

Wyoming Department of Environmental Quality
Water Quality Division
WYPDES Program

STATEMENT OF BASIS
NEW

APPLICANT NAME: Pinnacle Gas Resources, Inc.

MAILING ADDRESS: 1 East Alger, Suite 206
Sheridan, WY 82801

FACILITY LOCATION: Butcher, which is located in the SWNW and the SWSE, Section 19, Township 53 North, Range 73 West, Campbell County. The produced water will be discharged into two on-channel reservoirs "Butcher" (3B) and "Mackinaw" (3B), located on Boruff Draw (3B), and an unnamed, ephemeral tributary (3B) of the North Prong, Wildcat Creek (3B). Boruff Draw (3B) is tributary to the Little Powder River (2AB), via Horse Creek (3B) and Wildcat Creek (3B). The permit requires that the produced water being discharged from this facility originate in one or more of the following formations: the Cook, Canyon, Wall, and/or Pawnee coal seams.

NUMBER: WY0053961

General Facility Description

This facility is a typical coal bed methane production facility in which groundwater is pumped from a coal bearing formation resulting in the release of methane from the coal bed. The permit authorizes the discharge to the surface of groundwater produced in this way provided the effluent quality is in compliance with effluent limits that are established by this permit. In developing effluent limits, all federal and state regulations and standards have been considered and the most stringent requirements incorporated into the permit. The EPA Effluent Guidelines and Standards for Oil and Gas Extraction Point Source Category (Part 435, Subpart E) predate the development of coal bed methane extraction technology; however the technology is similar enough to conventional gas extraction that, in the professional judgment of the WDEQ, this effluent limit guideline is appropriately applied to coal bed methane gas production. This permit does not cover activities associated with discharges of drilling fluids, acids, stimulation waters or other fluids derived from the drilling or completion of the wells.

The permittee has chosen option 2 of the coal bed methane permitting options. Under this permitting option, the produced water is immediately discharged to a class 2 or 3 receiving stream which is eventually tributary to a class 2AB perennial water of the state. While some option 2 CBM discharge permits establish limits that are protective of the downstream class 2 water(s), this permit prohibits discharge to class 2 water (the Little Powder River). This permit authorizes discharge of CBM effluent to on-channel reservoirs located in ephemeral tributaries of the North Prong, Wildcat Creek. A flow monitoring station below each of the reservoirs (locations named with the prefix "FM" in Table 1, Part I.B.12 of the following permit) have been established to ensure that effluent from the reservoirs does not reach the Little Powder River except in the event of a 100-year / 24-hour storm event or greater. The permit establishes effluent limits for the end of pipe, which are protective of all designated uses of the

class 3B receiving waters defined in Chapter 1 of Wyoming Water Quality Rules and Regulations. This may include aquatic life other than fish, recreation, agriculture (livestock watering), wildlife, industry and scenic value.

The permittee has submitted information to demonstrate that the permitted produced effluent volume from this facility will be contained in two on-channel reservoirs. The water budget for this facility confirms that the reservoirs will have sufficient capacity to contain all of the permitted effluent volume from this facility as well as storm runoff from a precipitation event equal to a 100-year / 24-hour storm. This permit requires daily monitoring year-round on ephemeral tributaries of Wildcat Creek below the on-channel reservoirs in order to determine if any effluent from this facility is reaching the established flow monitoring stations (FM001, FM002). This permit prohibits discharge of effluent from the reservoirs except in the event of a 100-year / 24-hour storm or greater. The permittee is required to maintain sufficient freeboard to contain stormwater runoff from a 100 year, 24 hour storm event. Should the level of water within a reservoir exceed the 100 year, 24 hour freeboard level during periods of time in which a 100 year, 24 hour storm or greater has not occurred, the permittee will cease discharge into the reservoir until such time that the level of water within the reservoir falls below the 100 year, 24 hour freeboard level. If a reservoir overtopping event occurs, verification of storm magnitude will be the responsibility of the permittee. Discharge from the reservoir resulting from a 100-year / 24-hour storm event or greater is limited by the permit to natural overtopping and shall not extend beyond a 48 hour period following commencement of natural overtopping. Additional release from reservoir(s) is not authorized. If any effluent discharged from this facility does reach a downstream flow monitoring point (FM001 and/or FM002), this permit requires the permittee to cease all discharge of effluent from the contributing wells until the effluent is no longer reaching the flow monitoring station. Any effluent from this facility that reaches an established flow monitoring station, except as the direct result of reservoir overtopping during a 100-year / 24-hour storm or greater, will be considered a violation of this permit and must be corrected by the permittee immediately. This permit does not establish effluent limits that are protective of designated uses associated with or the Little Powder River (class 2AB waters).

