

**Wyoming Department of Environmental Quality  
Water Quality Division  
NPDES Program**

STATEMENT OF BASIS

MAJOR MODIFICATION

APPLICANT NAME: Pennaco Energy, Inc.

MAILING ADDRESS: 3601 Southern Drive  
Gillette, WY 82718

FACILITY LOCATION: AC Ranch Central, Option 2, which is located in the NWSE, Section 21, SESE, Section 33, the SWSE, Section 34, Township 56 North, Range 83 West, and in the SWNE, Section 3, Township 55 North, Range 83 West, Sheridan County. The produced water will be discharged to various named, on-channel reservoirs (3B) located on various unnamed tributaries (3B) of Wildcat Creek (3B. Wildcat Creek is tributary to the Tongue River (2AB), via Prairie Dog Creek (2AB). The permit establishes two irrigation compliance points, located in the NENE, Section 33, Township 56 North, Range 83 West (ICP1), and in the NENW, Section 21, Township 56 North, Range 83 West (ICP2), on Wildcat Creek, prior to the first downstream irrigation diversions. The permit also establishes a total maximum daily flow limit of 3.8 MGD, and requires that the produced water being discharged from this facility originate in one of the following formations: the Dietz1, Dietz3, Monarch, and/or the Carney coal seams.

PERMIT NUMBER: WY0052141

*The following Statement of Basis only includes information that has changed with this modification. For a complete Statement of Basis, please see previously issued modifications or renewals for this permit.*

*Upon approval of this major modification, the terms of permit WY0052141 are hereby modified as follows:*

- 1. In accordance with current WDEQ policy, the effluent limit and monitoring requirements for total petroleum hydrocarbons and sulfates are removed.*
- 2. Reduce monitoring for alkalinity and bicarbonate from monthly to annually.*
- 3. Remove effluent limit and routine EOP monitoring requirements for total dissolved solids.*
- 4. Replace total recoverable aluminum requirements with dissolved aluminum requirements.*
- 5. The radium<sup>226</sup> effluent limit is updated to reflect current WDEQ permitting approaches.*
- 6. Change the range for pH from 6.5 to 8.5 standard units (s.u.) to 6.5 to 9.0 s.u.*

*With the exception of items explicitly delineated in this major modification, all terms and conditions of Permit No. WY0052141, including Parts II and III of the renewed permit, shall remain unchanged and in full force.*

This permit originally established a total radium<sup>226</sup> limit of 1 pCi/l and a total petroleum hydrocarbons (TPH) limit of 10 mg/l at the end of pipe. Based upon water quality data collected by WDEQ since the time this permit was originally issued, a permitting approach for establishing total radium limits in coal bed methane permits has been developed. This approach is based upon the distance of the outfall from a class 2 water.

The removal of the originally-established total radium<sup>226</sup> limit is based on this permitting approach. In addition, review of discharge monitoring report data for this facility and other CBM facilities in Northeast Wyoming indicates that the maximum reported concentrations for total petroleum hydrocarbons (TPH) in the discharge were well below the water quality standard of 10 mg/l established in Chapter 1 of the Wyoming Water Quality Rules and Regulations. Therefore, WDEQ has removed the effluent limit and monitoring requirement for TPH in this permit. Based on evaluation of the available data, it is WDEQ's determination that removing the total radium<sup>226</sup> and total petroleum hydrocarbons limits from this permit conforms to the anti-backsliding requirements established in Section 402(o).2.B.i of the Clean Water Act.

This permit originally established a sulfate limit of 3000 mg/l at the end of pipe. Review of discharge monitoring report data for this facility and other CBM facilities in Northeast Wyoming indicates that the maximum reported concentrations for sulfate in the discharge were well below the water quality standards of 3000 mg/l for sulfates established in *Chapter 1 of the Wyoming Water Quality Rules and Regulations*. Therefore, WDEQ has removed the effluent limits and monitoring requirements for sulfate in this permit. Based on evaluation of the available data, it is WDEQ's determination that removing the sulfate from this permit conforms to the anti-backsliding requirements established in *Section 402(o).2.B.i of the Clean Water Act*.

