrity tests for each well.

Specific Requirements:

12. The Permittee shall collect water samples from all formations perforated and have them analyzed for all the constituents listed in Wyoming Water Quality Rules and Regulations (WWQRR) Chapter 8, Table 1, and EPA Method 624 (long list).
13. The Permittee shall collect injectate samples (from each source of injectate) and have them analyzed for all the constituents listed in WWQRR Chapter 8, Table 1, and EPA Method 624 (long list). The Permittee shall submit the lab results with a preliminary ground water classification (based upon WWQRR Chapter 8, Table 1) to the Department prior to injection.
14. The Permittee shall measure static reservoir pressure, static water level, or conduct a pressure falloff test in the completed formation(s) to determine the hydraulic head.
15. A baseline temperature survey shall be logged from the base of the conductor casing to the total well depth prior to any injection or other tests.
16. The Permittee shall measure and record times and injection rates during step-rate and pressure fall-off tests.
17. The Permittee shall conduct a radioactive tracer, spinner, or other test to estimate the proportion of injected fluid accepted within each perforated interval. If only one perforated interval is injected into at one time this will not be required.
18. The Permittee shall continuously measure and record the casing-annulus pressure.
19. A report describing the drilling and cementing of the permitted well(s) shall be submitted to the Administrator within thirty (30) days of completing the cement jobs. A report describing the well perforating, testing, completion, cement bond log, and injectate water analysis shall be submitted to the Administrator within ninety (90) days of well completion. Both reports are required prior to injection into the Class V wells at the Cameco Resources Gas Hills facility. The mailing address is: UIC Program Supervisor, DEQ – Water Quality Division, Herschler Building – 4W, 122 W. 25th St., Cheyenne, WY 82002.

I. Requirements for Monitoring the Discharge

The Permittee shall obtain the approval of the Administrator prior to injecting fluid for testing purposes. The Permittee shall provide the Administrator with information on the water quality of the injection zone which will allow the Administrator to classify the groundwater.

There are no sampling or analytical requirements for this discharge. The Permittee shall report to the Water Quality Division the quantities and sources of all fluids injected and the amounts and chemical names of anything added to the injected fluids.

J. Test Procedures

All samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. All samples taken shall include a trip blank of distilled water for each sampling date and at least one duplicate sample shall be collected during each year in which sampling occurs. All required analyses shall be conducted in compliance with WWQRR, Chapter 8, Section 7.

K. Records and Reports

The Permittee shall furnish to the Administrator within a specified time any information which the Administrator may request relating to the operation of the facility, including copies of records required to be kept by this permit. The Permittee shall retain copies of all records and reports required by this permit for a period of three (3) years following permanent well abandonment. After that time, those records shall be delivered to the Administrator for disposal or archive at his discretion. Reports of compliance or noncompliance with, and any progress reports on, interim and final requirements contained in any compliance schedule shall be submitted no later than thirty (30) days following each schedule date. Confirmed noncompliance resulting in the migration of injected fluid into any zone outside the permitted receiver shall be reported to the Administrator within twenty-four (24) hours, and a written submission (via certified mail) shall be provided within five (5) days of the time the Permittee becomes aware of the excursion. The written submission shall contain: a description of the noncompliance; the period of noncompliance, including exact dates and times, and if the noncompliance has not been controlled, the anticipated time it is expected to continue; and a list of the steps taken or planned to reduce, eliminate, and prevent the recurrence of the noncompliance. Confirmed noncompliance not already reported under this section shall be reported at the time monitoring reports are submitted. The reports shall contain the same information as required by the paragraph above. The Permittee shall notify the Administrator thirty (30) days in advance of any planned alteration, conversion, or abandonment of the wells covered by this permit.

L. Permit Actions

This permit is issued for a period of two (2) years. If the Permittee wishes to continue injection after the expiration date of this permit, he shall apply to the Administrator and obtain a new permit prior to the expiration date of this permit. It shall not be a defense for the Permittee in an enforcement action that it would be necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit. The filing of a request by the Permittee, or at the instigation of the Administrator, for permit modification, revocation, termination, or notification of planned changes or anticipated noncompliance shall not stay any condition of this permit.

After notice and opportunity for a hearing, a permit may be modified, suspended or revoked in whole or part during its term for cause which includes, but is not limited to any of the following:

1. Violation of this permit;
2. Obtaining a permit by misrepresentation of facts in the application; or
3. Failure of the tubing, casing, cement, or confining layers.

A permit may be modified at any time as may be required, including for conformity with changes in regulations or standards which occur after the permit was issued. A permit may be modified in whole or part in order to apply more or less stringent standards; or prohibitions for toxic or other substances present in the Permittee's discharge as may be ordered by the Environmental Quality Council.

M. Mechanical Integrity

The well(s) and associated facilities are required to have mechanical integrity that demonstrate the unimpaired condition of the well and facilities. The approved procedures for demonstrating the mechanical integrity for the well and associated facility authorized by this permit are as follows:

Part I Mechanical Integrity test shall demonstrate the absence of leaks through the packer, casing, and wellhead.

An initial pressure test shall be performed on each test well prior to perforating and testing using the criteria below.

Mechanical integrity shall be maintained continuously. The Permittee shall pressure test the casing of each well prior to injection and at least once every five (5) years. The casing-tubing annulus for each well shall be pressure tested to 0.25 psi/foot times the true vertical depth to the top of the packer. A pressure change of less than 10% after thirty (30) minutes shall be considered successful.

Once the well has passed the Part I Mechanical Integrity Test, the casing-annulus pressure shall be continuously maintained (between 200 psig and 800 psig) and continuously recorded.

Part II Mechanical Integrity test shall demonstrate the absence of fluid movement behind the casing above the topmost perforation.

The Permittee shall perform either a Radioactive Tracer Survey, Oxygen Activation log or Cement Bond log, and Temperature log on this well. The temperature log shall be run with the well shut in and shall be recorded while the tool is lowered into the hole.

Reports of mechanical integrity tests shall be submitted to the Administrator no later than sixty (60) days after completion of the tests. The mailing address is: UIC Program Supervisor, DEQ - Water Quality Division, Herschler Building - 4W, 122 W. 25th St., Cheyenne, WY 82002.

Wells which have not demonstrated both parts of the Mechanical Integrity test shall be shut in until mechanical integrity has been restored and the required tests have been passed.

N. Abandonment or Conversion

General Requirements:

1. The Permittee shall notify the Administrator at least seven (7) days before conversion or abandonment of the facility.
2. The permitted well(s) may be converted to a Class I disposal well upon issuance of a Class I permit.
3. An abandonment report, detailing the compliance with abandonment procedures outlined in the original application for coverage under this general permit, or describing any deviations from the original plan, shall be submitted as soon as practicable after abandonment. The abandonment shall include reclamation of the well site.
4. In no case shall the abandonment procedure be less stringent than that required at the time of abandonment by the Wyoming Oil and Gas Conservation Commission for the abandonment of producing oil wells.

O. Duties of the Permittee

The Permittee shall give advance notice to the Administrator as soon as possible of any planned physical alteration or additions, other than authorized operation and maintenance, to the permitted facility and receive authorization prior to implementing the proposed alternation or addition. The Permittee shall furnish the Administrator within a reasonable time any information which the Administrator may request to determine whether cause exists for modifying, revoking, or reissuing, or terminating this permit; or to determine compliance with this permit; and to furnish to the Administrator upon request, copies of records required to be kept by this permit. Any modification which may result in a violation of a permit condition shall be reported to the Administrator, and any modification that will result in a violation of any permit conditions shall be reported to the Administrator through the submission of a new or amended permit application. The Permittee shall report all instances where he becomes aware that he failed to submit any relevant facts in the permit application, or where he submitted incorrect information in a permit application or in any report to the Administrator, and shall promptly submit such facts or information.

P. Financial Responsibility

Class V injection wells are not required to maintain financial assurance. However the Permittee is advised that if one or both Class V test wells are ever converted to Class I injection wells, the following will apply:

1. The permittee is required to maintain financial assurance, in a form approved by the Administrator, to close, plug, and abandon the permitted well and to reclaim the surface facilities in a manner approved by the Administrator. Well construction may not begin until the Administrator has received and approved the permittee's financial instrument.
2. The obligation to maintain financial responsibility survives the termination of the permit and the cessation of injection.
3. If the institution issuing the financial instrument files for bankruptcy or loses its authority to issue financial instruments, the permittee shall notify the Administrator within 14 days and obtain other financial assurance within 60 days. If the permittee is named as debtor in

any voluntary or involuntary bankruptcy proceeding, it must notify the Administrator within fourteen (14) days.

4. The minimum financial assurance for the permitted wells will be \$54,100 for Gas Hills DDW #1 and \$62,100 for Gas Hills DDW #2 as per **Exhibit 11** of the application submitted July 22, 2011. This, or a replacement, financial instrument shall be maintained as long as the well is covered under this permit.

Q. Signatories Requirement

All reports filed in conjunction with this permit shall contain the following certification:

"I certify, under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

All reports required by this permit and other requested information shall be signed as follows:

For a corporation – by a principal executive officer of at least the level of vice-president;

For a partnership or sole proprietorship – by a general partner or the proprietor, respectively;

For a municipality, state, federal, or other public agency – by either a principal executive officer or ranking elected official;

or

By a duly authorized representative for any of the above. A person is a duly authorized representative only if:

1. The authorization is made in writing by one of the prescribed principals;
2. The authorization specifies either an individual or position having responsibility for the overall operation of the regulated facility or activity; and
3. The written authorization is submitted to the Administrator.

If an authorization is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization must be submitted to the Administrator prior to or together with any reports or information, to be signed by the new authorized representative.

R. Noncompliance

The Permittee shall comply with all conditions of the permit. Any permit noncompliance constitutes a violation of Wyoming Water Quality Rules and Regulations, Chapter 16 and is grounds for enforcement action, permit termination, revocation, or modification. Noncompliance resulting in a violation shall be reported to the Administrator orally at (307) 777-7781 within twenty-four (24) hours, and a written submission shall be provided within five (5) days of the time the Permittee becomes aware of the violation. The written report shall contain the sections specified in Section K of this permit. Any permit noncompliance constitutes a violation of this permit.

The filing of any request by the Permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.

S. Permit Transfer

Any transfer of this permit shall be accomplished by the submission of the proper forms for permit transfer to the Administrator. Transfer of this permit must first be approved by the Administrator and the Director. No transfer shall be approved unless the proposed Permittee agrees to bring any and all noncompliance issues into compliance with this permit. The Permittee is alone responsible for the operation of the facility covered by this permit. Sale of the facility and subsequent operation of this facility by another is a violation of this permit unless a transfer of this permit has first been accomplished.

T. Property Rights

This permit does not convey any property rights of any sort or any exclusive privilege. This permit does not authorize injury to private property or any invasion of personal rights, nor any infringement of federal, state, or local laws or regulations.

U. Severability

Nothing in this permit shall be construed to preclude the institution of any legal action or to relieve the Permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable state law or regulation.

The provisions of this permit are severable, and if any provision of the permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit shall not be affected thereby.

Hi John / John -

These are test wells for collecting
data & classifying GW only.

They can only inject water for testing.

May - Convert to Class I pending
DEQ & EPA Approval.

~~Thanks~~
JP

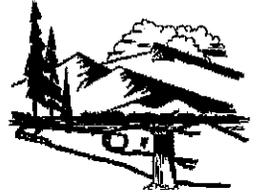
OK

JP



Department of Environmental Quality

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



Matthew H. Mead, Governor

John Corra, Director

November 1, 2011

Cameco Resources
Attn: Thomas P. Young
550 North Poplar, Suite 100
Casper, WY 82601

RE: Cameco Resources, Gas Hills DDW #1 and DDW #2
Final Permit 11-310, Class V
Fremont County, Wyoming

Dear Mr. Young:

Attached please find one copy of the Class V permit. This permit requires testing, reporting, and data submittal identified within the permit. The corresponding report forms can be filled out using our on-line webform (Monitor Reports Link), or one may have the lab submit them using Electronic Data Deliverable (EDD) at the following site: <https://gem.trihydro.com>

The underground injection control program was promulgated to prevent serious problems caused by direct discharges to the groundwater. Those problems included groundwater pollution leading to contamination in domestic water wells and serious health effects caused by exposures to toxic substances and water borne pathogens. Your cooperation with our program is sincerely appreciated.

If you have any questions please do not hesitate to contact me at (307) 777-5623 or by email at john.passehl@wyo.gov

Sincerely,

John A. Passehl, P.G.
UIC Geology Supervisor
Water Quality Division

JP/rm/11-0965

Enclosure: Permit

cc: Bonnie Percy, P.E., Gene R. George & Associates, III West Second Street, Suite 400, Casper, WY 82602
Kevin Frederick, WDEQ



WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY
WATER QUALITY DIVISION
PERMIT TO CONSTRUCT

PERMIT NO. 11-311

Ross Recovery
Commercial Oilfield Wastewater Evaporation Pond

This permit hereby authorizes the applicant:

Ross Recovery, Inc.
3493 Ross Road
Douglas, Wyoming 82633

to construct, install or modify up to two (2) evaporative pond cells and associated separation facilities for disposal of oilfield exploration and production wastewaters, according to the procedures and conditions of the application number 11-311. The facility is located near the center of the south half of Section 13, Township 39 North, Range 75 West, in the county of Converse, in the State of Wyoming. The facility is located approximately 40 miles northeast of Glenrock, Wyoming. All construction, installation, or modification allowed by this permit shall be completed by September 1, 2016.

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 11 The applicant will notify the CBM / Oil and Gas Group, Water Quality Division, 152 North Durbin Street, Suite 100, Casper, WY 82601, Phone 307-473-3465, FAX 307-473-3458 of the date construction will begin and the estimated completion date.
- 2 of 11 The applicant will provide the CBM / Oil and Gas Group, Water Quality Division, 152 North Durbin Street, Suite 100, Casper, WY 82601, the name of the type and brand of the primary and secondary liner, the liner manufacturer(s), the liner installation contractor(s), and all other required documentation related to the liners, at least two weeks prior to beginning construction. The manufacturer(s) will need to submit recommended installation methods that include cold weather installation. At a minimum, installation should be conducted in accordance with "Cold Weather Seaming of Geomembranes", Geosynthetic Institute, GRI Test Method GM9 or a comparable method.
- 3 of 11 The applicant will provide immediate oral or written notice to the CBM / Oil and Gas Group, Water Quality Division, 152 North Durbin Street, Suite 100, Casper, WY 82601, Phone 307-473-3465, FAX 307-473-3458, 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.
- 4 of 11 Within sixty days of completion of construction of the authorized facility, the applicant will submit to the CBM / Oil and Gas Group, Water Quality Division, 152 North Durbin Street, Suite 100, Casper, WY 82601, 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.
- 5 of 11 The review and approval of this permit is based upon the items identified in the attached "Statement of Basis".
- 6 of 11 Measurement of depth to groundwater and testing of groundwater is to be performed prior to filling any ponds at this facility. Groundwater monitoring will be conducted on a quarterly basis and results reported to DEQ within a month after receiving laboratory analytical reports. Samples will be submitted for the following analysis:
 - a) electrical conductivity

- b) pH
- c) chloride
- d) sodium
- e) alkalinity
- f) sulfate
- g) total dissolved solids

The analyte list and monitoring frequency are subject to revision as needed by CBM / Oil and Gas Group, Water Quality Division.

- 7 of 11 The leak detection system is to be checked weekly for the first month following filling of a pond and monthly thereafter with a log kept of the inspection results. As new ponds are constructed, the leak detection system is to be checked weekly for the first month. If fluid is found, the DEQ CBM / Oil and Gas Group is to be notified immediately, and samples are to be pulled from the inspection pipes and tested for total petroleum hydrocarbons (TPH) by EPA Method 8015 (modified), chlorides, total dissolved solids (TDS) and sulfates. Results are to be reported to DEQ as soon as they are available. Testing requirements are subject to revision as needed.

If a leak is confirmed, the pond(s) will be pumped dry of all wastewater. No additional wastewater will be placed into the pond(s) until a complete inspection and test of the liner is completed.

- 8 of 11 Fluids in the ponds are to be checked annually for the following constituents. Each pond will be sampled and analyzed separately in accordance with the following list:

- a) electrical conductivity
- b) pH
- c) chloride
- d) sodium
- e) alkalinity
- f) sulfate
- g) barium
- h) total dissolved solids

The results of the pond analyses are to be reported to DEQ within one month after receiving laboratory analytical reports. The analyte list and monitoring frequency are subject to revision by CBM / Oil and Gas Group, Water Quality Division.

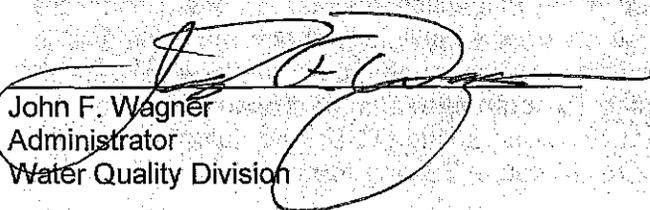
- 9 of 11 The facility is authorized to receive oilfield exploration and production waste (production water, produced water, and frac water), exempt from RCRA regulations by EPA. Any other waste must be approved on a case by case basis by the DEQ and the owner. Prior to approval for disposal by DEQ/WQD, all other waste will be subject to rules, regulations, policies, and/or procedures related to hazardous waste determination and disposal, as issued or promulgated by DEQ/Solid and Hazardous Waste Division (SHWD).

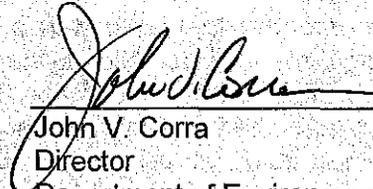
- 10 of 11 The validity of this permit is subject to the owner maintaining a bond acceptable to the State of Wyoming, DEQ/WQD for the amount of the facility closure and post-closure costs. The bonding amount is subject to review on an annual basis.

- 11 of 11 An annual report will be submitted to DEQ CBM / Oil and Gas Group by April 1 of each year. The annual report will include relevant details of the construction, modification, and operation details of the facility from the previous year, any anticipated construction, modification and/or operational changes for the upcoming year. The report will include a

discussion and analysis of the groundwater monitoring, leak detection monitoring and pond analysis. A listing of all non exploration and production wastes accepted by the facility will also be included in the annual report. This listing shall include generator, type of waste, amount and date of disposal. The annual report will also include a review of the closure and post closure requirements, including financial costs. A renewal of the bond will be required as part of the annual report. Reporting requirements are subject to modification by DEQ.

AUTHORIZED BY:


John F. Wagner
Administrator
Water Quality Division


John V. Corra
Director
Department of Environmental Quality

9-23-11
Date of Issuance

JDL/KJM/rm/11-0881

cc: Darrin Tromble, WWC Engineering, 6000 East 2nd Street, Suite 1004, Casper, WY 82609

STATEMENT OF BASIS

1. Permit Number: **11-311**

2. Application reviewed for compliance with the following applicable regulations :

Chapters 3 and 11 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 or differing from applicable regulations and approval is based upon a deviation in accordance with Section 5.

a. The permit includes approval to deviate from the following regulatory requirements:

Not applicable

b. Briefly state the basis for the deviation.

Not applicable

c. Permit approval is based upon deviation from applicable regulations in accordance with approved policy statement.

Not applicable

5. A review to determine groundwater impacts in accordance with Section 17, Chapter 3 was required.

6. If Section 17 of Chapter 3 review is required, indicate the basis for determining groundwater will be protected.

The facility will not allow a discharge to groundwater.

Each pond will have a primary liner of 60 mil high density polyethylene with a 40 mil high density polyethylene secondary liner. A compacted clay subgrade will be installed under the secondary liner. A leak detection system will be installed between the two liners. Groundwater monitoring wells will also be installed at the facility to monitor groundwater on a quarterly basis.

Quality of wastewater is such that it will not cause a violation of groundwater standards.

Not applicable

Existing soils or geology will not allow a discharge to groundwater.

Not applicable

The facility is designed and will be operated so that it will not to violate groundwater standards.

Not applicable

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:

Not applicable

If any groundwater quality standards are to be exceeded, briefly describe how any users of the affected aquifer will be protected. The description should include the water quality standard affected, the anticipated maximum concentration, the property boundaries, places of groundwater withdrawal and any other relevant information.