This permit authorizes discharge of CBM produced water from outfalls 001 and 002. These outfalls will discharge into on-channel reservoirs as described in Table 1 (Part I.B.12) of the permit. Neither the reservoirs nor the reservoir spillways will constitute regulated discharge points under this permit.

Effluent Limits

Permit effluent limits are based on federal and state regulations and are effective as of the date of issuance. The pH must remain within 6.5 and 9.0 standard units. Effluent limits for total dissolved solids (5,000 mg/l), specific conductance (7,500 micromhos/cm), and sulfates (3,000 mg/l) are included to protect for stock and wildlife watering. These limits are based upon Wyoming Water Quality Rules and Regulations, Chapter 2 and apply to discharge from any permitted outfall. In addition, the permit establishes a dissolved iron limit of 1000 µg/l, a dissolved manganese limit of 1755 µg/l, a total barium limit of 1800 µg/l, a total arsenic limit of 150 µg/l, a chlorides limit of 230 mg/l, and a total selenium limit of 5 µg/l. These limits are based on standards for class 3B waters which are intended to protect for the above listed designated uses and reflect the application of "tier 1" antidegradation protection. Tier 1 antidegradation protection is the basic level of protection which applies to all waters of the state, as described in the *Wyoming Surface Water Quality Standards "Implementation Policies for Antidegradation."* The permit also requires that the produced water being discharged by this facility originate in one or more of the following formations: the Cook, Canyon, Wall, and/or Pawnee coal seams, and establishes a total maximum daily flow limit of 0.28 MGD from outfalls 001 and 002.

Monitoring and Reporting Requirements

Results are to be reported twice-yearly and if no discharge occurs at the outfall for an entire sampling period, then "no discharge" is to be reported for that monitoring period. The permit also requires that an initial monitoring of the effluent be conducted within the first 60 days of discharge and the results submitted to WDEQ and the U.S. Environmental Protection Agency within 120 days of the commencement of discharge.

In order to monitor potential accumulation of pollutants within the receiving on-channel reservoirs, this permit (Part I.A.2.c) requires routine sampling, analysis, and reporting for the following constituents within the reservoirs being utilized to contain CBM produced water: total dissolved solids, specific conductance, total radium ²²⁶, dissolved iron, dissolved manganese, total arsenic, chlorides, dissolved zinc, and total selenium. Sampling for these constituents within the reservoirs is to occur a minimum of 50 feet from the location where the CBM effluent enters the reservoir. The reservoir monitoring locations have been identified in Table 1, Part I.B.12 of the permit as "R001 and R002". This monitoring requirement is intended to aid in the protection of the uses associated with the class 3B on-channel reservoirs (aquatic life other than fish, recreation, livestock watering, wildlife, industry and scenic value). If this monitoring of the effluent within the reservoirs reveals an exceedence of any applicable standards for class 3B waters, then this permit may be modified in order to protect all uses of the receiving water bodies.

General Permit Requirements

There shall be no discharge of floating solids or visible foam in other than trace amounts, nor shall the discharge cause formation of visible deposits of iron, hydrocarbons or any other constituent on the bottom or shoreline of the receiving water. In addition, erosion control measures will be implemented to prevent significant damage to or erosion of the receiving water channel at the point of discharge.

The discharge of wastewater and the effluent limits that are established in this permit have been reviewed to ensure that the levels of water quality necessary to protect the designated uses of the receiving waters are maintained and protected. An antidegradation review has been conducted and verifies that the permit conditions, including the effluent limitations established, provide a level of protection to the receiving water consistent with the antidegradation provisions of Wyoming surface water quality standards.