Kathy Shreve  
Water Quality Division  
Department of Environmental Quality  
Drafted: August 25, 2004

Bob Alexander  
Water Quality Division  
Department of Environmental Quality  
Drafted: June 4, 2008

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,

Pennaco Energy, Inc.

is authorized to discharge from the wastewater treatment facilities serving the

AC Ranch Central, Option 2,

which is located in the

NWSE, Section 21, SESE, Section 33, the SWSE, Section 34, Township 56 North, Range 83 West, and in the SWNE, Section 3, Township 55 North, Range 83 West, Sheridan County,

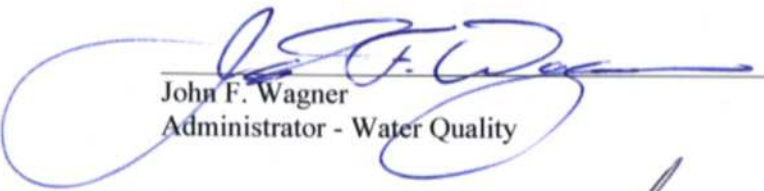
to receiving waters named

various named, on-channel reservoirs (3B) located on various unnamed tributaries (3B) of Wildcat Creek (3B). Wildcat Creek is tributary to the Tongue River (2AB), via Prairie Dog Creek (2AB).

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

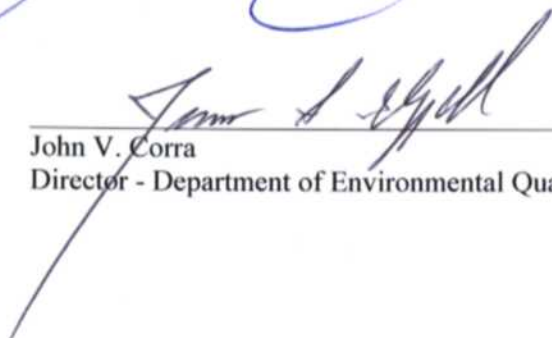
**This major modification shall become effective on the date of signature by the Director of the Department of Environmental Quality. With the exception of items explicitly delineated in this major modification, all terms and conditions of permit WY0052141, including Parts II and III of the original permit, shall remain unchanged and in full force and effect.**

This permit and the authorization to discharge shall expire **April 30, 2009**, at midnight .

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

Date

10/3/08

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

Date

10/7/08

PART IA. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

Effective immediately and lasting through April 30, 2009, 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 outfalls(s) serial numbers 001 – 004.

1. Such discharges shall be limited as specified below:

Effluent Limits

<u>Effluent Characteristic</u>	<u>Daily Maximum Outfall</u>	<u>Daily Maximum Irrigation Compliance Point**</u>
Chlorides, mg/l	46	
Dissolved Iron, µg/l	1000	
Dissolved Manganese, µg/l	50	
pH, standard units	6.5 – 9.0	
Specific Conductance, micromhos/cm	7500	2000
Total Arsenic, µg/l	1.4	
Total Barium, µg/l	1800	
Total Flow, MGD*	3.8	
Dissolved Zinc, µg/l	33	
Sodium Adsorption Ratio, calculated as unadjusted ratio		6

\*Total flow is to be calculated as the sum of all discharge from all permitted outfalls. The permit requires that the produced water being discharged by this facility originate on or more of the following formations: the Dietz1, Dietz3, Monarch, and/or Carney coal seams.

\*\*Limits at the irrigation compliance point are in effect whenever produced water from this facility contributes to flow at the irrigation compliance point.

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

The permittee may, if so desired, discharge effluent from any authorized well to any permitted outfall, as long as all permit limits and requirements can be met. This facility, as originally permitted, contained 4 outfalls and 101 wells. The wells authorized for discharge at this facility are also authorized for discharge at two additional CBM facilities authorized for discharge under NPDES permits WY0052132 and WY0052043. Linkage of the permittee's wells to additional permitted CBM facilities allows the permittee maximum water management flexibility.

Information gathered from the water quality monitoring stations may result in modification of the permit to protect existing uses on the tributary and the mainstem.

The representative water quality analyses indicate that this facility's discharge has the potential to exceed the established permit limits for dissolved iron. However, the permittee has submitted

information indicating that the installation of enhanced oxidation channels and stilling basins for dissolved iron can eliminate this problem by increasing the precipitation of iron out of the discharge. Therefore, the permittee will be required to, and has committed to, the installation of enhanced oxidation channels and stilling basins prior to the discharge reaching a water of the state. Enhanced oxidation facilities must be installed and operational prior to commencement of discharge from this facility.

Reservoir and/or discharge water is to be released at a rate which does not cause significant erosion to the channel or receiving lands. The permittee has committed to containment of all CBM effluent within a series of on-channel reservoirs. The permittee is required to contain all effluent within the reservoirs, and may not discharge except during periods of time in which stormwater runoff enters the reservoir, causing it to overtop and spill. Should the reservoirs discharge, the permittee will be required to substantiate that the discharge was due to the influx of stormwater runoff.