Not applicable

Briefly describe monitoring plan. The groundwater monitoring plan includes the monitoring wells or other sampling points, the parameters to be analyzed, the sampling frequency and reporting methods.

The leak detection system will be checked weekly for the first month after the ponds are filled. A log will be kept of the inspection results. The leak detection system is also monitored by a high level alarm system. If fluid is found, DEQ will be notified immediately. If a leak is confirmed, the pond(s) will be pumped dry of all wastewater. No additional wastewater will be placed into the pond(s) until a complete inspection and test of the liner is completed.

Measurement of depth to groundwater and testing of groundwater is to be performed prior to filling any ponds at this facility. Groundwater monitoring will be conducted on a quarterly basis and results reported to DEQ within a month after receiving laboratory analytical reports. If groundwater monitoring indicates a release to groundwater, a plan to investigate the extent of the release will be submitted to DEQ within 30 days after confirming the release for DEQ's approval. Following approval, the plan will be implemented.

Fluids in the pond are to be checked annually for hazardous constituents by collecting a sample from each pond in operation.

Operational concerns will be identified in an annual report to be submitted to DEQ by April 1 of each year. Any changes in operations, a discussion of groundwater monitoring, leak detection system operation, and pond characterization is to be included in the annual report.

The permit should clearly state the parameters to be utilized for determining compliance and what occurrences constitute a violation. The permit should identify the corrective actions to be taken in the event of a violation of a groundwater standard.

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 Kim Medina and Dennis Lamb, CBM / Oil and Gas Group and completed on June 20, 2011. 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."

STATE OF WYOMING
DEPARTMENT OF ENVIRONMENTAL QUALITY
UNDERGROUND INJECTION CONTROL PERMIT ISSUED UNDER
WYOMING WATER QUALITY RULES AND REGULATIONS
CHAPTER 16

CLASS V INJECTION WELL

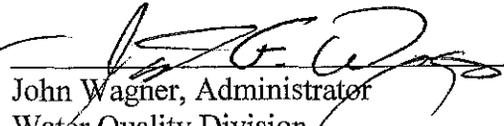
() New Permit Number **11-312**
(X) Modified (Renewal) Previous Permit Number(s) UIC 01-356
Facility Number WYS-039-003
State Subclass: 5E3

In compliance with the Wyoming Environmental Quality act (W.S. 35-11-101 through 1104, specifically 301(a)(i) through 301 (a)(iv), Laws 1973, Ch. 250, Section 1) and Wyoming Water Quality Rules and Regulations, Chapter 16.

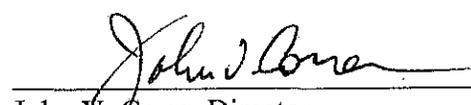
Applicant: R Lazy S Ranch
Attn: Mr. Kelvin Stirn
P.O. Box 308
Teton Village, WY 83025
(307) 733-7655

R Lazy S Ranch, hereafter referred to as the permittee, is authorized to continue operating the septic system located in the NE $\frac{1}{4}$ of the NW $\frac{1}{4}$ of Section 20, Township 42 North, Range 116 West, of the 6th Principal Meridian, Teton County. The permittee is allowed to operate the facility according to the procedures, conditions, and requirements of this permit.

This permit shall become effective on date of issuance.


John Wagner, Administrator
Water Quality Division
Herschler Building, 122 West 25th Street
Cheyenne, WY 82002
(307)-777-7781

10/31/11
Date


John V. Corra, Director
Department of Environmental Quality
Herschler Building, 122 West 25th Street
Cheyenne, WY 82002

10/31/11
Date

CAT/rm/11-0963

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A. Discharge Zone

The septic system is authorized to inject a maximum of 5,050 gallons per day and an average of 3,030 gallons per day. The primary treated wastewater is injected into the Alluvial Aquifer along the Snake River. Distance to groundwater in the area of discharge is approximately 8 feet below land surface.

B. Well and Area of Review

The injection well authorized by this permit is located as follows:

NE¼ of the NW¼ of Section 20, Township 42 North, Range 116 West, of the 6th Principal Meridian, Park County

The Area of Review is defined as a circular area of 360 acres with the injection facility located near its center.

The Area of Review is based upon the following assumptions:

Table 1 (Area of Review Inputs)

Description	Inputs	Units
Permit Duration	10	Years
Porosity	20	Percent
Maximum Injection Rate	5,050	GPD
Thickness of Receiver	4.5	Feet
Area of Review	360	Acres
Hydraulic Conductivity	12	Feet/Day

C. Groundwater Classification

The groundwater in the Alluvial Aquifer along the Snake River is classified as Class I according to Wyoming Water Quality Rules and Regulations, Chapter 8. This classification is made because the groundwater in this formation is currently being used for domestic purposes at several nearby points of withdrawal. Additionally, the groundwater in most of the alluvial aquifer meets all the Class I water quality standards set forth in Chapter 8. Groundwater of Class I shall not be degraded to make it unusable as a source of water for this purpose. An aquifer that contains less than 10,000 mg/L total dissolved solids (and is not exempted) can be considered an underground source of drinking water.

D. Authorized Operations

The permittee is authorized to inject 5,050 gallons per day maximum and 3,030 gallons per day average. The wastewater consists of primarily treated domestic wastewater produced from a guest ranch consisting of 9 cabins. The septic system is composed of multiple septic tanks and pump chambers collected to a pressure-dosed, mounded leachfield. The wastewater is injected into the Alluvial Aquifer along the Snake River and is described as primary treated domestic sewage from septic tanks.

If additional sewage flows are added beyond those identified in the permit application, the leach field and/or treatment system may need to be enlarged in which case the permittee must submit a

revised application and receive a new permit prior to modification of the leach field or treatment system.

E. Hazardous Waste

This permit does not allow for the injection of any hazardous waste as defined in 40 CFR 261.3 and in Wyoming Solid Waste Management Rules and Regulations, Chapter 2. Injection of any substance defined as a hazardous waste, whether hazardous by listing or by characteristic is a violation of this permit.

F. Proper Operation and Maintenance

The permittee shall take all reasonable steps to minimize or correct any adverse impact on the environment resulting from noncompliance with this permit. The permittee shall operate and maintain all facilities and systems of treatment and control which are installed or used by the permittee to achieve compliance with the conditions of the permit. Proper operation and maintenance includes: effective performance, adequate funding, operator staffing and training, and laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems only when necessary to achieve compliance with the conditions of this permit. The injection wells covered by this permit shall meet all construction requirements outlined in Wyoming Water Quality Rules and Regulations, Chapters 11, 16, and 25.

The permittee is required to operate in accordance with statements, representations and procedures presented in the complete permit application and supporting documents as accepted and approved by the Administrator. Any modifications which will result in a violation of permit conditions shall be reported by submission of a new or amended permit application and shall not be implemented until a new or modified permit has been issued. Injection into a well may not begin until construction is complete and the permit is approved.

G. Entry and Inspection

The permittee shall allow the Administrator (upon presentation of credentials and during normal working hours) to enter the premises where a regulated facility is located, or where records are kept under the conditions of this permit and inspect and photograph the discharge and related facilities, review and copy reports and records required by this permit, collect fluid samples for analysis, measure and record water levels, and perform any other function authorized by law or regulation.

H. Environmental Monitoring Program for Groundwaters of the State

General Requirements:

1. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.
2. The permittee shall retain records of all monitoring information including all calibration and maintenance records, copies of the reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least three (3) years from

the date of the sample measurement, report, or application. This period may be extended by request of the Administrator at any time.

3. The permittee shall use electronic data deliverable (EDD) reporting when required by the Administrator.
4. Records of monitoring information shall include:
 - a. The date, exact place, and time of sampling or measurements;
 - b. The initials or name(s) of the individual(s) who performed the sampling or measurements;
 - c. The date(s) analyses were performed;
 - d. The time(s) analyses were initiated;
 - e. The initials or name(s) of the individual(s) who performed the analyses;
 - f. References and written procedures for the analytical techniques or methods used;
 - g. The results of such analyses, including the bench sheets, instrument readouts, computer disks or tapes, etc., used to determine these results.
5. Monitoring must be conducted according to test procedures approved under 40 CFR Part 136, unless other test procedures have been specified in this permit.
6. The permittee shall retain all records concerning the nature and composition of injected fluids until five (5) years after completion of any specified plugging and abandonment procedures. The administrator may require the owner/operator to deliver the records to the administrator at the conclusion of the retention period.
7. The permittee shall report any noncompliance which may endanger health or the environment within 24 hours from the time the operator becomes aware of the circumstances. The report should include:
 - a. Any monitoring or other information which indicates that any contaminant may cause an endangerment to a usable groundwater of the state;
 - b. Any noncompliance with a permit condition or malfunction of the discharge (injection) system which may cause fluid migration into or between usable ground waters of the state;
 - c. A written submission shall be provided within 5 days of the time the operator becomes aware of the circumstances. This written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected; the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.
8. The permittee shall report all instances of noncompliance not reported otherwise, at the time monitoring reports are submitted.

9. The monitoring reports shall be submitted on forms provided by the Department. Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 45 days following each schedule date.

I. Requirements for Monitoring the Discharge

The groundwater in the receiving formation shall be sampled and the following parameters analyzed according to the schedule identified in **Table 2**. The following parameters shall be analyzed **semi-annually** and reported annually:

Table 2 (Annual Groundwater Monitoring Schedule)

WELL NAME OR NUMBER	SAMPLING SCHEDULE	ANALYTICAL METHOD	PARAMETER ANALYZED	PERMIT LIMIT or UCL
Monitoring Well	Semi-Annually (May and November)	EPA A 4500 NH ₃ G	Ammonia as N	0.50 mg/L
		EPA 300.0	Chloride	250 mg/L
		EPA 353.2	Nitrate as N	10 mg/L
		Casing elevation must be surveyed	Top of casing elevation (ft)	Not applicable
		Steel tape with chalk or electronic tape	Depth to Static Water (ft)	Not applicable
Domestic Water Supply	Semi-Annually (May and November)	EPA A 4500 NH ₃ G	Ammonia as N	0.50 mg/L
		EPA 300.0	Chloride	250 mg/L
		EPA 353.2	Nitrate as N	10 mg/L
		Microbiological Methods for Monitoring the Environment	Fecal Coliform	0 colonies/100ml
Septic Tanks	Annually, at end of summer season	Visual	Inspection of sludge depth in tank	6 inches

*All applicable chemical concentrations in this permit are expressed as total (not dissolved) in mg/l unless otherwise noted.

The septic tanks serving the development are to be inspected annually at a minimum, and must be pumped as necessary. A copy of the invoice for pumping the tanks is to be included with the

annual report. All annual reports are to be reported within forty-five (45) days of the last day of the year (February 14th).

The above upper control limit (UCL) cannot be exceeded in any sample. Exceedance of this value is a violation of this permit and shall require notification under Section K of this permit. If the UCL is exceeded in a sample, additional monitoring wells may be required to determine whether groundwater has been impacted and to delineate the nature and extent of any contamination resulting from operation of the permitted facility.

J. Test Procedures

All samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. All samples taken shall include a trip blank of distilled water for each sampling date and a duplicate sample at least once per year. All required analyses shall be conducted in compliance with Wyoming Water Quality Rules and Regulations, Chapter 8, Section 7.

K. Records and Reports

The permittee shall furnish to the Administrator within a specified time any information which the Administrator may request relating to the operation of the facility, including copies of records required to be kept by this permit. The permittee shall retain copies of all records and reports required by this permit for a period of three (3) years following permanent well abandonment. After that time, those records shall be delivered to the Administrator for disposal or archive at his discretion. Confirmed noncompliance resulting in the migration of injected fluid into any zone outside the permitted receiver shall be reported to the Administrator within twenty-four (24) hours, and a written submission (via certified mail) shall be provided within five (5) days of the time the permittee becomes aware of the excursion. The written submission shall contain: a description of the noncompliance; the period of noncompliance, including exact dates and times, and if the noncompliance has not been controlled, the anticipated time it is expected to continue; and a list of the steps taken or planned to reduce, eliminate, and prevent the recurrence of the noncompliance. Confirmed noncompliance not already reported under this section shall be reported at the time monitoring reports are submitted. The reports shall contain the same information as required by the paragraph above. The permittee shall notify the Administrator thirty (30) days in advance of any planned alteration, conversion, or abandonment of the well covered by this permit.

L. Permit Actions

This permit is authorized for a period of ten (10) years. If the permittee wishes to continue injection after the expiration date of this permit he shall apply to the Administrator and obtain a new permit. The application should be submitted at least 180 days before the expiration date of this permit. Under this permit, the Department may consider injection after the expiration date a violation of the permit.

It shall not be a defense for the permittee in an enforcement action that it would be necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit. The filing of a request by the permittee, or at the instigation of the Administrator, for

permit modification, revocation, termination, or notification of planned changes or anticipated noncompliance shall not stay any condition of this permit.

After notice and opportunity for a hearing, a permit may be modified, suspended or revoked in whole or part during its term for cause which includes, but is not limited to any of the following:

1. Violation of this permit; or
2. Obtaining a permit by misrepresentation of facts in the application.

This permit will be reviewed at least once every five (5) years, and may be reviewed more frequently. A permit may be modified at any time as may be required, including for conformity with changes in regulations or standards which occur after the permit was issued. A permit may be modified in whole or part in order to apply more or less stringent standards; or prohibitions for toxic or other substances present in the permittees discharge as may be ordered by the Environmental Quality Council.

M. Abandonment

General Requirements:

1. The permittee shall notify the administrator at least thirty (30) days prior to abandonment of the facility.
2. An abandonment report, detailing the compliance with abandonment procedures outlined in the original application for coverage under this permit, or describing any deviations from the original plan, shall be submitted as soon as practicable after abandonment. The abandonment shall include reclamation of the well site.
3. Injection wells covered by this permit shall be abandoned in accordance with Wyoming Water Quality Rules and Regulations, Chapter 16, Section 12.

N. Duties of the Permittee

The permittee shall give advance notice to the Administrator as soon as possible of any planned physical alteration or additions, other than authorized operation and maintenance, to the permitted facility and receive authorization prior to implementing the proposed alternation or addition. The permittee shall furnish the Administrator within a reasonable time any information which the Administrator may request to determine whether cause exists for modifying, revoking, or reissuing, or terminating this permit, or to determine compliance with this permit; and to furnish to the Administrator upon request, copies of records required to be kept by this permit. Any modification which may result in a violation of a permit condition shall be reported to the Administrator, and any modification that will result in a violation of any permit conditions shall be reported to the Administrator through the submission of a new or amended permit application. The permittee shall report all instances where he becomes aware that he failed to submit any relevant facts in the permit application, or where he submitted incorrect information in a permit application or in any report to the Administrator, and shall promptly submit such facts or information.

If any cultural materials are discovered during construction, work in the area should halt immediately. The Administrator and the Wyoming State Historic Preservation Office shall be contacted (777-7697) and the materials shall be evaluated by an archaeologist or historian meeting the Secretary of the Interior's Professional Qualification Standards (48 FR 22716, Sept. 1983).

O. Signatories Requirement

All reports filed in conjunction with this permit shall contain the following certification:

"I certify, under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

All reports required by this permit and other requested information shall be signed as follows:

For a corporation – by a principal executive officer of at least the level of vice-president;

For a partnership or sole proprietorship – by a general partner or the proprietor, respectively;

For a municipality, state, federal, or other public agency – by either a principal executive officer or ranking elected official; or

By a duly authorized representative for any of the above. A person is a duly authorized representative only if:

1. The authorization is made in writing by one of the prescribed principals;
2. The authorization specifies either an individual or position having responsibility for the overall operation of the regulated facility or activity; and
3. The written authorization is submitted to the Administrator.

If an authorization is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization must be submitted to the Administrator prior to or together with any reports or information, to be signed by the new authorized representative.

P. Noncompliance

The permittee shall comply with all conditions of the permit. Any permit noncompliance constitutes a violation of Wyoming Water Quality Rules and Regulations, Chapter 16 and is grounds for enforcement action, permit termination, revocation, or modification. Conformed

noncompliance resulting in an excursion shall be reported to the Administrator orally within twenty-four (24) hours, and a written submission shall be provided within five (5) days of the time the permittee becomes aware of the excursion. The written report shall contain the sections specified in Section K of this permit. Any permit noncompliance constitutes a violation of this permit.

The filing of any request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.

Q. Permit Transfer

Any transfer of this permit shall be accomplished by the submission of the proper forms for permit transfer to the Administrator. Transfer of this permit must first be approved by the Administrator and the Director. No transfer shall be approved unless the proposed permittee agrees to bring any and all noncompliance issues into compliance with this permit. The permittee is alone responsible for the operation of the facility covered by this permit. Sale of the facility and subsequent operation of this facility by another is a violation of this permit unless a transfer of this permit has first been accomplished.

R. Property Rights

This permit does not convey any property rights of any sort or any exclusive privilege. This permit does not authorize injury to private property or any invasion of personal rights, nor any infringement of federal, state, or local laws or regulations.

S. Severability

Nothing in this permit shall be construed to preclude the institution of any legal action or to relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable state law or regulation.

STATEMENT OF BASIS FOR A UIC PERMIT

I. General information.

- A. UIC Permit Number: **11-312**
-
- B. Facilities Covered: R Lazy S Ranch
- C. Class of Facility: Class V (Wyoming Water Quality Rules and Regulations, Chapter 16)

II. Application reviewed for compliance with the following regulations. (Indicate yes or no for each section)

- | | | | |
|---------------|-----|---------------|-----|
| A. Chapter 8 | Yes | D. Chapter 12 | No |
| B. Chapter 9 | No | E. Chapter 13 | No |
| C. Chapter 11 | Yes | F. Chapter 16 | Yes |

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.

Yes

- B. 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).

Not Applicable

V. Application requires review to determine groundwater impacts in accordance with Wyoming Water Quality Rules and Regulations, Chapter 3, Section 17. Note that sediment ponds, public water supplies, sewerage systems, and small wastewater systems are exempt from the requirements of Section 17. (Indicate either applicable or not applicable. If not applicable delete all of section VI from the Statement of Basis).

Applicable. A groundwater review has been conducted to insure that no groundwater will be impacted by this system.

VI. Documentation of Statement of Basis.

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

VII. Applicant and Public Participation

- A. The applicant has been provided with a draft permit prior to the permit being issued.

- B. A Public Notice has been issued with a public notice period starting September 14, 2011 and ending on October 14, 2011 (30 day notice as required by Wyoming Water Quality Rules and Regulations, Chapter 16). This notice was published in the *Jackson Hole News and Guide* on or before the start of the public comment period.

CERTIFICATION

The issuance of this permit is based upon a review of the application package submitted in accordance with the requirements of Wyoming Water Quality Rules and Regulations, Chapter 16, Section 6. This review was performed by Charis Tuers, Environmental Engineer, completed on September 7, 2011. 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.



Matthew H. Mead, Governor

John Corra, Director

October 31, 2011

R Lazy S Ranch
Attn: Mr. Kelvin Stirn
P.O. Box 308
Teton Village, WY 83025

RE: R Lazy S Ranch
Final Permit 11-312, Class V Septic System
Teton County, Wyoming

Dear Ms. Stirn:

Attached please find one copy of the Class V permit and corresponding reporting forms for the above referenced facility. This permit requires sampling on a semi-annual basis and reporting on an annual basis within 45 days of the end of each calendar year.

The permit application, draft permit, final permit, public notice, and report forms are available for review on the GEM website <https://gem.trihydro.com>. Additionally, you may report using the GEM database on-line, however, we still require you to mail the lab copies to us.

The underground injection control program was promulgated to prevent serious problems caused by direct discharges to the groundwater. Those problems included groundwater pollution leading to contamination in domestic water wells and serious health affects caused by exposures to toxic substances and water borne pathogens. Your cooperation with our program is sincerely appreciated.

If you have any questions please do not hesitate to contact me at (307) 777-8580 or by email at charis.tuers@wyo.gov

Sincerely,

Charis A. Tuers
Environmental Engineer
Underground Injection Control Program
Wyoming Department of Environmental Quality

CAT/rm/11-0963

Enclosures: Report Forms
Permit

cc: Kevin Frederick, WDEQ
John Passehl, WDEQ



STATE OF WYOMING
 CLASS V (SE3) LARGE CAPACITY SEPTIC (GROUNDWATER MONITORING)
 DEPARTMENT OF ENVIRONMENTAL QUALITY
 UIC
 REPORTING FORM FOR CLASS V INJECTION WELLS

This form shall accompany the submission of any report, documentation or data required by the UIC permit issued to this facility.