Self monitoring of effluent quality and quantity is required on a regular basis with reporting of results semiannually. The permit is scheduled to expire on June 30, 2008. This expiration date was determined through review of the watershed permitting schedule which the WDEQ is implementing in order to synchronize the permitting and expiration of facilities within the same watershed. This holistic approach will provide for more efficient permitting of point-source discharges.

Kathy Shreve
Water Quality Division
Department of Environmental Quality
Drafted: November 2, 2005

AUTHORIZATION TO DISCHARGE UNDER THE
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

In compliance with the provisions of the Federal Water Pollution Control Act, (hereinafter referred to as "the Act"), and the Wyoming Environmental Quality Act,

Pinnacle Gas Resources, Inc.

is authorized to discharge from the wastewater treatment facilities serving the

Butcher,

located in the

SWNW and the SWSE, Section 19, Township 53 North, Range 73 West, Campbell County,

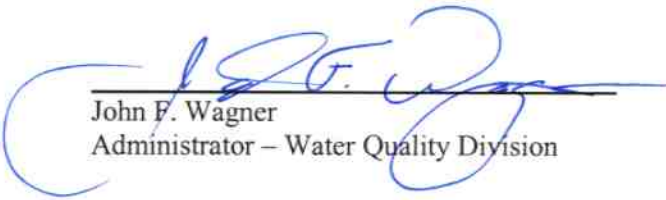
to receiving waters named

two on-channel reservoirs "Butcher" (3B) and "Mackinaw" (3B), located on Boruff Draw (3B), and an unnamed, ephemeral tributary (3B) of the North Prong, Wildcat Creek (3B). Boruff Draw (3B) is tributary to the Little Powder River (2AB), via Horse Creek (3B) and Wildcat Creek (3B).

in accordance with effluent limitations, monitoring requirements and other conditions set forth in Parts I, II and III hereof.

This permit shall become effective on the date of signature by the Director of the Department of Environmental Quality.

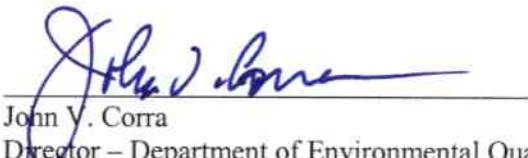
This permit and the authorization to discharge shall expire at midnight, June 30, 2008.



John F. Wagner
Administrator – Water Quality Division

3/8/06

Date



John V. Corra
Director – Department of Environmental Quality

3/13/06

Date

PART I

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

Effective immediately and lasting through June 30, 2008, the quality of effluent discharged by the permittee shall, at a minimum, meet the limitations set forth below. The permittee is authorized to discharge from outfall serial numbers 001-002.

1. Such discharges shall be limited as specified below:

Effluent Limits

<u>Effluent Characteristic</u>	<u>Daily Maximum</u>
Chlorides, mg/l	230
Dissolved Iron, µg/l	1000
Dissolved Manganese, µg/l	1755
pH, standard units	6.5 – 9.0
Specific Conductance, micromohs/cm	7500
Sulfates, mg/l	3000
Total Recoverable Arsenic, µg/l	150
Total Recoverable Barium, µg/l	1800
Total Dissolved Solids, mg/l	5000
Total Radium 226, pCi/l	60

Note: 1) 'Dissolved' value for metals refers to the amount that will pass through a 0.45 µm membrane filter prior to acidification to 1.5-2.0 with Nitric Acid.

The pH shall not be less than 6.5 standard units nor greater than 9.0 standard units in any single grab sample.

The produced water will originate from the Cook, Canyon, Wall, and/or Pawnee coal seams. The permittee may, if so desired, discharge produced water from any authorized well to any permitted outfall, as long as all permit limits and requirements are met. As originally permitted, this facility consisted of two outfalls and 17 wells.