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 *that has not previously been sampled for initial monitoring* 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 effluent limits and monitoring requirements established in this permit may be modified.

<b><u>Parameter*</u></b> (See notes following the table on chemical states)	<b><u>Required Detection Limits and Required Units</u></b>
<b>Alkalinity, Total</b>	<b>1 mg/l as CaCO<sub>3</sub></b>
<b>Aluminum, Dissolved</b>	<b>50 µg/l</b>
<b>Arsenic, Total</b>	<b>1 µg/l</b>
<b>Barium, Total</b>	<b>100 µg/l</b>
<b>Bicarbonate</b>	<b>10 mg/l</b>
<b>Cadmium, Dissolved</b>	<b>5 µg/l</b>
<b>Calcium, Dissolved</b>	<b>50 µg/l, report as mg/l</b>
<b>Chlorides</b>	<b>5 mg/l</b>
<b>Copper, Dissolved</b>	<b>10 µg/l</b>
<b>Dissolved Solids, Total</b>	<b>5 mg/l</b>
<b>Hardness, Total</b>	<b>10 mg/l as CaCO<sub>3</sub></b>
<b>Iron, Dissolved</b>	<b>50 µg/l</b>
<b>Lead, Dissolved</b>	<b>2 µg/l</b>
<b>Magnesium, Dissolved</b>	<b>100 µg/l, report as mg/l</b>
<b>Manganese, Dissolved</b>	<b>50 µg/l</b>
<b>Mercury, Dissolved</b>	<b>1 µg/l</b>
<b>pH</b>	<b>to 0.1 pH unit</b>
<b>Radium 226, Total</b>	<b>0.2 pCi/l</b>
<b>Selenium, Total Recoverable</b>	<b>5 µg/l</b>
<b>Sodium Adsorption Ratio</b>	<b>Calculated as unadjusted ratio</b>
<b>Sodium, Dissolved</b>	<b>100 µg/l, report as mg/l</b>
<b>Specific Conductance</b>	<b>5 micromhos/cm</b>
<b>Sulfates</b>	<b>10 mg/l</b>
<b>Zinc, Dissolved</b>	<b>50 µg/l</b>

**TOTAL:** Value is expressed in terms of total recoverable metal in the water column.

**NOTE:** Except for aquatic life values for metals and where otherwise indicated, the values given refer to the total recoverable (dissolved plus suspended) amount for each substance. For the aquatic life values for metals, the values refer to the dissolved amount.

**DISSOLVED:** Volume is based on the dissolved amount which is the amount that will pass through a 0.45 µm membrane filter prior to acidification to pH 1.5 - 2.0 with nitric acid.

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  
1595 Wynkoop Street  
Denver, CO 80202-1129

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 – 001-004**

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>
Bicarbonate (mg/l)	Annually	Grab
Dissolved Calcium (mg/l)	Monthly	Grab
Chloride (mg/l)	Annually	Grab
Dissolved Iron (µg/l)	Annually	Grab
Dissolved Manganese (µg/l)	Annually	Grab
Dissolved Magnesium (mg/l)	Monthly	Grab
pH (s. u.)	Once Every Six Months	Grab
Total Radium 226 (pCi/l)	Annually	Grab
Dissolved Sodium (mg/l)	Monthly	Grab
Sodium Adsorption Ratio (unadusted ratio)	Monthly	Calculated
Specific Conductance (micromohs/cm)	Monthly	Grab
Total Alkalinity (mg/l as CaCO <sub>3</sub> )	Annually	Grab
Total Arsenic (µg/l)	Annually	Grab
Total Barium (µg/l)	Annually	Grab
Total Flow - (MGD)	Monthly	Continuous
Dissolved Zinc (µg/l)	Annually	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. Irrigation Compliance Points – ICP1 and ICP2

For the duration of the permit, at a minimum, samples for the constituents described below shall be collected at the indicated frequencies when water discharged from any permitted outfall reaches any irrigation compliance points. Irrigation compliance point limits and requirements are in effect year-round due to the large amount of irrigation taking place on Prairie Dog Creek, and the potential for this discharge to impact irrigation water quality.