Company Name:	R Lazy S Ranch
Contact Person:	THOMAS KIRSTEN
Phone Number:	(307)733-2655
Company Address:	P.O. Box 308 Teton Village, WY 83025
Facility Name:	Septic System
Facility Number:	WYS-039-003
Permit Number:	11-312
Legal Location:	T:42.00 R:116.00 S:20.00

Report Frequency:	Annual
EDD Information:	Report ID = 170380; Facility ID = 3373; Sample ID = 2257

Sample Point:	Well Monitor Well
Sample Point Type:	Monitor Well
Formation:	Alluvium

Report Comments:

Chloride, Total (CHLORIDF)

50 ml glass or plastic container, holding time 28 days.

Data Type	Sample Period Start	Sample Period End	Sample Date	Sample Value	Permit Limit	Units	Detect Flag	Qualifier	EPA Method	Comments
LAB	1/1/2012	6/30/2012	1/1/2012		0-250	mg/L				
LAB	7/1/2012	12/31/2012	7/1/2012		0-250	mg/L				

Nitrogen, Ammonia as N (N_NH3)

250 ml glass or plastic container, cool to 4 degrees, preserve with 5ml, 50% Sulfuric Acid or equivalent. Centigrade, holding time 28 days

Data Type	Sample Period Start	Sample Period End	Sample Date	Sample Value	Permit Limit	Units	Detect Flag	Qualifier	EPA Method	Comments
LAB	1/1/2012	6/30/2012	1/1/2012		0-0.5	mg/L				
LAB	7/1/2012	12/31/2012	7/1/2012		0-0.5	mg/L				

Nitrate (NO3)

250 ml glass or plastic container, preserve with 5ml, 50% Sulfuric Acid or equivalent to pH of 2 or less.

Data Type	Sample Period Start	Sample Period End	Sample Date	Sample Value	Permit Limit	Units	Detect Flag	Qualifier	EPA Method	Comments
LAB	1/1/2012	6/30/2012	1/1/2012		0-10	mg/L				
LAB	7/1/2012	12/31/2012	7/1/2012		0-10	mg/L				

Elevation (MSL) for the Casing in the Well (CSG_ELEV)

Data Type	Sample Period Start	Sample Period End	Sample Date	Sample Value	Permit Limit	Units	Comments
FLD	1/1/2012	12/31/2012	1/1/2012			Feet	
FLD	1/1/2012	12/31/2012	1/1/2012			Feet	
FLD	1/1/2012	12/31/2012	1/1/2012			Feet	
FLD	1/1/2012	12/31/2012	1/1/2012			Feet	
FLD	1/1/2012	12/31/2012	1/1/2012			Feet	
FLD	1/1/2012	12/31/2012	1/1/2012			Feet	
FLD	1/1/2012	12/31/2012	1/1/2012			Feet	
FLD	1/1/2012	12/31/2012	1/1/2012			Feet	
FLD	1/1/2012	12/31/2012	1/1/2012			Feet	
FLD	1/1/2012	12/31/2012	1/1/2012			Feet	
FLD	1/1/2012	12/31/2012	1/1/2012			Feet	
FLD	1/1/2012	12/31/2012	1/1/2012			Feet	

Elevation of the Static Water (SWL_ELEV)

Data Type	Sample Period Start	Sample Period End	Sample Date	Sample Value	Permit Limit	Units	Comments
FLD	1/1/2012	12/31/2012	1/1/2012			Feet	

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment.

STATE OF WYOMING
 CLASS V (5E3) LARGE CAPACITY SEPTIC (GROUNDWATER MONITORING)
 DEPARTMENT OF ENVIRONMENTAL QUALITY
 UIC
 REPORTING FORM FOR CLASS V INJECTION WELLS

This form shall accompany the submission of any report, documentation or data required by the UIC permit issued to this facility.

Company Name:	R Lazy S Ranch
Contact Person:	THOMAS KIRSTEN
Phone Number:	(307)733-2655
Company Address:	P.O. Box 308 Teton Village, WY 83025
Facility Name:	Septic System
Facility Number:	WYS-039-003
Permit Number:	11-312
Legal Location:	T:42.00 R:116.00 S:20.00

Report Frequency:	Annual
EDD Information:	Report ID = 170381; Facility ID = 3373; Sample ID = 2345

Sample Point:	Well Domestic Water Supply Well
Sample Point Type:	Water Supply
Formation:	Alluvial Aquifer

Report Comments: _____

Chloride, Total (CHLORIDE)

50 ml glass or plastic container, holding time 28 days.

Data Type	Sample Period Start	Sample Period End	Sample Date	Sample Value	Permit Limit	Units	Detect Flag	Qualifier	EPA Method	Comments
LAB	1/1/2012	6/30/2012	1/1/2012		0-250	mg/L				
LAB	7/1/2012	12/31/2012	7/1/2012		0-250	mg/L				

Fecal Coliform (FECAL)

100 ml sample must be collected in a sterile Plastic or Glass container, preserved with Sodium Thiocyanate Na2S2O3, cooled to 4 degrees and analyzed within 6 hours.

Data Type	Sample Period Start	Sample Period End	Sample Date	Sample Value	Permit Limit	Units	Detect Flag	Qualifier	EPA Method	Comments
LAB	1/1/2012	12/31/2012	1/1/2012			Colonics/100 ml	100			

Nitrogen, Ammonia as N (N-NH3)

250 ml glass or plastic container, cool to 4 degrees, preserve with 5ml, 50% Sulfuric Acid or equivalent. Centigrade, holding time 28 days

Data Type	Sample Period Start	Sample Period End	Sample Date	Sample Value	Permit Limit	Units	Detect Flag	Qualifier	EPA Method	Comments
LAB	1/1/2012	6/30/2012	1/1/2012		0-0.5	mg/L				
LAB	7/1/2012	12/31/2012	7/1/2012		0-0.5	mg/L				

Nitrate (NO3)

250 ml glass or plastic container, preserve with 5ml, 50% Sulfuric Acid or equivalent to pH of 2 or less.

Data Type	Sample Period Start	Sample Period End	Sample Date	Sample Value	Permit Limit	Units	Detect Flag	Qualifier	EPA Method	Comments
LAB	1/1/2012	6/30/2012	1/1/2012		0-10	mg/L				
LAB	7/1/2012	12/31/2012	7/1/2012		0-10	mg/L				

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment.



Department of Environmental Quality

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



Matthew H. Mead, Governor

152 N. Durbin St., Suite 100 • Casper, WY 82601 • (307) 473-3450

John Corra, Director

NOTIFICATION OF COVERAGE

October 7, 2011

Dana Dykhouse
2211 Black Rock Circle
Sioux Falls, SD 57108

RE: Dykhouse Residential Septic System, Crook County
Location: SW ¼, Section 31, T. 52N, R. 61W, Crook County, WY
Permit # 11-313

Dear Mr. Dykhouse:

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. The General Permit requirements can be downloaded from the Wyoming Department of Environmental Quality webpage,

http://deq.state.wy.us/wqd/www/Permitting/Pages/general_permits.asp

Additionally, the following permit condition applies:

1. Cleanouts are required every 100 feet and at all changes in direction 22.5 degrees and greater, both horizontal and vertical. This requirement includes both the pipeline from the house to the septic tank and from the septic tank to the leachfield.
2. Either a 6-inch diameter clean-out riser or a manway from each compartment of the septic tank must be extended to the ground surface from all septic tanks.

Septic systems shall not be installed during adverse weather. This includes rain, snow, severely cold temperatures, or excessively moist soils. Please contact me with questions at 307-473-3469.

Sincerely,

Jason Vreeland, P.E.
Assistant NE District Engineer
WDEQ/WQD

cc: IPS, Cheyenne
WDEQ Casper File
Coltan Schad, 4928 Lofty Pines Road, Piedmont, SD 57769
Tim Lyons, Crook County Growth and Development



WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY
WATER QUALITY DIVISION
PERMIT TO CONSTRUCT

PERMIT NO. 11-314R

Denbury - Employee Housing
No Public Water System Number Assigned

This permit hereby authorizes the applicant:

Mike Liebelt
Denbury Resources, Inc. Big Piney Office
1 Gopher Ridge Lane
Big Piney, WY 83113

to construct a wastewater collection and disposal system consisting of one 2,000 gallon and two 1,000 gallons septic tanks, 800 feet of 6-inch collection mains, and a 250 Quik 4 unit leach field and a public water system consisting of a 200 foot water well, mechanical building, 500 feet of 2-inch water main to serve 15 cabins and one ranch house which will house 30 employees according to the procedures and conditions of the application number 11-314R. The facility is located about 2 miles south of Big Piney in S ½ NW ¼ Section 8 T29N R111W in the county of Sublette, in the State of Wyoming. All construction, installation, or modification allowed by this permit shall be completed by September 2, 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.

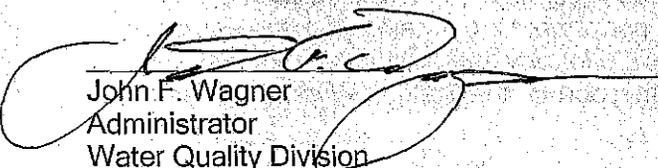
The issuance of this permit does not convey any property rights in either real or personal property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations.

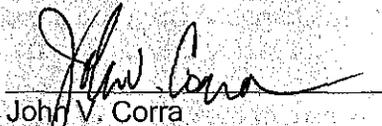
The permittee shall construct and operate the permitted facility in accordance with the statements, representations, procedures, terms and conditions of the permit application, supporting documents and permit. This permit does not relieve the permittee from any duty to obtain any other permit or authorization 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 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 307-332-7726, 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

9-6-11
Date of Issuance

MDB/rm/11-0812

STATEMENT OF BASIS

1. Permit Number: 11-314R
2. Application reviewed for compliance with the following regulations:
Yes. Chapters 3, 11 and 12 of the Wyoming Water Quality Rules and Regulations.
3. If a Section 17 of Chapter 3 review is required indicate the basis for determining groundwater will be protected.
Not Required.
4. 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 Mark D. Baron, P.E., mark.baron@state.wy.us, Southwest District Engineer and completed on September 2, 2011. 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: Mark Eatinger, P.E., Rio Verde Engineering, P.O. box 642, Pinedale, WY 82941



Department of Environmental Quality



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

Matt Mead, Governor

John Corra, Director

NOTIFICATION OF COVERAGE

August 11, 2011

Mike Liebelt
Denbury Resources Riley Ridge Plant
1 Gopher Ridge Lane
Big Piney, WY 83113

RE: Denbury Riley Ridge Plant - Small Waste Water System - Permit Number 11-315, S 1/2 NE 1/4, Section 16, T29N, R114W, Sublette County

Dear Mr. Liebelt:

The above application for coverage under General Permit to Construct for a small wastewater treatment systems consisting of a 1000 gallon septic tank and a 78 chamber leach field to serve a commercial facility 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. These General Permit requirements can be downloaded from the Wyoming Department of Environmental Quality webpage. The General Permits can be found under the Water Quality Division Water and Wastewater Program, Engineering and Technical Services at :

http://deq.state.wy.us/wqd/www/Permitting/Pages/general_permits.asp

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

Sincerely,

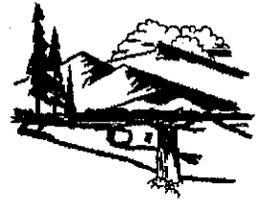
Mark Baron, P.E.
Southwest District Engineer
Water Quality Division

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





Department of Environmental Quality



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

Matt Mead, Governor

John Corra, Director

NOTIFICATION OF COVERAGE

August 24, 2011

Steve Sorensen
Smith's Food and Drug Stores, Inc.
1550 South Redwood Road
Salt Lake City, UT 84104

RE: Rock Springs - Smith's # 182 Store Expansion - Fire Hydrant- Permit Number 11-316R, SE ¼ NW ¼ Section 33, T19N, R105W, Sweetwater County

Dear Mr. Sorensen:

The above application for coverage under General Permit to Construct the extension of a public water supply distribution system consisting of about 60 linear feet of 6-inch PVC fire hydrant lead and the relocation of a sewer service consisting of about 121 linear feet of 6-inch PVC in accordance with Chapter 3, Section 7, Chapter 12, Section 14 and Chapter 11, Section 9 of the Wyoming Water Quality Rules and Regulations has been reviewed and is hereby approved. You are authorized to construct, the facilities 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. These General Permit requirements can be downloaded from the Wyoming Department of Environmental Quality webpage. The General Permits can be found under the Water Quality Division Water and Wastewater Program, Engineering and Technical Services at :

http://deq.state.wy.us/wqd/www/Permitting/Pages/general_permits.asp

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

Sincerely,

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

PDF to Cheyenne

Bret G. Wahlen, P.E., Great Basin Engineering- South, 2010 North Redwood Road, Salt Lake City, UT 84116



PERMIT TO CONSTRUCT
(AS-BUILT)

New
 Renewal
 Modified

PERMIT NO. 11-317
SPECIAL CONDITIONS

Atlantic Richfield Company-BP Whiskey Buttes 13 Site
Condensate Remediation Project

This permit hereby authorizes the applicant:

Atlantic Richfield Company
317 Anaconda Road
Butte, MT 59701

to construct, install or modify construct two additional monitoring wells and install passive aeration apparatus for an LNAPL recovery system in conjunction with ongoing monitoring activities according to the procedures and conditions of the application number 11-317. The facility is located in NE¼SW¼, Section 3, T.21N., R.112W. (6th P.M.) in the county of Sweetwater, in the State of Wyoming. All construction, installation or modification allowed by this permit shall be completed by September 30, 2016.

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 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/or operator.

Granting this permit does not imply that the Wyoming 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 the 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 the DEQ 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/or operator are solely responsible for any liability arising from the construction or operation of the permitted facility. 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.

The permittee shall notify representatives from the DEQ, Water Quality Division when the construction commences and give an estimate of completion for the project. The authorized representative in your area can be contacted at the following address: WDEQ, Water Quality Division, 510 Meadowview Drive, Lander, Wyoming 82520; telephone (307) 332-3144; FAX (307) 332-3183.

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. After the passive aeration system has fulfilled its useful purpose, they shall be disposed according to procedures specified in Chapter 26 of Wyoming Water Quality Rules and Regulations. In addition, borings in public use areas, particularly paved streets and alleys, shall be abandoned in accordance with City and/or Highway Department requirements. No monitoring well/piezometer shall be abandoned without prior approval from the Water Quality Division.
2. WDEQ/WQD personnel shall be given at least two (2) weeks notice prior to the installation of the bailers and sample collection so that they may be on site if deemed necessary.
3. The applicant is responsible for obtaining any Permits required by the State Engineer's Office (777-7354).
4. The results of any other analyses conducted on soil or water removed from all wells/piezometers or boreholes shall be provided to the department as soon as they are available.
5. ***Environmental Monitoring Program for Groundwater of the State:***
 - a. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity and performed in accordance with WDEQ or EPA approved Standard Procedures or Quality Assurance/Quality Control (QA/QC) Plan.
 - b. The permittee shall maintain records of all monitoring information for a period of at least 3 years.
 - c. Records of monitoring information shall include:
 - i. The date, exact place, and time of sampling or measurements;
 - ii. The name(s) of individual(s) who performed the sampling or measurements;
 - iii. The Mean Sea Level elevation of the water table to the closest .01 ft., and the depth to water (to the closest .01 ft.) from a marked measuring point at the top of casing.

- iv. Sampling procedures and sample preservation accomplished;
 - v. The date(s) analyses were performed;
 - vi. Names of individuals who performed the analyses;
 - vii. The analytical techniques or methods used; and
 - viii. The results of such analyses.
- ix. Groundwater samples from the monitoring wells shall be analyzed as indicated on the following table. This table supercedes previous permit requirements.

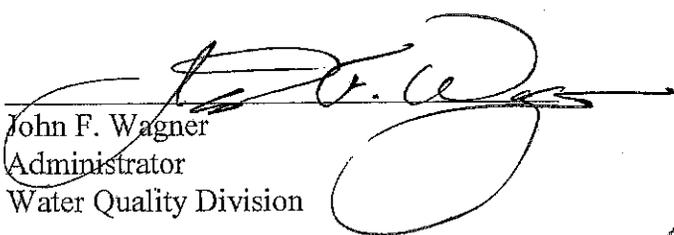
WELL NAME OR NUMBER	SAMPLING FREQUENCY	ANALYTICAL METHOD(S)	PARAMETER(S) ANALYZED	PERMIT LIMIT*
All Existing Monitoring wells	Semi-annual	EPA 8015M EPA 8260 (or equivalent)	TPH-GRO BTEX	

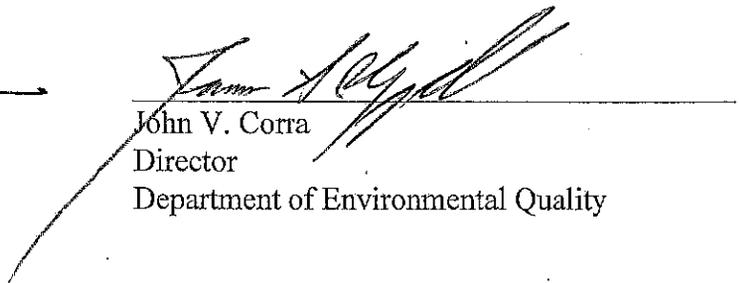
* Permit Limits (i.e. Groundwater Protection Standards) are only required for compliance monitoring wells. All chemical concentrations in this permit are expressed in mg/l unless otherwise noted.

6. Within ninety (90) days of completion of the recovery system installation, Atlantic Richfield Company shall submit a completion report. The completion report shall include the operation and maintenance plan and "as built" diagrams of the recovery system. Thereafter, an annual report, as is currently being submitted, will be required that provides a summary of the sampling data, LNAPL recovery amounts, a description of any equipment problems or downtime, and any other pertinent data.

7. The issuance of this permit does not relieve the permittee from obligations to complete the extent of contamination study and any further remedial work which may be required. Depending on the results of the subsurface investigation, additional site investigations or remedial actions may be required by the WQD. An adequate number of well(s)/piezometer(s) shall be installed to define the nature and extent of the contamination.

AUTHORIZED BY:


 John F. Wagner
 Administrator
 Water Quality Division


 John V. Corra
 Director
 Department of Environmental Quality

8-23-11

 Date of Issuance

JOC/rm/11-0754
 cc: IPS,
 Lander

GROUNDWATER POLLUTION CONTROL PROGRAM

REVIEW COMMENTS:

PLANS/SPECIFICATIONS/PROPOSALS/REPORTS

SITE NAME: Whiskey Buttes 13

SITE STATUS: Site Remediation

APPLICANT:

Mr. Steve Ferry
Atlantic Richfield Company
317 Anaconda Road
Butte MT, 59701

ENGINEER/CONSULTANT:

Mr. Patrick J. Mulcahy, P.G.
AECOM
717 17th Street, Suite 2600
Denver, CO 80202
(303) 228-3000

WATER QUALITY DIVISION REFERENCE PERMIT NUMBER: none
 EXISTING NEW AS-BUILT

TITLE: Current Conditions Report, Whiskey Buttes 14, Sweetwater County, Granger, WY
 PLANS SPEC'S PROPOSAL REPORT

[Check all that apply]

DATE ON PROPOSAL/PLANS/REPORT:

IS THIS PROPOSAL SUBMITTED PURSUANT TO:

'CONDITIONS' TO ANY WQD PERMIT? NO YES (GPC Permit 11-317)

AN 'LOV' 'NOV' OR OTHER ENFORCEMENT? NO YES [DATE]

REVIEWING OFFICIAL(S): _____

James O'Connor, P.G.

DATE OF THIS REVIEW: August 16, 2011

ACTION: Approved as submitted- comments attached

COMMENTS: GROUNDWATER SECTION**1.0 SUMMARY OF EXISTING CONTAMINATION****1.1. Site Description**

The legal description of the site is as follows: NE $\frac{1}{4}$ SW $\frac{1}{4}$ §3, T. 21 N., R. 112 W. (6th P.M.)