This permit prohibits discharge of effluent from the reservoirs except in the event of a 100-year / 24-hour storm event or greater. If a reservoir overtopping event occurs, verification of storm magnitude will be the responsibility of the permittee. Discharge from reservoir resulting from a 100-year / 24-hour storm event or greater is limited by the permit to natural overtopping and shall not extend beyond a 48 hour period following commencement of natural overtopping. Additional release from reservoir is not authorized. If any effluent

discharged from this facility does reach a downstream flow monitoring station (FM001 and/or FM002), see Table 1 in Part 1.b.12 of the permit for location information), this permit requires the permittee to cease all discharge of effluent from the contributing wells until the effluent is no longer reaching the tributary monitoring station. Should discharge from the reservoir contribute to flow at a flow monitoring station, located as described in Table 1, Part I.B.12 of the permit, the permittee is required to notify the WDEQ in writing within 24 hours of the circumstances surrounding the reservoir discharge at the address noted in Part I.A.2.a of the permit. The permittee is also required to collect water quality samples for the constituents listed in Part I.A.2.b (Routine Monitoring, End of Pipe) of the permit during each and every period in which discharges from the reservoir contributes to flow at a flow monitoring station (FM001). Water quality data related to reservoir discharge contributing to flow at a flow monitoring station will be submitted to the WDEQ within 30 days of the date of such reservoir discharge occurrence. Any effluent from this facility that reaches the established flow monitoring station, except as the direct result of reservoir overtopping during a 100-year / 24-hour storm event or greater, will be considered a violation of this permit and must be corrected by the permittee immediately. This permit does not establish effluent limits that are protective of designated uses associated with the Little Powder River (2AB waters).

There shall be no discharge of floating solids or visible foam in other than trace amounts, nor shall the discharge cause formation of a visible sheen or visible hydrocarbon deposits on the bottom or shoreline of the receiving water.

All waters shall be discharged in a manner to prevent erosion, scouring, or damage to stream banks, stream beds, ditches, or other waters of the state at the point of discharge. In addition, there shall be no deposition of substances in quantities which could result in significant aesthetic degradation, or degradation of habitat for aquatic life, plant life or wildlife; or which could adversely affect public water supplies or those intended for agricultural or industrial use.

2. Discharges shall be monitored by the permittee as specified below:

a. Monitoring of the initial discharge

Within 60 days of commencement of discharge, a sample shall be collected from each outfall and analyzed for the 24 constituents specified below, at the required detection limits. Within 120 days of commencement of discharge, a summary report on the produced water must be submitted to the Wyoming Department of Environmental Quality and the U.S. EPA Region 8 at the addresses listed below. This summary report must include the results and detection limits for each of the 24 constituents. In addition, the report must include written notification of the established location of the discharge point (refer to Part I.B.11). This notification must include a confirmation that the location of the established discharge point(s) is within 1,510 feet of the location of the identified discharge point(s), is within the same drainage, and discharges to the same landowner's property as identified on the original application form. The legal description and location in decimal degrees of the established discharge point(s) must also be provided. After receiving the monitoring results for the initial discharge, the routine monitoring requirements described in Part I.A.2.b. may be modified to require more stringent monitoring.

<u>Parameter</u>	<u>Required Detection Limit</u>	<u>Sample Type</u>
Total Aluminum	50 µg/l	Grab
Dissolved Cadmium	0.1 µg/l	Grab
Dissolved Calcium	as mg/l	Grab

<u>Parameter</u>	<u>Required Detection Limit</u>	<u>Sample Type</u>
Dissolved Calcium	as me/l	Grab
Chlorides	5 mg/l	Grab
Dissolved Copper	1 µg/l	Grab
Dissolved Iron	30 µg/l	Grab
Dissolved Manganese	10 µg/l	Grab
Total Hardness	10 mg/l as CaCO ₃	Grab
Dissolved Lead	2 µg/l	Grab
Dissolved Magnesium	as mg/l	Grab
Dissolved Magnesium	as me/l	Grab
Dissolved Mercury	0.06 µg/l	Grab
pH	to 0.1 pH unit	Grab
Total Radium 226	0.2 pCi/l	Grab
Total Selenium	5 µg/l	Grab
Dissolved Sodium	as mg/l	Grab
Dissolved Sodium	as me/l	Grab
Sodium Adsorption Ratio	not applicable	Calculated
Specific Conductance	5 micromhos/cm	Grab
Sulfates	10 mg/l	Grab
Total Alkalinity	1 mg/l as CaCO ₃	Grab
Total Arsenic	1 µg/l	Grab
Total Barium	100 µg/l	Grab
Dissolved Zinc	10 µg/l	Grab
Bicarbonate	1 mg/l	Grab
Total Dissolved Solids	5 mg/l	Grab