<u>Parameter</u>	<u>Measurement Frequency</u>	<u>Sample Type</u>
Bicarbonate (mg/l)	Annually	Grab
Dissolved Calcium (mg/l)	Monthly	Grab
Dissolved Magnesium (mg/l)	Monthly	Grab
Dissolved Sodium (mg/l)	Monthly	Grab
Sodium Adsorption Ratio (calculated as unadjusted ratio)	Monthly	Calculated
Specific Conductance (micromohs/cm)	Monthly	Grab
Total Flow - (MGD)	Monthly	Instantaneous

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following locations: at the irrigation compliance points which are located as follows: in the NENE, Section 33, Township 56 North, Range 83 West (ICP1), and in the NENW, Section 21, Township 56 North, Range 83 West (ICP2), on Wildcat Creek prior to the first downstream irrigation diversions on Wildcat Creek.

The permit requires daily monitoring of the irrigation compliance points described above to determine whether water discharged from the outfalls reaches an established irrigation compliance point. Daily monitoring is necessary because the permit establishes different sampling and analysis requirements based on whether the effluent reaches an irrigation compliance point. Once flow at an irrigation compliance point has been documented within a sampling month, then weekly monitoring of flow is required for the month. At the beginning of each calendar month, the frequency will revert to daily. Should the permittee be able to substantively document that this facility did not contribute to flows at the ICP at any time during the monitoring period in question, the permittee may report “did not contribute” on the discharge monitoring reports for the monitoring period in question, and is not required to collect samples at the irrigation compliance point for the monitoring period in question. In such cases, the permittee is required to submit copies of the documentation verifying non-contribution in conjunction with

the discharge monitoring reports for the monitoring period in question. Effluent samples must be collected on a weekly basis if flow persists at the irrigation compliance point for 24 hours or more. Results are to be reported twice-yearly and if no discharge occurs then "no discharge" is to be reported.

**d. Water Quality Monitoring Stations – TRIB1, UPDC, DPDC, UTR, and DTR**

For the duration of the permit, at a minimum, samples for the constituents described below shall be collected at the indicated frequencies. Monitoring will be based on monthly time frames, and reported semiannually.

<u>Parameter</u>	<u>Measurement Frequency</u>	<u>Sample Type</u>
Bicarbonate (mg/l)	Annually	Grab
Dissolved Calcium (mg/l)	Monthly	Grab
Dissolved Magnesium (mg/l)	Monthly	Grab
Dissolved Sodium (mg/l)	Monthly	Grab
Sodium Adsorption Ratio (calculated as unadjusted ratio)	Monthly	Calculated
Specific Conductance (micromohs/cm)	Monthly	Grab

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s): designated water quality monitoring stations located on the class 3B receiving stream– Wildcat Creek (TRIB1), and designated water quality monitoring stations located on the class 2AB mainstems - Prairie Dog Creek and the Tongue River. The Prairie Dog Creek water quality monitoring stations will be located upstream and downstream of the Wildcat Creek – Prairie Dog Creek confluence (UPDC and DPDC), in the main channel of Prairie Dog Creek, outside of the mixing zone of Wildcat Creek and Prairie Dog Creek. The Tongue River water quality monitoring stations will be located upstream and downstream of the Prairie Dog Creek – Tongue River confluence (UTR and DTR), in the main channel of the Tongue River, outside of the mixing zone of Prairie Dog Creek and the Tongue River. Effluent samples at the designated water quality monitoring stations must be collected on a monthly basis and are to be reported semiannually. Samples taken in compliance with the monitoring requirements specified above shall be taken at the following locations: designated water quality monitoring stations identified as TRIB1, UPDC, DPDC, UTR, and DTR in Table 1 (located at the end of Part I) of the permit below. Established water quality monitoring stations on the mainstem are to be located outside the mixing zone with the tributary and the mainstem. Monthly water quality samples are to be collected at all four water quality monitoring stations when effluent from this CBM facility reaches the TRIB1 station on Wildcat Creek. If flow occurs at the ICP1 station during a given monthly monitoring period, but this CBM facility did not contribute to that flow, the permittee will report “did not contribute” in the discharge monitoring reports for that monthly monitoring period. Under such circumstances, sampling is not required at the four water quality monitoring stations, and it will be the responsibility of the permittee to demonstrate that the effluent from this facility did not contribute to the flow occurring at the TRIB1 station. If no flow at all occurs at the TRIB1 station for an entire monthly

monitoring period, then “no flow” is to be reported and samples need not be collected at the three water quality monitoring stations for that monthly monitoring period.

At the designated water quality monitoring stations, monitoring will be required for calcium, magnesium, sodium, sodium absorption ratio and specific conductance. Results are to be reported semiannually. Information gathered from the water quality monitoring stations may result in modification of the permit to protect existing uses on the tributary and mainstem.