The site is located approximately 10 miles east of Opal, Wyoming in the Granger area of Lincoln County. WB-13 is a natural gas production well site within the Moxa Arch natural gas production field. WB-13 is located on land leased from the Bureau of Land Management. BP-NAG operates the well and associated facilities on behalf of the working partners BP-NAG, Anadarko, Chevron/Texaco, Robert Ferguson Trust and Double Eagle Petroleum Company. The remote site is located on a gently rolling plain in SW Wyoming at an elevation of 6,700 feet above mean sea level. Vegetation is characterized by low-growing sage and native grasses.

In 1982, the well (Whiskey Buttes 13 or WB-13) was drilled and associated production equipment and liquid storage facilities were installed to support natural gas production. Whiskey Buttes 13 has been in continuous operation since the well was drilled. In the summer of 1997, contractors abandoning seismic shot holes for Northern Geophysical discovered LNAPL natural gas condensate in Shot Hole No. 104 at the site. The suspected source of the condensate release is believed to be a former condensate line that ran to the east-northeast from the separator at the site or the former tinhorn produced water pit at the site.

Following the discovery of condensate in the shot hole, the nature and extent of the hydrocarbon released to the subsurface was investigated by Inberg-Miller Engineers (IME) of Casper, Wyoming. From November 1998 to August 2001 various wells (MW-1 thru MW-22) were installed for the purpose of investigating and delineating the dissolved phase hydrocarbon present in the groundwater at the site. In August 1999, WYDEQ issued permit-to-construct #99-315 to conduct semi-annual groundwater monitoring. In May, 2008, WYDEQ approved a modification from semi-annual to annual sampling events.

1.2. Site Geology

The geology at the WB-13 site consists of the Lower Bridge Formation, a fluvial deposit consisting primarily of claystone with some interbedded and very fine-grained sandstone layers. According to IME's interpretation of the soil and bedrock lithology the strata beneath the site are laterally highly variable and appear to be discontinuous. In general, the lithology consists of a slight to moderate weathered and fractured light brown to greenish-brown claystone with intermittent sandstone layers from ground to surface to approximately 15 to 20 feet below ground surface. The claystone and sandstone are dry and soft to moderately hard. However, a thin- i.e. 0.5 to 2 feet thick- highly competent sandstone layer was encountered beneath most of the site at depths of approximately 15 to 20 feet. Weathering, fracturing and the occurrence of sandstone layers in the claystone matrix appear to diminish at depths greater than 20 feet. Below depths of approximately 50 feet, the color of the claystone changes from light brown to dark brown to black. Soil moisture also increases with depth. An unconfined groundwater bearing

zone exists beneath the WB-13 site. Depth to groundwater ranges from approximately 50 to 75 feet bgs. The GW bearing zone is poorly connected with groundwater observed in the claystone fractures and in small sandstone layers.

1.3. Potential Sources

Potential sources of the condensate include production pipelines, well casings and a former tank battery. Initial reports- i.e. the March, 1998 and September, 1998 investigation reports did not identify a source(s). However, the current report, dated April, 2011, stated that the suspected source of the condensate release was believed to a former condensate line that ran to the east-northeast from the separator at the site or the former tinhorn produced water pit at the site.

2.0 CONCLUSION OF ADEQUACY OF WORK COMPLETED TO DATE

2.1. 1997 Investigation & Remediation Events

Summer 1997 Discovery of free-phase natural gas condensate during abandonment of seismic shot hole No. 104. **November 1997** Initial subsurface investigation performed to characterize subsurface features and the nature and extent of the condensate release. Eight monitoring wells, MW-1 through MW-8, installed. MW-8 installed at the location of shot hole No. 104. **December 1997** Monitoring wells MW-1 and MW-4 sampled for BTEX and TPH-GRO. **March 1998** *Subsurface Exploration Report, Condensate Release* prepared and submitted. Additional investigations and sampling of existing wells are recommended to further delineate the extent of light non-aqueous phase liquid (LNAPL) and dissolved-phase hydrocarbon. Monitored natural attenuation (MNA) is recommended as a remedial measure.

2.2. 1998 Remediation Activities

May and July 1998 Additional subsurface investigations performed to further delineate the extent of the condensate release. Nine additional monitoring wells, MW-9 through MW-17, installed. **August 1998** Monitoring wells MW-11, MW-12, and MW-14 sampled for BTEX. September 1998 *Supplemental Subsurface Exploration Report, Condensate Release* prepared and submitted. MNA and soil vapor extraction (SVE) are recommended as remedial measures. **October 1998** Passive SVE pilot test conducted. Passive SVE shown not to be a feasible remedial measure. **November 1998** WDEQ – WQD requests additional investigations and submittal of a Corrective Action Plan to address LNAPL and dissolved-phase hydrocarbon.

Soil Vapor Survey. Inberg-Miller performed a soil vapor survey in an attempt to determine the source(s) as well as the near surface horizontal extent of hydrocarbons. A photoionization detector (PID) was used to detect condensate vapor. VOC, O₂, CO₂ and CH₄ concentrations were also measured to delineate the near surface extent of the condensate. Eleven soil vapor points were analyzed. No VOC's were identified during

the survey. Vapor point #3 showed minor biological activity related to possible biodegradation of hydrocarbons.

Drilling and Soil Sampling. Seven soil borings were performed during the investigation which occurred in November 1997. The well cuttings were screened using a PID during the drilling. Borings 1, 2, 3, and 5 revealed trace amounts of hydrocarbon contamination near the groundwater table (50 - 70 feet bgs). Samples were taken for analysis from all borings at or near the interval with the highest PID readings. Borings 1, 3, 4, and 5 had TPH-GRO and/or TPH-DRO (EPA Method 8015 Modified) identified at concentrations below the 100 mg/kg WDEQ/WQD action level for a site with groundwater at depths greater than 50 feet. The other borings (2, 6 and 7) were non-detect for TPH-GRO and TPH-DRO.

Groundwater Monitor Wells. The seven soil borings were converted to groundwater monitoring wells and an existing shot hole (#104) was also converted into a groundwater monitoring well (#8) for a total of eight (8) wells. The water elevations were measured at three different occasions, and analytical samples were obtained from wells MW-1 and 4. Wells MW-2, 5, 6 and 7 were dry on 12/1/98; wells MW-3 and 8 had free phase hydrocarbon (FPH) condensate in them (0.56' and 0.30' respectively). As a result, these wells were not sampled. The samples were analyzed for TPH-DRO and TPH-GRO (EPA Method 8015 Modified) and BTEX (EPA Method 8020). Wells MW-1 and 4 had BTEX and TPH-GRO and/or TPH-DRO results significantly above WDEQ/WQD action levels.

2.3. 1999 Remediation Activities

February, 1999 Active SVE pilot test utilizing an internal combustion engine conducted. Active SVE shown not to be a feasible remedial measure. **April 1999** New wells MW-18 and MW-19 installed to better define the southern and eastern-most extent of the dissolved-phase hydrocarbon plume. Groundwater monitoring and enhanced fluid recovery (EFR) pilot test conducted. Ten monitoring wells sampled for BTEX and TPH-GRO. EFR determined to be a feasible remedial measure. **May 1999** Monitoring wells MW-18 and MW-19 first sampled for BTEX and TPH-GRO. June 1999 *Corrective Action Plan* (CAP) prepared and submitted. EFR and MNA recommended as remedial measures. **July 1999** Application for a permit to construct for remedial activities proposed in the CAP submitted to WDEQ – WQD. **August 1999** WDEQ – WQD issues Permit to Construct #99-315 for remedial measures proposed in the CAP. EFR activities are initiated at five monitoring wells historically containing LNAPL. Three EFR events are conducted during August 1999. Groundwater monitoring event conducted. Eleven wells sampled for BTEX and TPH-GRO. Five wells sampled for MNA parameters. September 1999 – October 1999 Four EFR events performed. **Fall 1999** semi-annual groundwater monitoring event performed.

2.4. 2000 Remediation Activities

November 1999 – January 2000 Five EFR events performed. **February 2000** Two EFR events performed. Monitoring well MW-20 installed by IME. **March – April 2000** Two EFR events performed. Spring 2000 semi-annual groundwater monitoring event performed. MW-20 first sampled for BTEX and TPH-GRO. **May – June 2000** Three EFR events performed. **July 2000** Produced water tin horn replaced with above ground produced water storage tank. Excavation of tin horn indicates that the pit was not a source of hydrocarbon impacts at the site. Xitech LNAPL skimming pump pilot tested at MW-3. **August 2000** One EFR event performed. **October 2000** Fall 2000 semi-annual groundwater monitoring event performed. **November 2000** Two EFR events performed. BP Amoco requests to modify the CAP to allow use of Xitech LNAPL Skimming Pumps and SoakEase absorbent socks for LNAPL recovery.

The report provided construction details for new well, MW-20. This well provided plume delineation of the southeastern extent of the dissolved phase plume. Groundwater sampling was performed in 13 wells not exhibiting FPH. The samples were analyzed for BTEX using EPA method 8260 and for TPH-GRO using EPA method 8015. Briefly, the results show that the dissolved phase concentrations are remained constant with the exception of the decrease in well MW-2. Eight of the wells displayed benzene concentrations above standards. FPH was present in five wells with a maximum thickness of 2.79 feet reported in MW-9. The new well, MW-20, unexpectedly contained FPH during the October 2000 sampling event. It was anticipated that an additional well or wells would be installed farther down gradient, to the south east, to determine the extent of the contamination.

EFR was performed in the 5 wells that have FPH present. Recovery was performed for most of 2000. However due to operation difficulties, recovery was not performed in July, September and October 2000. A total of 294 gallons of fluid was recovered during 2000.

2.5. 2001 Remediation Activities

December 2000 -- March 2001 Nine EFR events performed. **April 2001** EFR events discontinued, Xitech LNAPL skimming pumps and SoakEase absorbent socks installed for LNAPL recovery. **May 2001 Spring 2001** semi-annual groundwater monitoring event and LNAPL recovery operations, maintenance and monitoring (OM&M) event performed. June 2001 LNAPL recovery OM&M event performed. **August 2001** Monitoring wells MW-21 and MW-22 installed. LNAPL recovery OM&M performed. **October 2001** Fall 2001 semi-annual groundwater monitoring event and LNAPL recovery OM&M performed. Xitech skimming pumps shut down to fix controller. **November 2001** LNAPL recovery OM&M and Xitech system testing performed. Due to controller malfunction, Xitech system shutdown.

On March 16, 2001, Permit-to-Construct 01-045 was issued authorizing in the installation of a condensate recovery system and the construction of additional monitoring wells as necessary to further delineate the plume. Two wells were installed in August, 2001, MW-21 and MW-22 for the purpose of delineating the southeastern extent of the dissolved and free phase plumes. Four wells (MW-3, 5, 8, and 9) had FPH present for the May and October sampling events. Wells MW-15 and 17 continued to be dry. An adjustment in FPH recovery methods described below,

FPH thicknesses were less than previously measured. Well MW-9 contained the most with 0.86' of FPH present in October. The dissolved phase concentrations remained similar to previous years sampling. While some wells exhibited indications of a decreasing hydrocarbon trend, most remained unchanged. Maximum benzene concentrations were several orders of magnitude above WQD standards.

In 2001, BP changed the FPH recovery method from the EFR process that was used from 1999 until April 2001. FPH absorbent socks and pneumatic pumps were installed in April to better recover the FPH. Two pumps were installed in wells MW-3 and MW-9. The socks were installed in wells MW-5, 8, 10 and 20. A total of 157 gallons of total fluid was recovered during 2001. Due to the significant reduction in FPH levels in well MW-3 and increase in MW-5 the recovery methods were reversed in these two wells.

2.6. 2002 Remediation Activities

January 2002 Reinstalled Xitech controller and LNAPL recovery OM&M performed.
April 2002 LNAPL recovery OM&M and Xitech system testing performed. **May 2002**
Spring 2002 semi-annual groundwater monitoring event and LNAPL recovery OM&M performed. **July 2002** LNAPL recovery OM&M and Xitech system testing performed.
October 2002 Fall 2002 semi-annual groundwater monitoring event and LNAPL recovery OM&M performed. Xitech LNAPL recovery system shutdown for winter. Removed Soakease from wells MW-10 and MW-20 and placed in wells MW-3 and MW-9.

The groundwater elevations, FPH thicknesses and analytical results are similar to those described in the 2001 Report above. Several wells did not have sufficient groundwater to obtain samples, and others had such slow recharge that the wells were sampled without bailing. Six wells in May and four wells in October were not sampled due to the presence of FPH. The FPH thicknesses displayed a decrease due to the recovery operations at the site. During 2002 at least 4.7 gallons of FPH was recovered. However, it was not possible to calculate the actual amount because of the use of the absorbent socks. Xitech pumps (WQD Permit #01-045) were operated in wells MW-3 and MW-9 until October 2002 when they were removed to prevent freezing. The plan was to reinstall the pumps in the spring of 2003 in the two wells exhibiting the greatest FPH- most likely wells MW-3 and MW-9. All other wells that exhibiting minor amounts of FPH continued to employ absorbent socks to remove the hydrocarbon.

The dissolved phase hydrocarbon concentrations continued to exceed WQD Standards as expected in the presence of FPH. The data suggested that the dissolved phase contamination was stable. The dry wells on the southeastern side of the site limited accurate plume delineation but the lack of GW also restricted the plume migration.

The report concluded that natural attenuation was the preferred remediation method because of the following indicators: the extent of the dissolved phase contamination was defined, FPH was being effectively recovered and that the dissolved phase concentrations are decreasing over time. A recommendation was made to discontinue sampling the four wells (MW-6, 12, 14 and 16) below WQD standards for four consecutive sampling events. It was also recommended that

current FPH recovery practice remain in place until all thicknesses are less than 0.1 feet. After the FPH is removed, then MNA will be used as the final remedy for the site.

2.7. 2003 Remediation Activities

January 2003 LNAPL recovery OM&M performed. **February 2003** LNAPL recovery OM&M performed. **April 2003** LNAPL recovery OM&M performed. **May 2003** **Spring 2003** semi-annual groundwater monitoring event and LNAPL recovery OM&M performed. **June 2003** Xitech pump system installed in MW-5 and LNAPL recovery OM&M performed. **July 2003** Xitech pump in MW-5 startup up and LNAPL recovery OM&M performed. **August 2003** LNAPL recovery OM&M performed. **October 2003** **Fall 2003** semi-annual groundwater monitoring and LNAPL recovery OM&M performed.

The 2003 review noted that the product recovery systems were working well as evidenced by the lack of product that was observed during the October, 2003 sampling event. The dissolved phase contamination remained above WYDEQ standards in many of the wells. Semi-annual sampling was continued for all wells. However, sampling was discontinued for wells MW-18 and MW-21 as a result of being below standards since May, 2001.

2.8. 2004 Remediation Activities

January 2004 LNAPL Recovery OM&M performed **March 2004** LNAPL Recovery OM&M performed **April 2004** **Spring 2004** semi-annual groundwater monitoring event and LNAPL recovery OM&M performed, including startup of Xitech pump system at MW-5. **September 2004** LNAPL Recovery OM&M performed **November 2004** **Fall 2004** semi-annual groundwater monitoring and LNAPL recovery OM&M performed, including shutdown of Xitech pump system at MW-5 for the winter.

The 2004 review highlighted the improved conditions related to free phase recovering as a result of the recovery system installed in 2001. The report estimated 11 years for site recovery. The report noted that there was no off site dissolved phase migration.

2.9. 2005 Remediation Activities

April 2005 **Spring 2005** semi-annual groundwater monitoring event and LNAPL recovery OM&M performed, including startup of Xitech pump system at MW-5. **October 2005** **Fall 2005** semi-annual groundwater monitoring and LNAPL recovery OM&M performed, including shutdown of Xitech pump system at MW-5 for the winter. **December 2005** LNAPL recovery OM&M performed.

The 2005 review noted an adjustment from semi-annual to annual sampling. However, certain wells that were no longer in the sampling program were restarted. The consultant also requested that down-gradient well MW-22 be omitted from the sampling schedule due to being 'non-detect' for two sampling cycles. This adjustment

was approved because the next nearest upgradient well, MW-20, had reported decreasing concentrations.

2.10.2006 Remediation Activities

May 2006 WDEQ accepts proposal in the 2005 Annual Groundwater Monitoring Report to conduct annual groundwater monitoring. **June 2006** annual groundwater monitoring and LNAPL recovery OM&M performed, including startup of Xitech pump system at MW-5. **September 2006** LNAPL recovery OM&M performed. **October 2006** LNAPL recovery OM&M performed. **November 2006** LNAPL recovery OM&M performed, including shutdown of Xitech pump system at MW-5 for the winter.

Six of the eight sampled wells were above standards for benzene with one well, MW-5, contained a free phase hydrocarbon thickness of 0.87'. Four other wells exhibited a sheen and were not sampled for dissolved phase contamination. A total of 22.4 gallons of FPH were recovered by means of the pump system and absorbent socks. BP/AR recommended natural attenuation as the remediation method due to the slow recovery rates in the fractured bedrock. WYDEQ recommended 'fracking' the site to enhance recovery of the free product.

2.11.2007 Remediation Activities

March 2007 Annual groundwater monitoring and LNAPL recovery OM&M performed. **June 2007** LNAPL recovery OM&M performed. **July 2007** Atlantic Richfield submits FPH Recovery Evaluation for the BP Whiskey Buttes 13 site, proposing shutdown of LNAPL recovery operations. **August 2007** WDEQ does not accept proposal to shutdown LNAPL recovery operation in letter dated August 6, 2007. **August 2007** LNAPL recovery OM&M performed. **December 2007** LNAPL recovery OM&M performed.

This report listed parameters indicating a shrinking plume at the edges of the plume but free product was still being recovered in the interior. Due to the extended clean-up estimate of 226+ years for these wells, a more aggressive approach to the free product recovery was recommended.

2.12.2008 Remediation Activities

March 2008 LNAPL recovery OM&M performed. **June 2008** LNAPL recovery OM&M performed, including startup of Xitech pump system. **August 2008** Annual groundwater monitoring and LNAPL recovery OM&M performed. **October 2008** LNAPL recovery OM&M performed, including shutdown of Xitech pump system for the winter.

WYDEQ agreed with BP/AR's response to the recommendation to employ fracking to increase permeability at the site to enhance free product recovery. There were additional concerns that this method may further mobilize the LNAPL. As a result, the free product recovery methods in place at that time were continued for another sampling cycle.

2.13.2009 Remediation Activities

January 2009 LNAPL recovery OM&M performed. **May 2009** LNAPL recovery OM&M performed, including startup of Xitech pump system. **September 2009** Annual groundwater monitoring and LNAPL recovery OM&M performed. **November 2009** LNAPL recovery OM&M performed, including shutdown of Xitech pump system for the winter.

The data suggested a shrinking plume and that the Xitech and iSOC systems continued to effectively recover free product. Consequently, WYDEQ agreed with the recommendation to continue remediating the site by these means. WYDEQ met with the consultants onsite in conjunction with the sampling event.

2.14.2010 Remediation Activities

March 2010 LNAPL recovery OM&M performed. **May 2010** Annual groundwater monitoring and LNAPL recovery OM&M performed. **September 2010** LNAPL recovery OM&M performed. **October 2010** LNAPL recovery OM&M performed.

In the 2010 report BP/AR reported that the absorbent socks continued to be in use in wells with measureable LNAPL. Also, a recommendation was made for two wellbore aeration apparatus be installed for the purpose of light-end condensate removal. Also, the installation of two additional monitoring wells was requested. WYDEQ agreed with the recommendations and this additional equipment is the subject of the current permit-to-construct.

3.0 REQUESTS/REQUIREMENTS/RECOMMENDATIONS

- 3.1. The current work plan (2011) includes two proposals: (1) installation of two additional monitoring wells, and, (2) a wellbore aeration work pilot test work plan.
- 3.2. The objective of the two additional monitoring wells is to evaluate the downgradient location of the dissolved phase benzene plume. The plume is currently estimated to be approximately 200' downgradient of the existing wells, MW-7, MW-11 & MW-19.
- 3.3. The wells will be constructed and developed according to proscribed methods and standards.
- 3.4. Two weeks advance notice of installation shall be provided to the Lander WYDEQ office personnel.
- 3.5. After completion, the two proposed monitoring wells, MW-23 & MW-24, will be included in the required annual groundwater sampling and monitoring activities at the site.