Initial monitoring reports are to be sent to the following addresses:

Planning and Targeting Program, 8ENF-PT
 Office of Enforcement, Compliance, and Environmental Justice
 U.S. EPA Region 8
 999 18th St., Suite 300
 Denver, CO 80202-2466

and

Wyoming Department of Environmental Quality
 Water Quality Division
 Herschler Building, 4 West
 122 West 25th Street
 Cheyenne, WY 82002

b. Routine monitoring End of Pipe (001)

For the duration of the permit, at a minimum, samples for the constituents described below shall be collected at the indicated frequencies. The first routine monitoring for the time frame during which the monitoring of initial discharge occurs will, at a minimum, consist of flow measurements for the duration of the six-month monitoring time frame. Monitoring will be based on semi-annual time frames, from January through June, and from July through December.

<u>Parameter</u>	<u>Measurement Frequency</u>	<u>Sample Type</u>
Chloride (mg/l)	Annually	Grab
Dissolved Iron (µg/l)	Annually	Grab
Dissolved Manganese (µg/l)	Annually	Grab
pH (s. u.)	Once Every Six Months	Grab
Radium 226 (pCi/l)	Annually	Grab
Specific Conductance (micromohs/cm)	Once Every Six Months	Grab
Sulfate (mg/l)	Annually	Grab
Total Arsenic (µg/l)	Annually	Grab
Total Selenium (µg/l)	Annually	Grab
Total Barium (µg/l)	Annually	Grab
Total Flow – (MGD)	Monthly	Continuous
Sodium Adsorption Ratio (calculated as unadjusted ratio)	Once Every Six Months	Grab

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s): At the outfall of the final treatment unit which is located out of the natural drainage and prior to admixture with diluent waters.

c. Routine Monitoring Within Reservoirs (R001 – R002)

For the duration of the permit, at a minimum, samples for the constituents described below shall be collected at the indicated frequencies. Monitoring and reporting will be based on an annual time frame.

<u>Parameter</u>	<u>Measurement Frequency</u>	<u>Sample Type</u>
Total Dissolved Solids (mg/l)	Annually	Grab
Specific Conductance (micromohs/cm)	Annually	Grab
Total Radium 226 (pCi/l)	Annually	Grab

<u>Parameter</u>	<u>Measurement Frequency</u>	<u>Sample Type</u>
Dissolved Iron ($\mu\text{g/l}$)	Annually	Grab
Dissolved Manganese ($\mu\text{g/l}$)	Annually	Grab
Total Arsenic ($\mu\text{g/l}$)	Annually	Grab
Chlorides (mg/l)	Annually	Grab
Total Selenium ($\mu\text{g/l}$)	Annually	Grab
Dissolved Zinc ($\mu\text{g/l}$)	Annually	Grab

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s): the designated reservoir monitoring stations, located within the receiving reservoirs as described in Table 1 (R001), located in Part I.B.12 of the following permit. In the reservoirs, the monitoring locations are to be located a minimum of 50 feet away from the point where CBM effluent enters the reservoir. Reservoir sampling will only apply to reservoirs that are receiving CBM effluent or have received CBM effluent in the past. Results are to be reported annually and if a particular reservoir has not yet received any CBM effluent from this facility, then "no discharge" is to be reported for that reservoir monitoring station in the discharge monitoring report.

d. Routine Monitoring of the Flow Monitoring Stations (FM001 – FM002)

For the duration of the permit, at a minimum, the permittee is required to monitor the flow monitoring station identified with the prefix "FM" in Table 1, Part I.B.12 of the permit for the following constituent at the indicated frequency.

<u>Parameter</u>	<u>Measurement Frequency</u>	<u>Sample Type</u>
Total Flow	Weekly	Visual

In the event that flow from the reservoir not related to a 100 year, 24 hour precipitation event or greater is observed at the flow monitoring station, the permittee is required to report the observance of flow at the flow monitoring station to the Department of Environmental Quality, Water Quality Division, at the address below, within one business day. The report may be made via facsimile, e-mail, or overnight mail to:

Wyoming Department of Environmental Quality
Water Quality Division
Herschler Building, 4 West
122 West 25th Street
Cheyenne, WY 82002
Fax #: 307-777-5973

Such reports are, at a minimum, to include the following information: date, time, and location of unpermitted flow, WYPDES permit and outfall number, company name, contact, and contact address and telephone number, circumstances under which unpermitted flow occurred, and verification of date and time in which

discharges to the reservoir from which the unpermitted flow were shut in, and a plan of action, including dates and specific actions, for preventing reoccurrence of unpermitted discharges at the facility in the future.