The designated water quality monitoring stations are located on Wildcat Creek in the NENW, Section 9, Township 56 North, Range 83 West, on Prairie Dog Creek in the SWSE, Section 18, Township 56 North, Range 83 West, upstream and downstream (respectively) of the Wildcat Creek – Prairie Dog Creek confluence, and on the Tongue River in the SESW and SENE, Section 23, Township 58 North, Range 83 West, upstream and downstream (respectively) of the Prairie Dog Creek – Tongue River confluence. Water quality monitoring stations located on class 2 drainages are to be located in the main channels of the applicable drainage, and are to be located outside the mixing zone of the tributary with the mainstem.

## 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, irrigation compliance point, 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. When required, whole effluent toxicity (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 following issuance of this modification is due on February 15, 2009.

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 at the outlet of each receiving reservoir listed in Table 1 below. This sign shall, at a minimum, convey the following information:

- a. The name of the company, corporation, person(s) who holds the discharge permit, and the WYPDES 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 (as identified in this WYPDES permit). In addition, all outfall signs will include the outfall number. Reservoir signs are separate from the outfall signs, and are to be located at the outlet of the reservoir. Reservoir signs must include the information listed in items a and b above, in addition to the reservoir name, as identified in Table 1 below.

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.

Public notice is not required if the location of the established discharge point is 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 and Irrigation Compliance Points

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

SEE TABLE 1 FOR A LIST OF WELLS, OUTFALLS, AND IRRIGATION COMPLIANCE POINTS

13. Location of water quality monitoring stations

As of the date of issuance, authorized water quality monitoring stations were as follows:

SEE TABLE 1 FOR A LIST OF WATER QUALITY STATIONS

<b>TABLE 1: OUTFALL, IRRIGATION COMPLIANCE POINT, AND WATER QUALITY MONITORING STATION LOCATION INFORMATION, WY0052141</b>										
<b>Outfall #</b>	<b>Immediate Receiving Steam</b>	<b>Distance from outfall to mainstem (stream miles)</b>	<b>Quarter / Quarter</b>	<b>Section</b>	<b>Township</b>	<b>Range</b>	<b>Latitude</b>	<b>Longitude</b>	<b>Reservoir Name</b>	<b>Groundwater approval required before discharge?</b>
001	Unnamed tributary to Wildcat Creek	3.88	NWSE	21	56	83	44.81004851	-106.85558154	Hay Maker	YES
002	Unnamed tributary to Wildcat Creek	6.85	SESE	33	56	83	44.77984845	-106.85092717	Patrick	YES
003	Unnamed tributary to Wildcat Creek	7.00	SWSE	34	56	83	44.77722921	-106.83560261	Paul #3	YES
004	Unnamed tributary to Wildcat Creek	7.47	SWNE	3	55	83	44.77261746	-106.83817918	Adams	YES
<b>IRRIGATION COMPLIANCE POINT LOCATIONS</b>										
ICP1	Wildcat Creek	n/a	NENE	33	56	83	44.78890000	-106.85050000		
ICP2	Wildcat Creek	n/a	NENW	21	56	83	44.81740000	-106.86420000		
<b>WATER QUALITY MONITORING STATION LOCATIONS</b>										
TRIB1	Wildcat Creek	n/a	NENW	9	56	83	44.84650000	-106.86270000		
UPDC	Prairie Dog Creek	n/a	SWSE	18	56	83	44.82194444	-106.89916667		
DPDC	Prairie Dog Creek	n/a	NESW	4	56	83	44.85361111	-106.86277778		
UTR	Tongue River	n/a	SESW	23	58	83	44.99150000	-106.83540000		
DTR	Tongue River	n/a	SENE	23	58	83	44.98880000	-106.82590000		

Requests for modification of outfall locations as described in the table below 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.

The outfalls listed in the above table 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.

#### 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. Once an impoundment has been granted a written groundwater compliance approval, the contributing outfall(s) to that reservoir may commence discharge.

2. Reclamation Performance Bonds for On-Channel Reservoirs:

Table 1 of the permit above also identifies which outfalls (if any) are designed to discharge into impoundments that are subject to WDEQ bonding requirements, as set forth in the latest version of the Water Quality Division guideline *“Implementation Guidance for Reclamation and Bonding of On-Channel Reservoirs That Store Coalbed Natural Gas Produced Water.”* These specified outfalls are not authorized to discharge until the associated reservoir reclamation bond is approved by WDEQ. Once the reservoir reclamation bond is approved by WDEQ, the contributing outfall(s) to that reservoir may commence discharge.

Any discharge into an above-listed impoundment which has not been secured by the required WDEQ-approved bond, or 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.