- 3.6. Monitoring well completion diagrams and boring logs for the two wells will be submitted along with initial GW sampling data within 90 days of concluding the construction.
- 3.7. The work plan also includes information pertaining to the installation of wind powered apparatuses.
- 3.8. The purpose of the aerators is to passively remove the remaining LNAPL through volatilization.

End of Report

JOC/rm/11-0754



Department of Environmental Quality

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



Matthew H. Mead, Governor

152 N. Durbin St., Suite 100 · Casper, WY 82601 · (307) 473-3450

John Corra, Director

NOTIFICATION OF COVERAGE

October 21, 2011

Mayor Steve Blakeman
Town of Moorcroft
P.O. Box 70
Moorcroft, WY 82721

RE: Sewer line replacement - west of Belle Fourche from Converse Street to Railroad Street,
WDEQ #11-318, Crook County, WY

Dear Mayor Blakeman:

The above application for coverage under General Permit to Construct, Install, Modify or Operate Extensions to or Modification of Existing Sewage Collection Systems in accordance with Chapter 3 and Chapter 11 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(ies) in accordance with the general permits and the materials submitted in your application package. The General Permit requirements can be downloaded from the Wyoming Department of Environmental Quality webpage,

http://deq.state.wy.us/wqd/www/Permitting/Pages/general_permits.asp

If you have any questions, please contact me at 307-473-3478.

Sincerely,

Karen L. Farley, P.E.
WDEQ/WQD Northeast District Engineer

Enclosures: Certificate of Completion

cc: Bill A. Carson, P.E., Stetson Engineering, Inc., P.O. Box 457, Gillette, WY 82717
WDEQ File, IPS



WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY
WATER QUALITY DIVISION
PERMIT TO CONSTRUCT

PERMIT NO. 11-319R

Town of Shoshoni Wastewater Evaporation & Infiltration Lagoons

This permit hereby authorizes the applicant:

Mayor Scott Peters
Town of Shoshoni
102 East 2nd Street
Shoshoni, WY 82649

To install two sewage pumps, a new forced sewage main and to construct two new wastewater lagoons; according to the procedures and conditions of the application number 11-319R. The two new wastewater lagoons are sized at 3.3 acres and 2.8 acres. The new lagoons will increase evaporation and infiltration water losses for the Town of Shoshoni in order to avoid stringent ammonia standards associated with upgrading the surface water classification of Poison Creek to a 2AB surface water. The project is within SE ½, Section 28, T38N, R94W in the county of Fremont, in the State of Wyoming. All construction, installation, or modification allowed by this permit shall be completed by October 1, 2012.

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.

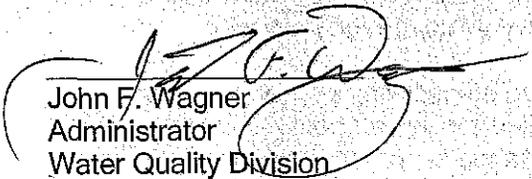
The issuance of this permit does not convey any property rights in either real or personal property or any invasion of personal rights, or any infringement of federal, state or local laws or regulations.

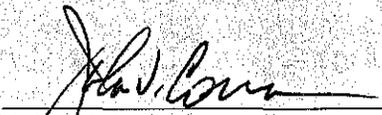
The permittee shall construct and operate the permitted facility in accordance with the statements, representations, procedures, terms and conditions of the permit application, supporting documents and permit. This permit does not relieve the permittee from any duty to obtain any other permit or authorization 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 The scope of this project didn't include headworks, an insulated structure for the chlorine contact chamber, pump level controls, nor armoring of the dike due to budget restraints. These items may need to be addressed at a later date.
- 3 of 4 Within sixty days of completion of construction of the authorized facility, the applicant will submit to the Northwest 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.
- 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

8-29-11
Date of Issuance

JSB/rm/11-0771

STATEMENT OF BASIS

1. Permit Number: 11-319R
2. Application reviewed for compliance with the following regulations:
Chapters 3 and 11 of the Wyoming Water Quality Rules and Regulations.
3. Does the permit comply with all applicable regulations identified above?
NA.
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. If Section 17 of Chapter 3 review is required indicate the basis for determining groundwater will be protected.

Two monitoring wells (MW-1 and MW-2) were installed on May 14, 2011 to identify the quantity and quality of groundwater prior to the construction of the new wastewater lagoons. The MW-1 is up-gradient and drilled to the 23-foot depth; MW-2 is down-gradient and drilled to the 25-foot depth. MW-1 was dry, but groundwater was encountered in MW-2 at the 20-foot depth and subsequently rose to the 14-foot depth. A water quality test results showed the following:

Nitrate - 20 mg/L	TDS - 2070 mg/L	Lead - 0.16 mg/L
Sodium - 483 mg/L	Arsenic - 0.036 mg/L	pH - 7.97
Sulfate - 1110 mg/L	Iron - 338 mg/L	Alkalinity (CaCO ₃) - 148 mg/L

In short, pre-construction conditions demonstrated limited groundwater that does not meet Class I nor Class II Groundwater standards.

6. 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, james.brough@wyo.gov, Northwest District Engineer and completed on August 26, 2011. 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: John McLain, P.E., Baseline Engineering, 700 12th St., Suite 220, Golden, CO 80401
Norm Morre, Town of Shoshoni, 102 East 2nd Street, Shoshoni, WY 82649



Department of Environmental Quality



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

Matt Mead, Governor

John Corra, Director

NOTIFICATION OF COVERAGE

August 26, 2011

Kirk S. Schmidt
Fremont County School District No. 1
400 Baldwin Creek Rd.
Lander, WY 82520

RE: Gannett Peak Elementary School Water and Wastewater
DEQ Permit #11-320
Fremont County, Latitude 42.8333°, Longitude 108.733°

Dear Mr. Schmidt,

This project consists of a new 6 inch diameter water service line for domestic water supply and fire hydrant. New 6 inch and 4 inch diameter sewer service lines for wastewater discharge.

The above application for coverage under General Permit has been reviewed in accordance with Chapter 3, Section 7; Chapter 11, Part B; 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.

These General Permit requirements can be downloaded from the Wyoming Department of Environmental Quality webpage. The General Permits can be found under the Water Quality Division Water and Wastewater Program, Engineering and Technical Services at:

http://deq.state.wy.us/wqd/www/Permitting/Pages/general_permits.asp

If you have any questions, please contact Hannes Stueckler at 307-335-6964 or James Brough at 307-335-6961.

Sincerely,

Hannes E. Stueckler, P.E.
Assistant Northwest District Engineer
Water Quality Division

xc: PDF to Cheyenne
David A. Dufault P.E., Nelson engineering, P.O. Box 1599, Jackson, WY 83001

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 332-7726



WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY
WATER QUALITY DIVISION
PERMIT TO CONSTRUCT

PERMIT NO. 11-321R

Valley View Mutual Water Company (VVMC) Well #1 Equipping & Garcia Well #1 Testing
PWS #WY5601499

This permit hereby authorizes the applicant:

James Fowler, President
Valley View Mutual Water Company
P.O. Box 12483
Jackson, WY 83002

To equip VVMC Well #1 with a pump and discharge piping and to perform a pump test on existing Garcia #1 Well; according to the procedures and conditions of the application number 11-321R. The VVMC Well #1 was pump tested at 60 gallons per minute (gpm) and will be equipped to produce about 42 gpm. The existing Garcia Well will be equipped with a new well head and new pump and motor after a pump test. Both the VVMC Well #1 Well and the Garcia Well are located in the Valley View Subdivision which is about 5 miles south of Jackson. The project is within SE ¼, Section 17, T40N, R110W in the county of Teton, in the State of Wyoming. All construction, installation, or modification allowed by this permit shall be completed by 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 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.

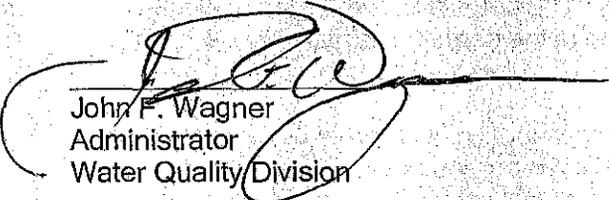
The issuance of this permit does not convey any property rights in either real or personal property or any invasion of personal rights, or any infringement of federal, state or local laws or regulations.

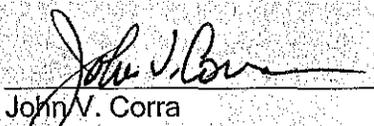
The permittee shall construct and operate the permitted facility in accordance with the statements, representations, procedures, terms and conditions of the permit application, supporting documents and permit. This permit does not relieve the permittee from any duty to obtain any other permit or authorization 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 With the pump testing of Garcia Well #1, a Chapter 3 Permit to Construction must be obtain for equipping the well with a new pump, especially if the well will be equipped at a higher production rate.
- 3 of 4 Within sixty days of completion of construction of the authorized facility, the applicant will submit to the Northwest 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.
- 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

8/29/11
Date of Issuance

JSB/rm/11-0784

STATEMENT OF BASIS

1. Permit Number: 11-321R
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. If Section 17 of Chapter 3 review is required indicate the basis for determining groundwater will be protected.
Public water supply wells are exempted from review by Chapter 3, Section 17
6. Documentation of Statement of Basis: The archive file for this permit includes adequate documentation of all sections of this Statement of Basis.

CERTIFICATION

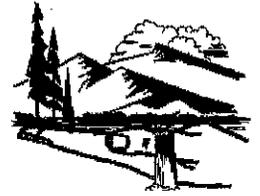
The issuance of this permit is based upon a review of the application package submitted in accordance with the requirements of Chapter 3, Section 6, Wyoming Water Quality Rules and Regulations. This review was performed by James S. Brough, james.brough@wyo.gov, Northwest District Engineer and completed on August 29, 2011. 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: Marjorie Mathiesen, Wedco MFG., 665 West Elk, Jackson, WY 83002
Philip Gyr, P.E., Nelson Engineering, P.O. Box 1599, 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.



Matthew H. Mead, Governor

John Corra, Director

NOTIFICATION OF COVERAGE

August 25, 2011

Con Way Properties Inc.
Robert Sandahl, Director, Real Estate, Con-way Freight
2211 Old Earnhart Road, Suite 100
Ann Arbor, MI 48105

RE: Con-way Freight
Application No. 11-322, Laramie County

Dear Mr. Sandahl:

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 installation of a 6 inch fire sprinkler line, abandon a dead-end 6 inch water main, and remove one fire hydrant, Section 1, T13N R 67W; 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 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 August 25, 2013.

This **Notice of Coverage** is covered under the General Permits on the Wyoming Department of Environmental Quality webpage. The General Permits can be viewed at the following path:
http://deq.state.wy.us/wqd/www/Permitting/Pages/general_permits.asp. Please reference Application No. 11-322 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/11-0764

Enclosure: Certificate of Completion

cc: IPS, Cheyenne
Kelly Hafner, Benchmark Engineers, 1920 Thomes Ave., Suite 620, Cheyenne, WY 82001
Herman Noe, Cheyenne Board of Public Utilities, P.O. Box 1469, Cheyenne WY 82003



WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY
WATER QUALITY DIVISION
PERMIT TO CONSTRUCT

PERMIT NO. 11-323

Watco Sweetwater County Rail Yard - Underdrains and Storm Water Containment Pond

This permit hereby authorizes the applicant:

Scott Adams
Watco Companies, Inc.
420 Hansen St., South
Twin Falls, ID 83301

to construct a synthetically and clay lined rail yard storm containment pond with a secondary geomembrane and leak detection system according to the procedures and conditions of the application number 11-323. The facility is located in Sections 28,29,33 and 34, T20N, and R109W in the county of Sweetwater, in the State of Wyoming. All construction, installation, or modification allowed by this permit shall be completed by August 23, 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 11 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 307-332-7726, 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 11 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 11 This facility is permitted to only receive storm water from the WATCO Sweetwater Rail Yard.
- 4 of 11 A completed operation and maintenance manual for this facility must be submitted to the Southwest District Engineer, State of Wyoming, DEQ, Water Quality Division, 510 Meadow View Drive, Lander, WY 82520. This manual must meet the applicable requirements of Chapter 11, Section 24 of the Wyoming Water Quality Rules and Regulations, and be approved by the DEQ/WQD prior to placing this facility in operation.
- 5 of 11 The leak detection sump is to be checked weekly for the first month operation and monthly thereafter with a log kept of the inspection results. If fluid is found, the DEQ/WQD Southwest District Engineer is to be notified immediately.
- 6 of 11 If fluid is found in the leak detection system, and a leak is verified by observation or sampling and testing, a fluid recirculating system shall be activated to minimize the fluid level under the primary pond liner and reduce the chance for migration of the fluid to groundwater, until repairs and/or corrective action can be taken.

7 of 11

If a leak in the primary liner is confirmed, the following monitoring, reporting and repair actions are required:

1. High level alarms on the recirculating leak detection system sumps shall be continuously monitored.
2. The totalizing hour meters shall be read at least weekly.
3. If the recovery rate exceeds 400 gallons per day per acre (gpd/acre) for any sub-cell as delineated by the recovery system, the permittee shall notify the DEQ/WQD within seven (7) days. Repair of the primary liner must be scheduled within 12 months.
4. If the recovery rate exceeds 800 gpd/acre for any sub-cell as delineated by the recovery system, the DEQ/WQD shall be notified within 48 hours. Repair of the primary liner must be scheduled within 60 days.
5. If the high level alarm level is reached, the DEQ/WQD shall be notified immediately. Repair of the primary liner must be initiated immediately.
6. If fluids are detected in the leak detection system and there is a threat of contamination to groundwater, the DEQ/WQD may require the construction of new groundwater monitoring wells along with periodic sampling and testing of the groundwater monitoring wells. Required sampling and testing parameters and frequency will be determined by the DEQ/WQD.

8 of 11

a) A 1 foot thick compacted clay liner with a max permeability of 1×10^{-5} cm/sec under the second high-density polyethylene liner is required.

b) The compacted clay liner shall meet the following criteria: The tests for water content and density shall be taken during the placement of each lift of the liner. A total minimum liner thickness of one (1) foot shall be provided and shall be constructed with maximum lifts of one-half (0.5) foot. Either permeability testing of undisturbed core samples from the in-place seal, or detailed tests such as particle size distribution and Atterburg limits shall be conducted. Detailed tests should confirm that the soil specified was used for liner construction. One (1) test shall be conducted per acre per lift. For core sampling of the in-place liner, one (1) core of the completed liner shall be tested per acre. The permittee shall provide the division written certification by a Wyoming registered professional engineer that the soil liner was constructed according to the permit and that final testing indicated results within the allowable limits established by the permit.

9 of 11

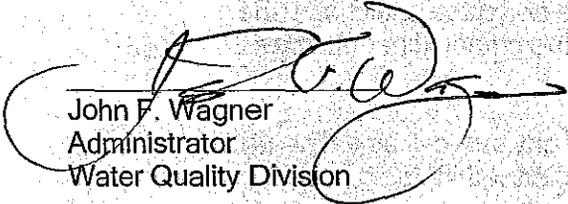
One year before the operations of the disposal pond cease a closure and post closure plan must be submitted to the Southwest District Engineer. The plan must follow Solid Waste Rules and Regulations. Disposal pond closure must be completed within three years of ceasing operations.

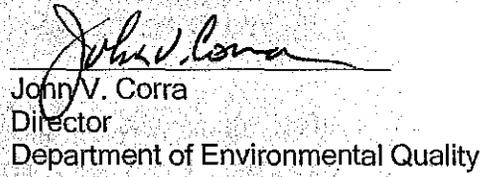
10 of 11

This facility is required to comply with the Wyoming Air Quality Standards and Regulations Chapter 2 Ambient Standards. Chapter 2, Section 11(a)(i) shall be the minimum basis for determining the adequacy of the proposed procedures and methods for controlling odors. Air Quality Standards are an enforceable condition of this permit.

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

8-25-11
Date of Issuance

MDB/rm/11-0760

STATEMENT OF BASIS

1. Permit Number: 11-323
2. Application reviewed for compliance with the following regulations:
Chapters 3 and 11 of the Wyoming Water Quality Rules and Regulations.
3. Does the permit comply with all applicable regulations identified above?
The approval is based upon following the Chapter 20, Section 35 regulations in accordance with Section 5 of Chapter 11.
4. If Section 17 of Chapter 3 review is required indicate the basis for determining groundwater will be protected.
The containment pond will be lined with a primary 60-mil high-density polyethylene (HDPE) liner and with a 40-mil HDPE secondary liner installed below a leak detection system. A 1-foot compacted clay liner will also be installed under the secondary liner. If a leak is detected, a recirculation system to return leaking fluids to the pond will be used, thus reducing the hydrostatic head beneath the primary liner, and minimizing the risk of migration of the fluids to groundwater.
5. Documentation of Statement of Basis: The archive file for this permit includes adequate documentation of all sections of this Statement of Basis.

CERTIFICATION

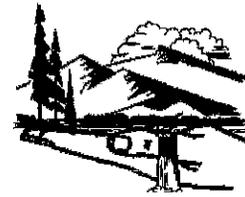
The issuance of this permit is based upon a review of the application package submitted in accordance with the requirements of Chapter 3, Section 6, Wyoming Water Quality Rules and Regulations. This review was performed by Mark D. Baron, Southwest District Engineer, mark.baron@wyo.gov, and completed on August 23, 2011. 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: Donald Fleming, P.E., Hanson Professional Services, 7625 N. University St., Ste 200, Peoria, IL 61624
John W. Hay, Rock Springs Grazing Association, 200 2nd St., Rock Springs, WY 82901
Nathan Cooper, PDF to: NCooper@hanson-inc.com



Department of Environmental Quality

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



Matthew H. Mead, Governor

John Corra, Director

NOTIFICATION OF COVERAGE

August 31, 2011

Joe Nelson
33 Mountain Dr.
Wheatland, WY 82201

RE: Nelson Small Wastewater Facility (Septic System),
Location: SE¼ Section 5, T23N, R68W,
Mountain Shadows Subdivision, Lot 20

Application No. **11-325**
Platte County

Dear Mr. Nelson:

The above application for coverage under General Permit to Construct, Install, Modify or Operate a Small Wastewater Facility consisting of a 1500 gallon, two compartment concrete septic tank, a distribution box, and about 210 feet of chamber type leachfield divided into three equal length trenches of about 70 feet each for a **5 bedroom 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 25 of the Water Quality Division Rules and Regulations, the general permit, the condition 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 condition also applies:

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.

The approval granted under this Notification Of Coverage and the General Permit shall expire on August 31, 2013. Please reference Application Number 11-325 in any future correspondence.

If you have any questions, please contact me at ron.ewald@wyo.gov or (307) 777-6183.

Sincerely,

Ronald L. Ewald
Assistant Southeast District Engineer
Southeast District, Water & Wastewater Section
Water Quality Division

RLE/rm/11-0798

Enclosures: GENERAL PERMIT - Small Wastewater Facility
Certificate of Completion

cc: IPS, Cheyenne
Aaron Wilson, A&A Earth Works, 580 Grange Rd, Wheatland, Wyoming 82201
Platte County Planning Office, Dennis Becker, PO. Box 728, Wheatland, WY 82201





Department of Environmental Quality

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



Matthew H. Mead, Governor

John Corra, Director

NOTIFICATION OF COVERAGE

September 2, 2011

Herbert Marshall
1395 Fletcher Park Road
Wheatland, WY 82201

RE: Marshall Small Wastewater Residential Septic System, Application No. **11-326**
Location: Portions of Sections 34 & 35, T26N, R70W, Platte County

Dear Mr. Marshall:

The above application for coverage under General Permit to Construct, Install, Modify or Operate a Small Wastewater Facility consisting of a 1000 gallon, two compartment polyethylene septic tank and about 100 feet of chamber bed type leachfield divided into two equal length trenches of about 50 feet each for a **2 bedroom 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 25 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. 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.
2. Polyethylene Septic Tank Installation Requirements - To ensure structural integrity, the **manufacturer's instructions** regarding bedding the tank and filling the tank with water during burial **must be followed during installation**. Additionally, immediately after clean-outs, the tank must be refilled with water according to the manufacturer's instructions to maintain structural integrity.