B. MONITORING AND REPORTING

1. Representative Sampling

Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored discharge. All samples shall be taken at the monitoring points specified in this permit and, unless otherwise specified, before the effluent joins or is diluted by any other waste stream, body of water, or substance. Monitoring points shall not be changed without notification to and approval by the permit issuing authority.

2. Reporting

Results of initial monitoring, including the date the discharge began, shall be summarized on a Monitoring Report Form for Monitoring of Initial Discharge and submitted to the state water pollution control agency at the address below postmarked no later than 120 days after the commencement of discharge.

Results of routine end of pipe and water quality station monitoring during the previous six (6) months shall be summarized and reported semiannually on a Discharge Monitoring Report Form (DMR). If the discharge is intermittent, the date the discharge began and ended must be included. The information submitted on the first semiannual DMR shall contain a summary of flow measurements and any additional monitoring conducted subsequent to the submittal of the initial monitoring report. If required, whole effluent toxicity testing (biomonitoring) results must be reported on the most recent version of EPA Region VIII's Guidance for Whole Effluent Reporting. Monitoring reports must be submitted to the state water pollution control agency at the following address postmarked no later than the 15th day of the second month following the completed reporting period. The first report is due on August 15, 2006.

Legible copies of these, and all other reports required herein, shall be signed and certified in accordance with the Signatory Requirements contained in Part II.A.11.

Wyoming Department of Environmental Quality
Water Quality Division
Herschler Building, 4 West
122 West 25th Street
Cheyenne, WY 82002
Telephone: (307) 777-7781

If no discharge occurs during the reporting period, "no discharge" shall be reported. If discharge is intermittent during the reporting period, sampling shall be done while the facility is discharging.

3. Definitions

- a. The "monthly average" shall be determined by calculating the arithmetic mean (geometric mean in the case of fecal coliform) of all composite and/or grab samples collected during a calendar month.

- b. The "weekly average" shall be determined by calculating the arithmetic mean (geometric mean in the case of fecal coliform) of all composite and/or grab samples collected during any week.
- c. The "daily maximum" shall be determined by the analysis of a single grab or composite sample.
- d. "MGD", for monitoring requirements, is defined as million gallons per day.
- e. "Net" value, if noted under Effluent Characteristics, is calculated on the basis of the net increase of the individual parameter over the quantity of that same parameter present in the intake water measured prior to any contamination or use in the process of this facility. Any contaminants contained in any intake water obtained from underground wells shall not be adjusted for as described above and, therefore, shall be considered as process input to the final effluent. Limitations in which "net" is not noted are calculated on the basis of gross measurements of each parameter in the discharge, irrespective of the quantity of those parameters in the intake waters.
- f. A "composite" sample, for monitoring requirements, is defined as a minimum of four grab samples collected at equally spaced two hour intervals and proportioned according to flow.
- g. An "instantaneous" measurement for monitoring requirements is defined as a single reading, measurement, or observation.
- h. A "pollutant" is any substance or substances which, if allowed to enter surface waters of the state, causes or threatens to cause pollution as defined in the Wyoming Environmental Quality Act, Section 35-11-103.
- i. "Total Flow" is the total volume of water discharged, measured on a continuous basis and reported as a total volume for each month during a reporting period. The accuracy of flow measurement must comply with Part III.A.1.

4. **Test Procedures**

Test procedures for the analysis of pollutants, collection of samples, sample containers, sample preservation, and holding times, shall conform to regulations published pursuant to 40 CFR, Part 136, unless other test procedures have been specified in this permit.

5. **Recording of Results**

For each measurement or sample taken pursuant to the requirements of this permit, the permittee shall record the following information:

- a. The exact place, date and time of sampling;
- b. The dates and times the analyses were performed;
- c. The person(s) who performed the analyses and collected the samples;
- d. The analytical techniques or methods used; and

- e. The results of all required analyses including the bench sheets, instrument readouts, computer disks or tapes, etc., used to determine the results.

6. **Additional Monitoring by Permittee**

If the permittee monitors any pollutant at the location(s) designated herein more frequently than required by this permit, using approved analytical methods as specified above, the results of such monitoring shall be included in the calculation and reporting of the values required in the Discharge Monitoring Report Form. Such increased frequency shall also be indicated.

7. **Records Retention**

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 all 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. Data collected on site, copies of Discharge Monitoring Reports and a copy of this NPDES permit must be maintained on site during the duration of activity at the permitted location.

8. **Penalties for Tampering**

The Act provides that any person who falsifies, tampers with or knowingly renders inaccurate, any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than \$10,000 per violation, or by imprisonment for not more than two years per violation, or both.

9. **Compliance Schedules**

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 14 days following each schedule date.

10. **Facility Identification**

All facilities discharging produced water shall be clearly identified with an all-weather sign posted at each outfall and flow monitoring locations (points of compliance). This sign shall, as a minimum, convey the following information:

- a. The name of the company, corporation, person(s) who holds the discharge permit, and the NPDES permit number;
- b. The contact name and phone number of the person responsible for the records associated with the permit;
- c. The name of the facility (lease, well number, etc.) and the outfall number as identified by the discharge permit.

11. **Identification and Establishment of Discharge Points**

According to 40 CFR 122.21(k)(1), the permittee shall identify the expected location of each discharge point on the appropriate NPDES permit application form. The location of the discharge point must be identified to within an accuracy of 15 seconds. This equates to a distance of 1,510 feet.

In order for the permit not to be subjected to additional public notice, the location of the established discharge point must be within 1,510 feet of the location of the discharge point originally identified on the permit application. In addition, the discharge must be within the same drainage and must discharge to the same landowner's property as identified on the original application form. If the three previously stated requirements are not satisfied, modification of the discharge point location(s) constitutes a major modification of the permit as defined in Part I.B.12. The permittee shall provide written notification of the establishment of each discharge point in accordance with Part I.A.2.a above.

12. Location of Discharge Points (Outfalls), Flow Monitoring Stations, Reservoir Water Quality Monitoring Stations, and Tributary Water Quality Monitoring Stations

As of the date of permit issuance, authorized points of discharge were as follows:

SEE TABLE 1 FOR A LIST OF OUTFALLS, FLOW MONITORING STATIONS,
RESERVOIR WATER QUALITY MONITORING STATIONS, AND TRIBUTARY WATER
QUALITY MONITORING STATIONS

The outfalls listed in the table below may be moved from the established location without submittal of a permit modification application provided all of the following conditions are satisfied:

1. The new outfall location is within 2640 feet of the established outfall location.
2. The new outfall location is within the same drainage or immediate permitted receiving waterbody.
3. There is no change in the affected landowners.
4. Notification of the change in outfall location must be provided to the NPDES Permits Section on a form provided by the WQD Administrator within 10 days of the outfall location change. The form must be provided in duplicate and legible maps showing the previous and new outfall location must be attached to the form.

Moving an outfall location without satisfying the four above listed conditions will be considered a violation of this permit and subject to full enforcement authority of the WQD.

An outfall relocation as described above will not be allowed if the new outfall location is less than one mile from the confluence of a Class 2 waterbody and the dissolved iron limits established in the permit for the outfall are based upon Class 3 standards.

Requests for modification of the above list will be processed as follows. If the requested modification satisfies the definition of a minor permit modification as defined in 40 CFR 122.63 modifications will not be required to be advertised in a public notice. A minor modification constitutes a correction of a typographical error, increase in monitoring and/or reporting, revision to an interim compliance schedule date, change in ownership, revision of a construction schedule for a new source discharger, deletion of permitted outfalls, and/or the incorporation of an approved local pretreatment program.

A request for a minor modification must be initiated by the permittee by completing the form titled National Pollutant Discharge Elimination System Permit Modification Application For Coal Bed Methane. Incomplete application forms will be returned to the applicant.