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

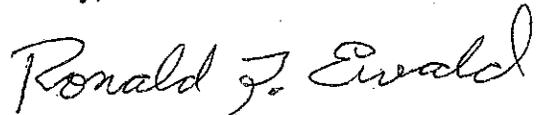
ADMIN/OUTREACH (307) 777-7758 FAX 777-7682	ABANDONED MINES (307) 777-6145 FAX 777-6462	AIR QUALITY (307) 777-7391 FAX 777-5616	INDUSTRIAL SITING (307) 777-7369 FAX 777-6937	LAND QUALITY (307) 777-7756 FAX 777-5864	SOLID & HAZ. WASTE (307) 777-7752 FAX 777-5973	WATER QUALITY (307) 777-7781 FAX 777-5973
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The approval granted under this Notification Of Coverage and the General Permit shall expire on September 2, 2013. Please reference Application Number 11-326 in any future correspondence.

If you have any questions, please contact me at ron.ewald@wyo.gov or (307) 777-6183.

Sincerely,



Ronald L. Ewald
Assistant Southeast District Engineer
Southeast District, Water & Wastewater Section
Water Quality Division

RLE/rm/11-0810

Enclosures: GENERAL PERMIT - Small Wastewater Facility
Certificate of Completion form

cc: IPS, Cheyenne
Platte County Planning Office, Dennis Becker, PO. Box 728, Wheatland, WY 82201



Department of Environmental Quality

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



Matthew H. Mead, Governor

John Corra, Director

NOTIFICATION OF COVERAGE

August 31, 2011

Mark Williamson
149 North Park St.
Casper, Wyoming 82601

RE: Williamson Small Wastewater Facility (Septic System),
Location: Section 13, T29N, R67W,
Glendo Overlook, Tract GO-5

Application No. **11-327**
Platte County

Dear Mr. Williamson:

The above application for coverage under General Permit to Construct, Install, Modify or Operate a Small Wastewater Facility consisting of a 1000 gallon, single compartment concrete septic tank, and about 106 feet of chamber type leachfield divided into two equal length trenches of about 53 feet each for a **3 bedroom 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 25 of the Water Quality Division Rules and Regulations, the general permit, the condition 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 condition also applies:

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.

The approval granted under this Notification Of Coverage and the General Permit shall expire on August 31, 2013. Please reference Application Number 11-327 in any future correspondence.

If you have any questions, please contact me at ron.ewald@wyo.gov or (307) 777-6183.

Sincerely,

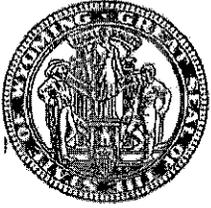
Ronald L. Ewald
Assistant Southeast District Engineer
Southeast District, Water & Wastewater Section
Water Quality Division

RLE/rm/11-0799

Enclosures: GENERAL PERMIT - Small Wastewater Facility
Certificate of Completion

cc: IPS, Cheyenne
Aaron Wilson, A&A Earth Works, 580 Grange Rd, Wheatland, Wyoming 82201
Platte County Planning Office, Dennis Becker, PO. Box 728, Wheatland, WY 82201





Department of Environmental Quality

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



Matthew H. Mead, Governor

152 N. Durbin St., Suite 100 · Casper, WY 82601 · (307) 473-3450

John Corra, Director

NOTIFICATION OF COVERAGE

September 21, 2011

Scott Russell
1745 S. Wilson
Casper, WY 82601

RE: Scott Russell Small Wastewater Treatment System, Natrona County
Location: NE ¼ NW ¼, Section 5, Township 32 North, Range 80 West, Permit # **11-328**

Dear Mr. Russell:

The above application for coverage under General Permit to Construct, Install, Modify or Operate a Small Wastewater Facility consisting of a NORWECO® Singulair® Bio-Kinetic® Wastewater Treatment System, Model 960, in accordance with Chapter 3, Section 7, Chapter 11, Section 5, 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, install, or modify the facility in accordance with general permit and the materials submitted in your application package. The General Permit requirements can be downloaded from the Wyoming Department of Environmental Quality webpage,

http://deq.state.wy.us/wqd/www/Permitting/Pages/general_permits.asp

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

1. The permittee and/or contractor must contact both DEQ (307-473-3478) and the Natrona County Health Department (577-9745) to arrange for a site inspection **PRIOR** to the system being covered up.
2. This permit is for a NORWECO mechanical treatment system. The permittee is required to obtain a maintenance contract and submit annual documentation that maintenance is being provided in accordance with the manufacturer requirements and recommendations and the permit conditions. Authority for this requirement is found in Section 11 (a) and (c), Chapter 3 of the Wyoming Water Quality Rules and Regulations. Annual maintenance documentation must be submitted before December 31 of each year, starting December 31, 2011 to: Northeast District Engineer, Wyoming Department of Environmental Quality, 152 North Durbin, Suite 100, Casper, WY 82601. Failure to submit annual maintenance documentation is a violation of the compliance requirements for this permit issued under Wyoming Statute 35-11-301.

Cheyenne
122 West 25th Street 82002
(307) 777-7937

Lander
510 Meadowview Drive 82520
(307) 332-3144

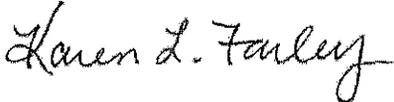
Sheridan
2100 W. 5th Street 82801
(307) 673-9337



3. The permittee shall ensure that the system is maintained and regularly serviced, as recommended by the manufacturer, for the life of the system. An inspection of the system, as recommended by the manufacturer in the owner's manual, shall be performed every six months by a qualified or certified individual to ensure the system is operating correctly, and to determine when maintenance is required.

Septic systems shall not be installed during adverse weather. This includes rain, snow, severely cold temperatures, or excessively moist soils. Please contact me with questions at 307-473-3478.

Sincerely,



Karen L. Farley, P.E.
NE District Engineer
WDEQ/WQD

cc: IPS, Cheyenne
WYDEQ Casper File
Can Do Company LLC, P.O. Box 4356, Casper, WY 82604
CEPI, 6080 Enterprise Drive, Casper, WY 82609
April Gindulis, Natrona County Health Department

PERMIT TO CONSTRUCT

New
 Renewal
 Modified

PERMIT NO. **11-329**
SPECIAL CONDITIONS

UPR, Carpenter A-1

This permit hereby authorizes the applicant:

Anadarko Petroleum
P.O. Box 1330
Houston, TX 77251

to construct, install or modify temporary test well(s), soil borings according to the procedures and conditions of the application number **11-329**. The facility is located in Section 31, T15N, R120W in the county of Uinta, in the State of Wyoming. All construction, installation or modification allowed by this permit shall be completed by August 19, 2016.

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 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/or operator.

Granting this permit does not imply that the Wyoming 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 the 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 the DEQ 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/or operator are solely responsible for any liability arising from the construction or operation of the permitted facility. 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.

The permittee shall notify representatives from the DEQ, Water Quality Division when the construction commences and give an estimate of completion for the project. The authorized representative in your area can be contacted at the following address: WDEQ, Water Quality Division, 510 Meadowview Drive, Lander, Wyoming 82520; telephone (307) 332-3144; FAX (307) 332-3183.

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. After the monitoring well(s)/piezometer(s) have fulfilled their useful purpose, they shall be abandoned according to procedures specified in Chapter 26 of Wyoming Water Quality Rules and Regulations. In addition, borings in public use areas, particularly paved streets and alleys, shall be abandoned in accordance with City and/or Highway Department requirements. No monitoring well/piezometer shall be abandoned without prior approval from the Water Quality Division.
2. WDEQ/WQD personnel shall be given at least two (2) weeks notice prior to the installation of groundwater monitoring wells/piezometers and sample collection so that they may be on site if deemed necessary.
3. The applicant is responsible for obtaining any Permits required by the State Engineer's Office (777-7354).
4. The results of any other analyses conducted on soil or water removed from these wells/piezometers or boreholes shall be provided to the department as soon as they are available.
5. ***Environmental Monitoring Program for Groundwater of the State:***
 - a. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity and performed in accordance with WDEQ or EPA approved Standard Procedures or Quality Assurance/Quality Control (QA/QC) Plan.
 - b. The permittee shall maintain records of all monitoring information for a period of at least 3 years.
 - c. Records of monitoring information shall include:
 - i. The date, exact place, and time of sampling or measurements;
 - ii. The name(s) of individual(s) who performed the sampling or measurements;
 - iii. The Mean Sea Level elevation of the water table to the closest .01 ft., and the depth to water (to the closest .01 ft.) from a marked measuring point at the top of casing.
 - iv. Sampling procedures and sample preservation accomplished;

- v. The date(s) analyses were performed;
- vi. Names of individuals who performed the analyses;
- vii. The analytical techniques or methods used; and
- viii. The results of such analyses.

ix. Groundwater samples from the monitoring wells shall be analyzed as indicated on the following table. This table supersedes previous permit requirements.

WELL NAME OR NUMBER	SAMPLING FREQUENCY	ANALYTICAL METHOD(S)	PARAMETER(S) ANALYZED	PERMIT LIMIT
All Existing Monitoring wells	Semi-annual	EPA 8015M EPA 8260B (or equivalent)	TPH-GRO BTEX Naphthalene 2-methylnaphthalene	

* Permit Limits (i.e. Groundwater Protection Standards) are only required for compliance monitoring wells. All chemical concentrations in this permit are expressed in mg/l unless otherwise noted.

6. Within ninety (90) days of issuance of this permit, or completion of the installation and sampling of monitoring well(s)/piezometer(s) authorized by this permit, the Applicant shall submit to WDEQ/WQD a **Report of Investigation**. At a minimum, the *Report of Investigation* shall contain the following information:

- a. A chronology of events leading up to the investigation.
- b. A site map which illustrates:
 - i. physical features (i.e. structures, utilities, etc.).
 - ii. monitoring well/piezometer/test pit/borehole locations.
 - iii. locations and use (i.e. domestic, irrigation, stock) of municipal drinking water and private groundwater supply wells existing within one (1) mile of the site.
 - iv. surface waters.
 - v. existing treatment, recovery and containment systems.
- c. Geohydrologic maps and cross sections that clearly describe the subsurface distribution of geologic materials and elevations of groundwater.
- d. Borehole Installation Diagrams/Lithology Logs for boreholes installed under this permit.
- e. 'As Built' Monitor Well Installation/Construction Diagrams for monitoring wells/piezometers installed under this permit.
- f. Depth to water and product thickness measurements to the closest .01 ft.

- g. Sample collection procedures utilized and laboratory analytical results (i.e. lab reports).
- h. A map delineating the extent of the subsurface contamination, including:
 - i. Location(s) and thickness(es) of contaminated soils.
 - ii. LNAPL (free product) thickness iso-contours.
 - iii. Dissolved (in groundwater) contaminant iso-concentration maps.
- i. A potentiometric surface map illustrating groundwater elevation (Mean Sea Level), gradient, well locations and measurement results.
- j. Using commonly accepted scientific and engineering practices for determination of the environmental fate of contaminants, use site-specific or comparable and reasonable literature data and/or values and provide estimates for the:
 - 1. Travel time (yrs.) of the contaminant plume (in groundwater) to the nearest downgradient property line;
 - 2. Travel time (yrs.) of the contaminant plume (in groundwater) to the nearest downgradient water supply well and occupied dwelling within one (1) mile of the site.

Provide equations, data used, and data sources used. Include lab results as appropriate.

- k. Interpretation of the data and summary conclusions of the investigation results.
- l. A recommended *Corrective Action Plan* and schedule for **either**:
 - i. Development and implementation of additional *Subsurface Investigation* work to further characterize and define sub-surface and contaminant conditions in soil and/or groundwater.

OR

- ii. Development and implementation of *Corrective Measures* to:
 - (1) Remove LNAPL (Free-product).
 - (2) Control the migration of LNAPL (free-product)
 - (3) Control (contain) the migration of contaminated (dissolved) groundwater.
 - (4) Restore the quality of groundwater to within Wyoming groundwater quality standards.

OR

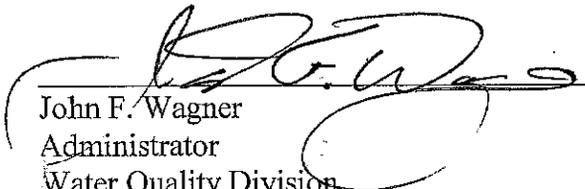
- iii. Development and submittal of a formal request, including a *Statement of Basis* to justify *Project (Site) Closure* based upon one or more of the following:
 - (1) No apparent violation, nor potential for violation, of soil and/or groundwater quality standards;
 - (2) Technical impracticability of eliminating or reducing any or all pollution.

NOTE: All plans and schedules for implementation of Subsurface Investigations, Corrective Measures and Project (Site) Closure require Department of Environmental Quality, Water Quality Division (WDEQ/WQD) approval prior to their implementation.

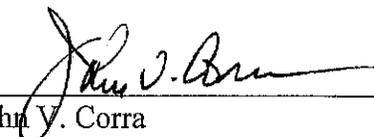
Thereafter, an annual report, as is currently being submitted, will be required that provides a summary of the sampling data, LNAPL recovery amounts, a description of any equipment problems or downtime, and any other pertinent data.

7. The issuance of this permit does not relieve the permittee from obligations to complete the extent of contamination study and any further remedial work which may be required. Depending on the results of the subsurface investigation, additional site investigations or remedial actions may be required by the WQD. An adequate number of well(s)/piezometer(s) shall be installed to define the nature and extent of the contamination.

AUTHORIZED BY:



John F. Wagner
Administrator
Water Quality Division



John V. Corra
Director
Department of Environmental Quality

8-25-11
Date of Issuance

DH/rm/11-0756

cc: IPS,
Lander

GROUNDWATER POLLUTION CONTROL PROGRAM
REVIEW COMMENTS:
PLANS/SPECIFICATIONS/PROPOSALS/REPORTS

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY
WATER QUALITY DIVISION

510 Meadowview Drive
Lander, Wyoming 82520
(307)332-3144

PROJECT: SITE REMEDIATION

APPLICANT:

Dana Howard
Project Manger
Anadarko Petroleum
P.O. Box 1330
Houston, TX 77251

ENGINEER/GEOLOGIST/CONSULTANT:

Brad Snow
Snow Environmental Solutions, LLC
1375 Braided Rope Drive
Austin, TX 78727

WATER QUALITY DIVISION REFERENCE (PERMIT) NUMBER: 11-329

EXISTING NEW AS BUILT

TITLE: Work Plan for Installation of Soil borings and Temporary Monitoring Wells to delineate LNAPL and gather data to determine forward course of action. Anadarko Petroleum Corp., Carpenter A-1 Well Site, Evanston, WY (Formerly UPR Resources)

PLANS SPECS PROPOSAL REPORT
[Check all that APPLY]

DATE ON PROPOSAL/PLANS/REPORT: August 16, 2011 (Date stamped 8/18/11)

IS THIS PROPOSAL SUBMITTED PURSUANT TO:

'CONDITIONS' TO ANY WQD PERMIT? NO YES

AN LOV, NOV OR OTHER ENFORCEMENT? NO YES [DATE]

REVIEWING OFFICIAL:

Deborah Harris, P.G.

DATE OF THIS REVIEW: August 19, 2011

ACTION: Work Plan, August 2011, approved as submitted

COMMENTS: GROUNDWATER SECTION

1.0 SITE SUMMARY:

1.1 Site Description. The Union Pacific Resources (UPR) Carpenter A-1 site is a former production oil well that is approximately two miles south of Evanston, Wyoming in Uinta County. The site is 1.5 acres surrounded by pasture land. A site characterization investigation was conducted as a requirement by the Wyoming Oil and Gas Conservation Commission for the closure of a blowdown pit. The investigation revealed subsurface hydrocarbon contamination. An additional investigation was performed in 1998 (see below).

1.2 Hydrogeology. Groundwater exists at about ten feet below ground surface. The nearest surface water is Yellow Creek, located 0.5 miles to the west.

1.3 Contamination. A light "gasoline-like" product was observed floating on the shallow water table through backhoe excavations and auger holes near the blowdown pit. In the 1998 investigation, condensate was identified in a monitoring well and "heavy, non-hazardous crude-like oil" was found at shallow depths in the former process area.

2.0 SUMMARY OF WORK COMPLETED TO DATE:

2.1 July 1997 Site Characterization. Holes were dug using a backhoe or drilled using a small auger rig in and around the former blowdown pit. Hydrocarbons were observed floating on the shallow water table.

2.2 1998 Report of Investigation. An investigation of the site, including a blow down pit and a former process area, was performed following the November 6, 1997 Subsurface Investigation Work plan. The goals of the investigation were to delineate the vertical and horizontal extent of light non-aqueous phase liquids (LNAPLs), characterize the local hydrogeology, determine the presence of potential receptors and evaluate if remediation measures are necessary.

2.2.1 Groundwater Investigation. Thirteen (13) boreholes were drilled to define the site lithology, delineate the plume (free and dissolved phase) boundary, and determine the site hydrology. Five (5) of the borings were converted to groundwater monitoring wells to determine groundwater flow direction and gradient, to assess groundwater quality and to measure any LNAPL accumulation. Four of the wells surround the pit and one well was installed in the center of the pit location. Groundwater from the wells was sampled and analyzed for TPH-DRO and TPH-GRO, and BTEX compounds. Natural attenuation parameters were also measured. The wells were also measured for LNAPL accumulation. Well MW-4 contained LNAPL and was not sampled for dissolved phase contaminants. The groundwater flow direction and gradient was determined to be to the west at 0.01 ft/ft. This held steady during four months of monitoring. The four surrounding wells, MW-1, 2, 3, and 5, were non-detect or had very low levels of dissolved phase contamination. Well MW-4 contained up to 4.40 feet of condensate.

2.2.2 Soil Investigation. Each of the thirteen (13) borings was advanced through at least eight feet of alluvium before intersecting the claystone bedrock. The "perched" aquifer is located in the alluvium. Evaluation of the borings suggests that the blow down pit is located in a shallow "bowl" of alluvium surrounded by the relatively impermeable claystone. Lithology logs were prepared for each boring. Visual, olfactory, and organic vapor

measurement (OVM) readings were noted for each boring. Where contamination was obvious, soil samples were collected and sent to a laboratory for BTEX and TPH analysis. Significant hydrocarbon contamination was only observed in BH-24 where a THP-GRO level of 829 mg/kg was reported by the laboratory. This boring is located near the old processing area. Boring BH-21, located between MW-4 and MW-3, also exhibited some hydrocarbon contamination based on the field observations, however, no laboratory analysis was performed. Geophysical testing of the soil was performed, resulting in a permeability (K) of 4.38 feet per year or 4.235×10^{-6} cm/second.

2.2.3 Potential Receptors. A one mile radius was investigated for streams, crops, livestock, ponds, irrigation ditches and water wells. Eight wells supplying water for domestic and/or stock use were located in the one mile radius. The wells that are being used for domestic uses are completed in the deeper, confined aquifer. The stock ponds and livestock wells are completed in the perched, unconfined aquifer. Surrounding fields are used to grow hay and to pasture livestock. A contaminant travel time estimate was performed to determine how long it will take the contaminant plume to migrate down gradient to the property boundary, to the nearest water supply well and to the nearest occupied dwelling. The travel times were calculated to be 14.6 years to the property boundary, 394.2 years to the nearest down gradient water supply well, and 401.5 years to the nearest down gradient occupied dwelling.

2.3 1999 Corrective Action Plan. The corrective action plan (CAP), that discusses plans for recovery of the LNAPL and remediation of impacted soil and groundwater, was required by the March 16, 1999 WDEQ review of the 1998 ROI. The WDEQ review also required further investigation of the former process area.

2.3.1 Former Process Area Investigation. UPR's plan involves drilling at least four (4) borings in the area to define the soil contamination and install a monitoring well in one of the borings to test for the presence of LNAPL and dissolved phase groundwater contamination. Samples of the soil will be sent to a lab for volatile and semi-volatile analyses (EPA methods 8260 and 8270). The groundwater will be tested for BTEX and TPH-GRO.

2.3.2 LNAPL Recovery. The CAP provides UPR's plans for LNAPL recovery at the site. The total volume of LNAPL released at the site was estimated to be 981 gallons based on LNAPL thicknesses measured in monitoring well MW-4. A software program called OILVOL was used to determine this amount. The program also estimated that 631 gallons are LNAPL, 308 gallons are residual product in the saturated zone and 42 gallons are residual product in the unsaturated zone. The total recoverable amount will be less than the 981 gallons, probably in the range of 300-500 gallons. An LNAPL drawdown/recovery test was performed on MW-4 in 1998. The observed LNAPL thickness returned to its original thickness after approximately 2 days indicating that the LNAPL can be removed from this well, but at a relatively slow rate, probably around 10 gallons per day. The lithology at well MW-4 is a silty sand alluvium which should be acceptable for the planned recovery system.

UPR proposes to use MW-4 as a recovery well using a pneumatically operated skimmer pump to transfer LNAPL from the well to a on-site 400 barrel storage tank. The recovered LNAPL will then be trucked to an active UPR facility for processing. The storage tank will be equipped with an automatic high-level shut-off control to prevent overflowing the tank. An operation and maintenance manual will be prepared following construction of the system.

Performance of the recovery system will be measured by the amount of product recovered, the product thickness in MW-4, and by the water quality of down gradient wells. The system will be monitored on a monthly basis. The monitoring wells will be gauged and sampled quarterly for BTEX and TPH-GRO. pH, conductivity, and redox potential will be measured in the

field. UPR has a contingency plan for adding more recovery wells if the single well is not proving to be effective.

2.3.3 Natural Attenuation (NA). UPR plans to analyze the site groundwater for NA indication parameters once the LNAPL is recovered or significantly reduced. These parameters include electron acceptors and biodegradation by-products. A model such as Bioscreen will be used to evaluate the effectiveness of NA at the site.

2.4 2000 Corrective Action Report. The current report provides information on the work that was planned as described above in the Corrective Action Plan. The soil borings were installed, with one of the borings converted to a monitoring well, and the recovery system was installed, tested, and finally became fully operational in the Spring of 2001.

2.4.1 Additional Investigation. In June 2000, a limited subsurface investigation was performed to define the extent of impact by heavy hydrocarbons in the vadose zone at a previously discovered location at the site, thought to be a former process area. This location is unrelated to the former blown down pit and the condensate contamination. Four (4) borings were performed in the area assumed to be where the "heavy" petroleum is concentrated. The borings were field screened using a Organic Vapor Meter (OVM). Soil samples were collected from the shallow soil (2'±) and from approximately 11 feet deep (at the water table depth) and analyzed for VOC and SVOC compounds using EPA analytical methods 8260 and 8270. This data, combined with previous soil sampling (July, 1997) identifies an area of shallow (3-7 feet) "heavy range" petroleum soil contamination at concentrations well below EPA soil standards. The near surface impact and the area of the impact suggest that the contamination is due to a historic operation at the site unrelated to the condensate contamination associated with the blown down pit.

One boring, in the middle of the "heavy petroleum" soil contamination, was made into a groundwater monitoring well. This well, MW-6, was sampled and had EPA method 8021 for BTEX and method 8015 GRO and DRO analyses performed. The well was sampled in June and November 2000. The maximum BTEX readings were 2,200/160/2,300/4,560 µg/l respectively. The maximum TPH-DRO and GRO readings were 0.63 and 75.0 mg/l.

2.4.2 Annual Sampling Results. Monitoring wells MW-1 through MW-5 were sampled three times during 2000 for BTEX and TPH-GRO compounds. Well MW-4, located in the center of the former blow down pit, had free phase hydrocarbons present in the well on all three occasions, so it was not sampled. The remaining wells were non-detect for all compounds during 2000.

2.4.3 Recovery System Installation and Operation. In August 2000, a Solar Sipper system was installed in MW-4 to recover the free phase hydrocarbon (FPH). The system consists of a solar panel, battery, control panel, skimmer pump, air compressor and tubing, high level shut off system and a 500 gallon, doubled wall storage tank. After some system testing and fine tuning, it is set to run on a timed interval to collect the FPH. Currently it is recovering approximately 1 quart every two hours. Because of system down times during the testing/shakedown period, only 40 gallons of FPH has been recovered at the time the report was written. The system operates by applying a vacuum to the floating skimmer which opens a valve and allows FPH to enter the reservoir. After several seconds the pump reverses itself, applying pressure to the collector, closing the inlet valve, and forcing the accumulated FPH to the surface. The system will work as the groundwater fluctuates over a range of approximately 2.5 feet. The Report provides a complete operations manual for additional operation and maintenance information.

As mentioned above, several "bugs" had to be worked out before the system began working efficiently. The main problem with the installation was that during irrigation season, the groundwater elevation changes approximately 10 feet in a matter of a few days. This will either cause the skimmer to be completely covered by rising groundwater, allowing only water to be captured, or it will be hanging in mid air as the groundwater elevation falls. The solution to this problem is to take the system off line during the few months that irrigation is occurring. Other problems encountered were with the filter becoming plugged and the timing of the controller was not functioning properly. As of the spring of 2001, the system was operating as designed with no problems. The system is being checked on a monthly basis.

2.5 April 2007 Work Plan. This permit to construct application provided plans and specs for performing a limited subsurface investigation to determine the extent of FPH in the subsurface and to install an additional recovery well. The two current recovery wells are not working as quickly as hoped. The installation of a third recovery well should accelerate the recovery of the FPH. Up to five (5) temporary test wells will be installed to investigate FPH thicknesses. Once an area of the maximum thickness is identified, a permanent recovery well, with oil skimmer, will be installed. The skimmer will be completed the same as the existing recovery wells. A construction report will be provided following the field work. All of the field work will follow applicable WDEQ and EPA guidelines and requirements.

2.6 Semi-annual Sampling & Monitoring (S&M) and operation of free product recovery. Semi-annual S&M of four (4) monitoring wells, reporting, and ongoing operation of the free product recovery system, with three (3) recovery wells since the April 2007 Work was completed, has been ongoing since the installation of the additional recovery well with skimmer as proposed in the April 2007 Workplan. Based on historic data, it appears that sufficient site characterization/investigation work has not been previously completed, and Anadarko's August 2011 *Site Investigation Work Plan* proposes additional soil borings and temporary monitoring wells in an attempt to accomplish this. Anadarko proposes to utilize data obtained from these additional environmental investigation activities to properly characterize the site, to define the source areas, and to base additional decisions pertaining to remedial action for the site.

3.0 REQUESTS/REQUIREMENTS/RECOMMENDATIONS:

3.1 The August 2011 *Site Investigation Work Plan* is approved as submitted. Please submit a Site Investigation Report on the site investigation details with recommendations for remedial action designed to mitigate and/or remove source areas, expediting closure of the Site, as soon as possible following the construction activities.

END OF REVIEW

DH/rm/11-0755



Department of Environmental Quality

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



Matthew H. Mead, Governor

John Corra, Director

NOTIFICATION OF COVERAGE

August 30, 2011

Saddle Ridge, LLC
Attn: William J. Edwards, Member/Manager
506 Shoshoni Street
Cheyenne, Wyoming 82009

RE: Saddle Ridge Sub – Phase 2-B Water & Sewer Construction,
Location: Portion of W $\frac{1}{2}$, Section 25, T14N, R66W,

App. #11-330
Laramie County

Dear Mr. Edwards:

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 consisting of 8" to 12" C-900 PVC DR-14 Class 200 water line extensions and Existing Sewage Collection Systems consisting of 8" to 12" PVC SDR35 sanitary sewer line extensions in the Phase 2-B area of the Saddle Ridge Subdivision development 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, 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 permits. 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) 777-7758 FAX 777-7682	ABANDONED MINES (307) 777-8145 FAX 777-6462	AIR QUALITY (307) 777-7391 FAX 777-5616	INDUSTRIAL SITING (307) 777-7369 FAX 777-6937	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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- c. Water mains greater than 12 inches in diameter shall be 100% remote video inspected after completion before first charging with water. If objects greater than 2" in diameter are found, they shall be mechanically removed before water is introduced. If flushing velocities greater than 5 feet per second cannot be achieved, the lines shall be 100% remote video inspected after flushing. Any remaining debris must be removed before the line can be disinfected or placed into service.

The approval granted under this Notification Of Coverage and the General Permit shall expire on August 31, 2013. Please reference Application Number 11-330 in any future correspondence.

If you have any questions, please contact me at either ron.ewald@wyo.gov or (307) 777-6183.

Sincerely,



Ronald L. Ewald
Assistant Southeast District Engineer
Water Quality Division

RLE/rm/11-0794

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: IPS, Cheyenne
Herman Noe, Engineering Manager, City of Cheyenne Board of Public Utilities,
2406 Snyder Avenue, Cheyenne, Wyoming 82001
Roger Strube, DOWL HKM, 1575 N 4th, Suite 105, Laramie, Wyoming 82072



Department of Environmental Quality



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Matt Mead, Governor

John Corra, Director

NOTIFICATION OF COVERAGE

August 26, 2011

Mayor Nancy Tia Brown
City of Cody
P.O. Box 2200
Cody, WY 82414

RE: Veterans Memorial Privy, Permit Number: 11-333, NW ¼, Lot 61, T52N, R101 W., Park County

Dear Mayor Brown:

This project involves the installation of a prefabricated vault toilet at a park in Cody. This application for coverage under General Permit has been reviewed in accordance with Chapter 3, Section 7; and Chapter 11, Section 44 of the Wyoming Water Quality Rules and Regulations and is hereby approved with the following exemption.

Chapter 11, Section 44 (e) requires that the vault has a minimum capacity of 500 gallons per riser and shall be a minimum of 4.5 feet deep. The specified prefabricated vault has a 478 gallon capacity and the depth of the vaults is 4 feet, 4 inches. An exemption is hereby granted.

You are authorized to construct the facilities in accordance with the general permits and 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 which can be downloaded from the Wyoming Department of Environmental Quality webpage at:

http://deq.state.wy.us/wqd/www/Permitting/Pages/general_permits.asp

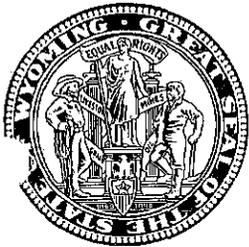
If you have any questions, please contact me at 307-335-6961.

Sincerely,

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

xc: Jeremiah Easum, P.E., Sage Civil Engineering, 2824 Big Horn Ave., Cody, WY 82414
IPS, Cheyenne





Department of Environmental Quality

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Matthew H. Mead, Governor

John Corra, Director

NOTIFICATION OF COVERAGE

August 31, 2011

Laramie County
Gary Kranse, Planning Director,
310 W 19TH Street, Suite 400
Cheyenne, WY 82001

RE: Laramie County Archer Complex Water System
Application No. **11-341**, Laramie County

Dear Mr. Kranse:

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 installation of approximately 127 ft of 8 inch PVC water main and install one new fire hydrant, Section 27, Section 28, T14N R65W; 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 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 August 31, 2013.

This **Notice of Coverage** is covered under the General Permits on the Wyoming Department of Environmental Quality webpage. The General Permits can be viewed at the following path: http://deq.state.wy.us/wqd/www/Permitting/Pages/general_permits.asp. Please reference Application No. **11-341** 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/11-0801

Enclosure: Certificate of Completion

cc: IPS, Cheyenne
Gary Grigsby, Western R.&D., 5908 Yellowstone Ave., Suite B, Cheyenne, WY 82009



REVIEW OF PLANS AND SPECIFICATIONS
WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY
WATER QUALITY DIVISION

Herschler Bldg., 4 West
Cheyenne, Wyoming 82002

PROJECT: Mortimore Residential Septic System, Carbon County

LOCATION: Portions of Section 18, T12N, R87W, **Carbon County**

ENGINEER: None
SURVEYOR: None

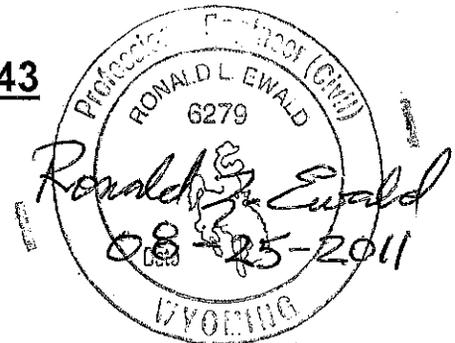
APPLICANT: Howard Mortimore
P.O. Box 1257
Rawlins, WY 82301
Ph: (307) 320-8283

WATER QUALITY DIVISION REFERENCE #:

11-343

REVIEWING ENGINEER: Ronald L. Ewald
Phone: (307) 777-6183

DATE OF REVIEW: August 25, 2011



ACTION: **NOT AUTHORIZED FOR CONSTRUCTION**. In accordance with Section 14 (a), Chapter III, Wyoming Water Quality Rules and Regulations, the application is denied because it is incomplete or does not meet applicable minimum design and construction standards. Please address the comments outlined below and submit the requested information in order that the application process may be completed in accordance with Section 9. If the applicant fails to provide the requested information within six months the incomplete application shall be returned.

COMMENTS, INADEQUACIES, AND QUESTIONS:

1. Physical Location of System Components - you have property that straddles the Wyoming/Colorado state line, and the proposed location of your leachfield also appears to be very close to the state line (or possibly on the Colorado side). Therefore, very accurate and precise locations of all buildings, property lines, the septic tank and leachfield, and especially the state line must be indicated on all site drawings, or subdivision Tract and Lot drawings. The legal description of the

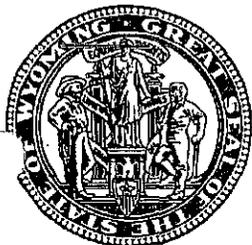
property mentions "RESURVEY Township North" and Tract & Lot #'s. What does Resurvey Township North mean, and show it on a map. Also, the subdivision drawing submitted has unreadable Tract #'s and no Lot #'s on it, which is what the legal description refers to. Lastly, the precise location of the state line is not shown on any of the site or subdivision drawings submitted, and it shall be included on all future maps and drawings.

Site maps or drawings that clearly indicate, with adequate precision, where all pertinent existing structures or features are located, and where the exact locations of the septic tank and leachfield are to be installed, and especially where the state line is located, **SHALL BE indicated** on all future resubmitted maps and drawings. Also, Tract #'s and Lot #'s shall be clearly legible on all maps and drawings. It was previously suggested that you obtain a 7½ minute quad map of this area to use as a background reference map. However this is not required so long as what is submitted includes all that is needed from above.

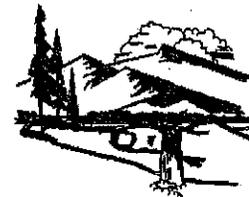
2. Leachfield Layout - on the site drawing submitted a single 96 foot long trench is shown as the leachfield. However, in your worksheets and detail sheets a two trench leachfield was designed for. Which is it to be? This reviewer recommends the two trench layout as a single chambered trench is really too long and the "back end" of the trench may never get used. Make sure all site plan drawings are consistent with the worksheets and detail sheets.

Enclosures: Returned site drawings

RLE/rm/11-0765



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Matt Mead, Governor

John Corra, Director

NOTIFICATION OF COVERAGE

September 2, 2011

Paul D. Genho, President
Corp. of the Presiding Bishop
Church of Jesus Christ of Latter Day Saints
139 E. South Temple, Ste 110
Salt Lake City, UT 84111

RE: Sixth Crossing Visitor Center Septic Tank System with Pressure Dosed Drainfield, Permit Number: 11-354, SE ¼, Secton 27, T30N, R95 W., Fremont County

Dear Mr. Genho:

This project involves the installation of two 1,500-gallon septic tanks in series and a pressure dosed drain field to serve a new visitors center. This application for coverage under General Permit has been reviewed in accordance with Chapter 3, Section 7; and Chapter 11 of the Wyoming Water Quality Rules and Regulations and is hereby approved.

You are authorized to construct the facilities in accordance with the general permits and 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 which can be downloaded from the Wyoming Department of Environmental Quality webpage at:

http://deq.state.wy.us/wqd/www/Permitting/Pages/general_permits.asp

If you have any questions, please contact me at 307-335-6961.

Sincerely,

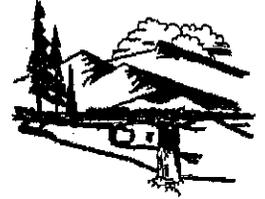
James Brough, P.E.
Northwest District Engineer
Water Quality Division

xc: Charles K. Wolz, P.E., 3240 Green Meadows Drive, Casper, WY 82604
IPS





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Matt Mead, Governor

John Corra, Director

NOTIFICATION OF COVERAGE

September 2, 2011

Dossey Overfield, Manager
Northwest Rural Water District
P.O. Box 2347
Cody, WY 82414

RE: NWRW-North Cody-CR 2AB Dip Replacement. DEQ Permit #11-332, Park County, N 1/2, 2.11, T53N., R101 W.

Dear Ms. Overfield,

This project consists of the replacement of approximately 3750 linear feet of ductile iron pipe waterline with C900 PVC DR 18 - Class 235 or ASTM D3035 - PE 4710 - DR 9 - Class 250 along County Rd. 2AB

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.

These General Permit requirements can be downloaded from the Wyoming Department of Environmental Quality webpage. The General Permits can be found under the Water Quality Division Water and Wastewater Program, Engineering and Technical Services at:

http://deq.state.wy.us/wqd/www/Permitting/Pages/general_permits.asp

If you have any questions, please contact Hannes Stueckler at 307-335-6964 or James Brough at 307-335-6961.

Sincerely,

Hannes E. Stueckler, P.E.
Assistant Northwest District Engineer
Water Quality Division

xc: PDF to Cheyenne
Cody A. Schatz, P.E., engineering Associates, P.O. Box 1900, Cody, WY 82414





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John Corra, Director

NOTIFICATION OF COVERAGE

September 2, 2011

Dave Gaddis
P.O. Box 487
Dubois, WY 82513

RE: Ramshorn Inn Fire Suppression Water Service. DEQ Permit #11-331, Fremont, Latitude 43.533731°, Longitude 109.630182°

Dear Mr. Gaddis,

This project consists of the installation of a new 6 inch water line to provide future capacity for proposed fire suppression sprinkler system at the Ramshorn Inn.

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.

These General Permit requirements can be downloaded from the Wyoming Department of Environmental Quality webpage. The General Permits can be found under the Water Quality Division Water and Wastewater Program, Engineering and Technical Services at:

http://deq.state.wy.us/wqd/www/Permitting/Pages/general_permits.asp

If you have any questions, please contact Hannes Stueckler at 307-335-6964 or James Brough at 307-335-6961.

Sincerely,

Hannes E. Stueckler, P.E.
Assistant Northwest District Engineer
Water Quality Division

xc: PDF to Cheyenne
Erik Wachob P.E., Nelson Engineering, P.O. Box 1559, Jackson 83001





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Matthew H. Mead, Governor

152 N. Durbin St., Suite 100 Casper, WY 82601 (307) 473-3450

John Corra, Director

NOTIFICATION OF COVERAGE

September 20, 2011

Clint Ruby
P.O. Box 339
Gillette, WY 82717

RE: Clint Ruby Residential Small Wastewater System, Crook County
Location: SE ¼ SW 1/4, Section 15, Township 50 North, Range 62 West, Permit # 11-335

Dear Mr. Ruby:

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. The General Permit requirements can be downloaded from the Wyoming Department of Environmental Quality webpage,

http://deq.state.wy.us/wqd/www/Permitting/Pages/general_permits.asp

Additionally, the following permit condition applies:

1. Cleanouts are required every 100 feet and at all changes in direction 22.5 degrees and greater, both horizontal and vertical. **This requirement includes both the pipeline from the house to the septic tank and from the septic tank to the leachfield.**
2. Either a 6-inch diameter clean-out riser or a manway from each compartment of the septic tank must be extended to the ground surface from all septic tanks.

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.** Please contact me with questions at 307-473-3478.

Sincerely,

Karen L. Farley, P.E.
NE District Engineer
WDEQ/WQD

cc: IPS, Cheyenne
WYDEQ Casper File
Jay Pixley, P.O. Box 590, Sundance, WY 82729
Tim Lyons, Crook County Growth and Development

Cheyenne
122 West 25th Street 82002
(307) 771-7937

Lander
510 Meadowview Drive 82520
(307) 332-3144

Sheridan
2100 W. 5th Street 82801
(307) 673-9337





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John Corra, Director

NOTIFICATION OF COVERAGE

September 2, 2011

Jeanette D. Mathis
P.O. Box 1286
Sundance, WY 82729

RE: Mathis Residential Small Wastewater System, Crook County
Location: NW, NSW, SWNE, W ½ of SESW, SWNW, Section 10, Township 51 North, Range 63 West,
Permit # 11-336

Dear Ms. Mathis:

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. The General Permit requirements can be downloaded from the Wyoming Department of Environmental Quality webpage, http://deq.state.wy.us/wqd/www/Permitting/Pages/general_permits.asp

Additionally, the following permit condition applies:

1. Cleanouts are required every 100 feet and at all changes in direction 22.5 degrees and greater, both horizontal and vertical. This requirement includes both the pipeline from the house to the septic tank and from the septic tank to the leachfield.
2. Either a 6-inch diameter clean-out riser or a manway from each compartment of the septic tank must be extended to the ground surface from all septic tanks.