TABLE 1: OUTFALL, RESERVOIR, AND FLOW MONITORING STATION LOCATION INFORMATION, WY0053961

Outfall #	Immediate Receiving Stream	Distance from outfall to mainstem (stream miles)	Qtr	Qtr	Sec	Tw	Rng	Latitude	Longitude	Groundwater approval required before discharge?
001	Boruff Draw - North Prong, Wildcat Creek Wildcat Creek - Horse Creek	~27 linear	SW	NW	19	53	73	44.56369	-105.69319	Yes
002	Unnamed, ephemeral tributary - North Prong, Wildcat Creek Wildcat Creek - Horse Creek	~26 linear	SW	SE	19	53	73	44.55383	-105.68697	Yes
Flow and Reservoir Monitoring Station Locations										
Station	Immediate Receiving Stream	Description	Qtr	Qtr	Sec	Tw	Rng	Latitude	Longitude	
FM001	Boruff Draw - North Prong, Wildcat Creek Wildcat Creek - Horse Creek	Flow monitoring station, outfall 001, Butcher Reservoir	SW	NW	19	53	73	44.56258	-105.69042	
FM002	Unnamed, ephemeral tributary - North Prong, Wildcat Creek Wildcat Creek - Horse Creek	Flow monitoring station, outfall 002, Mackinaw Reservoir	SW	SE	19	53	73	44.55458	-105.68358	
R001	Boruff Draw - North Prong, Wildcat Creek Wildcat Creek - Horse Creek	Reservoir monitoring station, Butcher Reservoir	SW	NW	19	53	73	44.56369	-105.69319	
R002	Unnamed, ephemeral tributary - North Prong, Wildcat Creek Wildcat Creek - Horse Creek	Reservoir monitoring station, Macinaw Reservoir	SW	SE	19	53	73	44.55383	-105.68697	

C. **RESERVOIR / IMPOUNDMENT REQUIREMENTS**

1. **Groundwater Monitoring Beneath Impoundments**

Table 1 of the permit above identifies which outfalls (if any) are designed to discharge into impoundments that are subject to groundwater monitoring requirements established in the latest version of the Water Quality Division guideline "*Compliance Monitoring for Groundwater Protection Beneath Unlined Coalbed Methane Produced Water Impoundments.*" These specified outfalls are not authorized to discharge until a written groundwater compliance approval has been granted by the Groundwater Pollution Control Program of the Water Quality Division. A groundwater compliance approval will consist of either a final approved groundwater compliance monitoring plan, or written authorization for an exemption thereof. Once an impoundment has been granted a written groundwater compliance approval, the contributing outfall(s) to that reservoir may commence discharge.

Any discharge into an impoundment which has not been granted the required groundwater compliance approval will constitute a violation of this permit, and may result in enforcement action from the Water Quality Division to include a notice of violation, revocation of the discharge permit, or other appropriate enforcement action.

PART II

A. MANAGEMENT REQUIREMENTS

1. Changes

The permittee shall give notice to the administrator of the Water Quality Division as soon as possible of any physical alterations or additions to the permitted facility. Notice is required when:

- a. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source as determined in 40 CFR 122.29 (b); or
- b. The alteration or addition could change the nature or increase the quantity of pollutants discharged.

2. Noncompliance Notification

- a. The permittee shall give advance notice of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.
- b. The permittee shall report any noncompliance which may endanger health or the environment as soon as possible, but no later than 24 hours from the time the permittee first became aware of the circumstances. The report shall be made to the Water Quality Division, Wyoming Department of Environmental Quality at (307) 777-7781.
- c. A written submission shall be provided within five (5) days of the time that the permittee becomes aware of a noncompliance circumstance as described in paragraph c. above.

The written submission shall contain:

- (1) A description of the noncompliance and its cause;
 - (2) The period of noncompliance, including exact dates and times;
 - (3) The estimated time noncompliance is expected to continue if it has not been corrected; and
 - (4) Steps taken or planned to reduce, eliminate and prevent reoccurrence of the noncompliance.
- d. The following occurrences of unanticipated noncompliance shall be reported by telephone to the Water Quality Division, Watershed Management Section, NPDES Program (307) 777-7781 by the first workday following the day the permittee became aware of the circumstances.
 - (1) Any unanticipated bypass which exceeds any effluent limitation in the permit;
 - (2) Any upset which exceeds any effluent limitation in the permit; or