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.** Please contact me with questions at 307-473-3478.

Sincerely,

Karen L. Farley, P.E.
NE District Engineer
WDEQ/WQD

cc: IPS, Cheyenne
WYDEQ Casper File
William C. Dewey, Tri-City Excavation, Inc., 169 Thorn Divide Road, Carlile, WY 82721
Tim Lyons, Crook County Growth and Development

Cheyenne
122 West 25th Street 82002
(307) 777-7937

Lander
510 Meadowview Drive 82520
(307) 332-3144

Sheridan
2100 W. 5th Street 82801
(307) 673-9337





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Matt Mead, Governor

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John Corra, Director

NOTIFICATION OF COVERAGE

September 16, 2011

Mike McFarland
61 Bruce Road
Newcastle, WY 82701

RE: McFarland Small Residential Septic System, Weston County
Location: NW ¼, Section 17, T. 43N, R. 65W, Newcastle, WY
Permit # 11-337

Dear Mr. McFarland:

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. The General Permit requirements can be downloaded from the Wyoming Department of Environmental Quality webpage,

http://deq.state.wy.us/wqd/www/Permitting/Pages/general_permits.asp

Additionally, the following permit condition applies:

1. Cleanouts are required every 100 feet and at all changes in direction 22.5 degrees and greater, both horizontal and vertical. This requirement includes both the pipeline from the house to the septic tank and from the septic tank to the leachfield.
2. Either a 6-inch diameter clean-out riser or a manway from each compartment of the septic tank must be extended to the ground surface from all septic tanks.

Septic systems shall not be installed during adverse weather. This includes rain, snow, severely cold temperatures, or excessively moist soils. Please contact me with questions at 307-473-3469.

Sincerely,

Jason Vreeland, P.E.
Assistant NE District Engineer
WDEQ/WQD

cc: IPS, Cheyenne
WDEQ Casper File
John Patik, Black Hills Plumbing, Inc., 1122 S. Summit Avenue, Newcastle, WY 82701
Ray Pacheco, Weston County Growth and Development, 1 West Main Street, Newcastle, WY 82701





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Matthew H. Mead, Governor

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John Corra, Director

NOTIFICATION OF COVERAGE

September 22, 2011

Richard C. Miller
5016 US Highway 16
Newcastle, WY 82701

RE: Miller Small Residential Septic System, Weston County
Location: SE ¼, Section 28, T. 45N, R. 61W, Newcastle, WY
Permit # 11-338

Dear Mr. Miller:

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. The General Permit requirements can be downloaded from the Wyoming Department of Environmental Quality webpage,

http://deq.state.wy.us/wqd/www/Permitting/Pages/general_permits.asp

Additionally, the following permit condition applies:

1. Cleanouts are required every 100 feet and at all changes in direction 22.5 degrees and greater, both horizontal and vertical. This requirement includes both the pipeline from the house to the septic tank and from the septic tank to the leachfield.
2. Either a 6-inch diameter clean-out riser or a manway from each compartment of the septic tank must be extended to the ground surface from all septic tanks.

Septic systems shall not be installed during adverse weather. This includes rain, snow, severely cold temperatures, or excessively moist soils. Please contact me with questions at 307-473-3469.

Sincerely,

Jason Vreeland, P.E.
Assistant NE District Engineer
WDEQ/WQD

cc: IPS, Cheyenne
WDEQ Casper File
John Patik, Black Hills Plumbing, Inc., 1122 S. Summit Avenue, Newcastle, WY 82701
Ray Pacheco, Weston County Growth and Development, 1 West Main Street, Newcastle, WY 82701





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Matthew H. Mead, Governor

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John Corra, Director

NOTIFICATION OF COVERAGE

October 7, 2011

R. Reynard Mills
1487 Inyan Kara Creek Road
Sundance, WY 82729

RE: Mills Residential Septic System, Crook County
Location: SE ¼, Section 7, T. 52N, R. 66W, Crook County, WY
Permit # 11-339

Dear Mr. Mills:

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. The General Permit requirements can be downloaded from the Wyoming Department of Environmental Quality webpage,

http://deq.state.wy.us/wqd/www/Permitting/Pages/general_permits.asp

Additionally, the following permit condition applies:

1. Cleanouts are required every 100 feet and at all changes in direction 22.5 degrees and greater, both horizontal and vertical. This requirement includes both the pipeline from the house to the septic tank and from the septic tank to the leachfield.
2. Either a 6-inch diameter clean-out riser or a manway from each compartment of the septic tank must be extended to the ground surface from all septic tanks.
3. To ensure proper operation of the leachfield, wastewater flow into the leachfield should be evenly distributed between the trenches with a flow-dividing tee or by other approved methods.

Septic systems shall not be installed during adverse weather. This includes rain, snow, severely cold temperatures, or excessively moist soils. Please contact me with questions at 307-473-3469.

Sincerely,

Jason Freeland, P.E.
Assistant NE District Engineer
WDEQ/WQD

cc: IPS, Cheyenne
WDEQ Casper File
Travis Dewey, Tri-City Excavation, Inc., 169 Thorn Divide Road, Carlile, WY 82721
Tim Lyons, Crook County Growth and Development

Cheyenne
122 West 25th Street 82002
(307) 777-7937

Lander
510 Meadowview Drive 82520
(307) 332-3144

Sheridan
2100 W. 5th Street 82801
(307) 673-9337





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Matthew H. Mead, Governor

152 N. Durbin St., Suite 100 • Casper, WY 82601 • (307) 473-3450

John Corra, Director

NOTIFICATION OF COVERAGE

October 17, 2011

Mayor Paul Brooks
City of Sundance
P.O. Box 542
Sundance, WY 82728

RE: City of Sundance – West Street Stream Crossing Improvements,
WDEQ #11-340, Crook County, WY

Dear Mayor Brooks:

The above application for coverage under General Permit to Construct, Install, Modify or Operate Extensions to or Modification of Existing Public Water Supply Distribution Systems in accordance with Chapter 3 and Chapter 12 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(ies) in accordance with the general permits and the materials submitted in your application package. The General Permit requirements can be downloaded from the Wyoming Department of Environmental Quality webpage,

http://deq.state.wy.us/wqd/www/Permitting/Pages/general_permits.asp

If you have any questions, please contact me at 307-473-3478.

Sincerely,

Karen L. Farley, P.E.
WDEQ/WQD Northeast District Engineer

Enclosures: Certificate of Completion

cc: Ken Rathbun, P.E., Bearlodge Ltd., Inc., P.O. Box 130, Sundance, WY 82729
WDEQ File
IPS (Cheyenne)





Department of Environmental Quality

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Matthew H. Mead, Governor

John Corra, Director

NOTIFICATION OF COVERAGE

November 10, 2011

City of Rawlins
Spencer Ellingson, City Engineer
P.O. Box 953
Rawlins, WY 82301

RE: City of Rawlins- 2011 Water Main Replacement Project,
Application No. 11-342, Carbon County

Dear Mr. Ellingson:

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 5300 ft of 6 inch PVC water main, replacement of approximately 400 ft of 12 inch PVC water main and installation of eight new fire hydrant, S 1/2 Section 16, NE 1/4 Section 18, and N 1/2 Section 20, T21N R 87W; 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 November 10, 2013.

This **Notice of Coverage** is covered under the General Permits on the Wyoming Department of Environmental Quality webpage. The General Permits can be viewed at the following path:
http://deq.state.wy.us/wqd/www/Permitting/Pages/general_permits.asp. Please reference Application No. 11-342 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/11-0997

Enclosure: Certificate of Completion

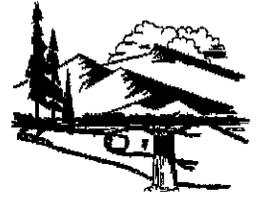
cc: IPS, Cheyenne
Seth Tourney, PMPC Civil Engineers, P.O. Box 370, Saratoga, WY 82331





Department of Environmental Quality

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Matthew H. Mead, Governor

John Corra, Director

NOTIFICATION OF COVERAGE

September 14, 2011

Howard Mortimore
P.O. Box 1257
Rawlins, WY 82301

RE: Mortimore Residential Septic System,
Location: SE¼ Section 18, T12N, R87W,

Application No. 11-343
Carbon County

Dear Mr. Mortimore:

The above application for coverage under General Permit to Construct, Install, Modify or Operate a Small Wastewater Facility consisting of a 1000 gallon, two compartment polyethylene septic tank and about 100 feet of chamber type leachfield divided into two equal length trenches of 50 feet each for a **3 bedroom 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 25 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. 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.
2. Polyethylene Septic Tank Installation Requirements - To ensure structural integrity, the **manufacturer's instructions** regarding bedding the tank and filling the tank with water during burial **must be followed during installation**. Additionally, immediately after clean-outs, the tank must be refilled with water according to the manufacturer's instructions to maintain structural integrity.



The approval granted under this Notification Of Coverage and the General Permit shall expire on September 14, 2013. Please reference Application Number 11-343 in any future correspondence.

If you have any questions, please contact me at ron.ewald@wyo.gov or (307) 777-6183.

Sincerely,



Ronald L. Ewald
Assistant Southeast District Engineer
Southeast District, Water & Wastewater Section
Water Quality Division

RLE/rm/11-0847

Enclosures: GENERAL PERMIT - Small Wastewater Facility
Certificate of Completion

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



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Matthew H. Mead, Governor

John Corra, Director

NOTIFICATION OF COVERAGE

September 13, 2011

Town of Encampment
Greg Salisbury, Mayor
P.O. Box 5
Encampment, WY 82327

RE: Town of Encampment 2012 Sewer Improvements Project;
Application No. **11-344**, Carbon County

Dear Mr. Salisbury:

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 installing approximately 950 feet of 8 inch PVC, SDR35 sewer main; installing 3 new manholes; 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. 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 September 13, 2013.

This **Notice of Coverage** is covered under the General Permits on the Wyoming Department of Environmental Quality webpage. The General Permits can be viewed at the following path: http://deq.state.wy.us/wqd/www/Permitting/Pages/general_permits.asp. Please reference Application No. **11-344** 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/11-0840

Enclosure: Certificate of Completion

cc: IPS, Cheyenne

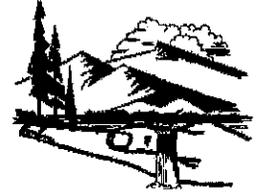
Ken Schwerdt, PMPC Civil Engineers, P.O. Box 370, Encampment, WY 82327





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Matthew H. Mead, Governor

John Corra, Director

NOTIFICATION OF COVERAGE

September 7, 2011

Midwestern Wyoming LLC
Attention: Michael Harrison
424 Parsley Blvd.
Cheyenne, WY 82007

RE: Midwestern Wyoming LLC, Water Lines
Application No. **11-345**, Laramie County

Dear Mr. Harrison:

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 installation of approximately 1,650 feet of 8 inch water main, install three new fire hydrants, and installation of approximately 600 feet of 6 inch water main, W 1/2, E 1/2 Section 27; W 1/2, Section 27; E 1/2, Section 28; NE 1/4, Section 33, N 1/2 SE 1/4, Section 33; NW 1/4 Section 34; T13N R 67W; 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 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 September 7, 2013.

This **Notice of Coverage** is covered under the General Permits on the Wyoming Department of Environmental Quality webpage. The General Permits can be viewed at the following path: http://deq.state.wy.us/wqd/www/Permitting/Pages/general_permits.asp. Please reference Application No. **11-345** 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/11-0819

Enclosure: Certificate of Completion

cc: IPS, Cheyenne
Thomas D. Cobb, AVI, 1103 Old Town Lane, Suite 101, Cheyenne, WY 82009
Herman Noe, Cheyenne Board of Public Utilities, P.O. Box 1469, Cheyenne WY 82003





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Matthew H. Mead, Governor

152 N. Durbin St., Suite 100 · Casper, WY 82601 · (307) 473-3450

John Corra, Director

NOTIFICATION OF COVERAGE

December 12, 2011

John Werbelow
46 Sundog
Gillette, WY 82718

RE: Werbelow Residential Septic System, Crook County, Permit # 11-346
Location: NW ¼, SW ¼, Section 27, Township 54 North, Range 61 West, Crook County, WY

Dear Mr. Werbelow:

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. The General Permit requirements can be downloaded from the Wyoming Department of Environmental Quality webpage, http://deq.state.wy.us/wqd/www/Permitting/Pages/general_permits.asp

Additionally, the following permit conditions apply:

1. Cleanouts are required every 100 feet and at all changes in direction 22.5 degrees and greater, both horizontal and vertical. This requirement includes both the pipeline from the house to the septic tank and from the septic tank to the leachfield.
2. Either a 6-inch diameter clean-out riser or a manway from each compartment of the septic tank must be extended to the ground surface from all septic tanks.
3. You are encouraged to contact the State Engineer's Office to begin the process of permitting all private wells on your property; a search done on the SEO website did not reveal any well permitted under your name.
4. Please be aware that if this system fails, an alternative replacement site will need to be selected that complies with current regulations for separation between drainages and water wells. If one is not available, alternative wastewater methods will need to be considered.
5. Flow Divider Tees are required, not just a regular tee. Please see "Two Trench Chambered Leachfield" detail (page 25 of the design packet).

Septic systems shall not be installed during adverse weather. This includes rain, snow, severely cold temperatures, or excessively moist soils. Please contact me with questions at 307-473-3478.

Sincerely,

Karen L. Farley, P.E.
WDEQ/WQD, NE District Engineer

cc: IPS, Cheyenne, WDEQ Casper File
Randy Gantz, Gantz Backhoe Service, Inc., P.O. Box 280, Hulett, WY 82720
Tim Lyons, Crook County Growth and Development

Cheyenne
122 West 25th Street 82002
(307) 777-7937

Lander
510 Meadowview Drive 82520
(307) 332-3144

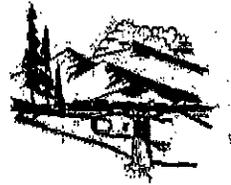
Sheridan
2100 W. 5th Street 82801
(307) 673-9337





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John Corra, Director

NOTIFICATION OF COVERAGE

September 8, 2011

Richard Telsrow
#3484 Hwy 24
Aladdin, WY 82710

RE: Telsrow Residential Small Wastewater System, Crook County
Location: NW ¼, NW ¼, Section 3, Township 54 North, Range 65 West, Permit # 11-347

Dear Mr. Telsrow:

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. The General Permit requirements can be downloaded from the Wyoming Department of Environmental Quality webpage, http://deq.state.wy.us/wqd/www/Permitting/Pages/general_permits.asp

Additionally, the following permit condition applies:

1. Cleanouts are required every 100 feet and at all changes in direction 22.5 degrees and greater, both horizontal and vertical. This requirement includes both the pipeline from the house to the septic tank and from the septic tank to the leachfield.
2. Either a 6-inch diameter clean-out riser or a manway from each compartment of the septic tank must be extended to the ground surface from all septic tanks.

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.** Please contact me with questions at 307-473-3478.

Sincerely,

Karen L. Farley, P.E.
NE District Engineer
WDEQ/WQD

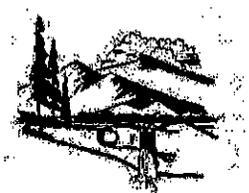
cc: IPS, Cheyenne
WYDEQ Casper File
Randy Gantz, Gantz Backhoe Service, P.O. Box 280, Hulett, WY 82720
Tim Lyons, Crook County Growth and Development





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Matthew H. Mead, Governor

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John Corra, Director

NOTIFICATION OF COVERAGE

September 12, 2011

Shawn Fligge
1484 Street Hwy 116
Sundance, WY 82729

RE: Fligge Residential Small Wastewater System, Crook County
Location: NE ¼ of Section 18, Township 49 North, Range 64 West, Permit # 11-348

Dear Mr. Fligge:

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. The General Permit requirements can be downloaded from the Wyoming Department of Environmental Quality webpage,

http://deq.state.wy.us/wqd/www/Permitting/Pages/general_permits.asp

Additionally, the following permit condition applies:

1. Cleanouts are required every 100 feet and at all changes in direction 22.5 degrees and greater, both horizontal and vertical. This requirement includes both the pipeline from the house to the septic tank and from the septic tank to the leachfield.
2. Either a 6-inch diameter clean-out riser or a manway from each compartment of the septic tank must be extended to the ground surface from all septic tanks.

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.** Please contact me with questions at 307-473-3478.

Sincerely,

Karen L. Farley, P.E.
NE District Engineer
WDEQ/WQD

cc: IPS, Cheyenne
WYDEQ Casper File
Bill Dewey, Tri-City Excavation, Inc., 169 Thorn Divide Road, Carfile, WY 82721
Tim Lyons, Crook County Growth and Development

Cheyenne
122 West 25th Street 82002
(307) 777-7937

Lander
510 Meadowview Drive 82520
(307) 332-3144

Sheridan
2100 W. 5th Street 82801
(307) 673-9337





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152 N. Durbin St., Suite 100 • Casper, WY 82601 • (307) 473-3450

John Corra, Director

NOTIFICATION OF COVERAGE

August 29, 2011

Blakeman Propane Septic System
Attn: Andrea Marden
802 W. Converse
Moorcroft, WY 82721

RE: Blakeman Propane Replacement Small Wastewater System, Crook County
Location: NE ¼, SE ¼, Section 36, Township 50 North, Range 65 West, Permit # 11-349,
Reference Permit # 86-311

Dear Andrea:

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. The General Permit requirements can be downloaded from the Wyoming Department of Environmental Quality webpage, http://deq.state.wy.us/wqd/www/Permitting/Pages/general_permits.asp

Additionally, the following permit condition applies:

1. Cleanouts are required every 100 feet and at all changes in direction 22.5 degrees and greater, both horizontal and vertical. This requirement includes both the pipeline from the house to the septic tank and from the septic tank to the leachfield.
2. Either a 6-inch diameter clean-out riser or a manway from each compartment of the septic tank must be extended to the ground surface from all septic tanks.

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.** Please contact me with questions at 307-473-3478.

Sincerely,

Karen L. Farley, P.E.
NE District Engineer
WDEQ/WQD

cc: IPS, Cheyenne
WYDEQ Casper File
Travis Dewey, Tri-City Excavation, Inc., 189 Thorn Divide Road, Carlisle, WY 82721
Tim Lyons, Crook County Growth and Development

Cheyenne
122 West 25th Street 82002
(307) 777-7937

Lander
510 Meadowview Drive 82520
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(307) 673-9337





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Matthew H. Mead, Governor

John Corra, Director

NOTIFICATION OF COVERAGE

September 7, 2011

Knife River Corporation - Northwest
Attention: Stephen Frey
32260 Old Hwy 34
Tangent, OR 97389

RE: Jebro Inc., Water and Sewer Lines
Application No. 11-350, Laramie County

Dear Mr. Frey:

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 installation of approximately 1,400 feet of 8 inch water main, install one new fire hydrants, installation of approximately 40 feet of 6 inch water main, installation of approximately 800 feet of 6 inch sanitary sewer, and install three manholes, W 1/2, E 1/2 Section 27; W 1/2, Section 27; E 1/2, Section 28; NE 1/4, Section 33, N 1/2 SE 1/4, Section 33; NW 1/4 Section 34; T13N R 67W; 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 September 7, 2013.

This **Notice of Coverage** is covered under the General Permits on the Wyoming Department of Environmental Quality webpage. The General Permits can be viewed at the following path: http://deq.state.wy.us/wqd/www/Permitting/Pages/general_permits.asp. Please reference Application No. 11-350 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/11-0824

Enclosure: Certificate of Completion

cc: IPS, Cheyenne
Thomas D. Cobb, AVI, 1103 Old Town Lane, Suite 101, Cheyenne, WY 82009
Herman Noe, Cheyenne Board of Public Utilities, P.O. Box 1469, Cheyenne WY 82003

