

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

STATEMENT OF BASIS
RENEWAL

APPLICANT NAME: Pennaco Energy, Inc.

MAILING ADDRESS: 3601 Southern Drive
Gillette, WY 82718

FACILITY LOCATION: Hank Williams Project, which is located in the SENE and NWSW, Section 1, the NWNE and SWNW, Section 2, the NWNE and SWNW, Section 3, the NWNW, NWSW, NWNE, SENE, SENW, and SWSW, Section 4, the NWNE, SWNE, and NESW, Section 5, the NENE, SENW, SESW, SESE, SENE, and SWSE, Section 6, the SWNW, Section 7, the NWNE, SENE, and NWSW, Section 8, the SWNE, Section 10, the SENE and NWNE, Section 11, the NWNE, Section 12, the NWNE and NESW, Section 17, and the NENW, Section 18, Township 54 North, Range 76 West, the NWNW, SWNW, SWNE, and SESW, Section 1, the SESE, Section 11, the NWSW, SESW, NWNE, and SWNE, Section 12, the SENE, SENW, NWNW, NWSW, SESE, and NWSE, Section 13, the SESW, NWNE, NWSW, NWSE and SENE, Section 14, Township 54 North, Range 77 West, the SESE, Section 29, the SESW, Section 31, the SESW, SWNE, and SESE, Section 32, the NWSW, SWSE, SWSW, and NENE, Section 33, and the SENW, Section 34, Township 55 North, Range 76 West in Campbell and Sheridan Counties. The produced water will be discharged to various unnamed, ephemeral tributaries (3B) of North Prong, Wild Horse Creek (3B), Coulee Draw (3B), and Wild Horse Creek (3B), to North Prong, Wild Horse Creek (3B), North Draw (3B), Oliver Draw (3B), North Fork, Okeson Draw (3B), Okeson Draw (3B), Larey Draw (3B), Carter Draw (3B), Carter Draw #2 (3B), and to Wild Horse Creek proper (3B), which are all tributary to the Powder River (2ABWW), via Wild Horse Creek (3B). The permit establishes a total maximum daily flow limit of 5.41 MGD (million gallons per day), and requires that the produced water being discharged from this facility originate in one or more of the following formations – the Canyon, Cook, Wall, and/or Anderson coal seams.

NUMBER: WY0039934

This permit has been modified from the version that was advertised in public notice to include Part I.C, which contains general information on requirements related to groundwater monitoring at CBM impoundments.

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 judgement of the WDEQ, this effluent limit guideline is appropriately applied to coal bed methane gas production. The guideline limits oil and grease effluent concentrations to less than 35 mg/l and requires that discharges of produced water be used to enhance agricultural production and/or wildlife propagation. 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. The permit establishes effluent limits for the end of pipe, which are protective of all the designated uses defined in Chapter 1 of Wyoming Water Quality Rules and Regulations. This may include drinking water, game and non-game fish, fish consumption, aquatic life other than fish, recreation, agriculture, wildlife, industry and scenic value.

The Wyoming DEQ has determined through review of the permit application and available scientific information that effluent discharged from this facility is unlikely to reach the Powder River. The maximum total effluent flow rate from this facility is estimated at 8.37 cfs (cubic feet per second), or 5.41 MGD (million gallons per day), and is solely based upon the capacity of the reservoirs proposed for containment of CBM produced water at this facility. Stream channel infiltration and evaporation was not considered in establishing this flow rate. In addition, this permit establishes a monitoring station on the receiving stream prior to the confluence with the Powder River. This station will function to monitor any effluent flows to the Powder River.

Effluent Limits

Permit effluent limits are based on federal and state regulations and are effective as of the date of issuance. The permit requires that the pH must remain within 6.5 and 8.5 standard units. Effluent limits for total dissolved solids (5,000 mg/l), specific conductance (7500 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 manganese limit of 630 µg/l, a total arsenic limit of 7 µg/l, a total barium limit of 1800 µg/l, and a chlorides limit of 46 mg/l. These limits are based on chronic aquatic life standards for class 2AB waters which are intended to protect for the above listed designated uses and reflect the application of the antidegradation provisions required under Chapter 1 of the Wyoming Water Quality Rules and Regulations. The permit also establishes a dissolved iron limit of 1000 µg/l, which is based upon chronic aquatic life standards for class 3B waters, and reflects the application of standards required under Chapter 1 of the Wyoming Water Quality Rules and Regulations.

This permit originally established a total radium²²⁶ limit of 60 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. Establishment of the new total radium²²⁶ limits described below are 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 changing the total radium²²⁶ and removing the 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.

The permit establishes a total radium²²⁶ limit of 3 pCi/l for outfalls 049 and 054, which are located between 1 and 3 stream miles of a class 2 water, and a total radium limit of 5 pCi/l for outfalls 007, 008, 044, 045, 046, 047, 050, 051, 052, 053, 055, 056, 057, 058, 059, 060, 061, 062, 063, 064, 065, and 066, which are located between 3 and 9 stream miles of a class 2 water. Review of the permit files indicates that the operator will have no difficulties in meeting the new limits.

Because the permittee's water budget indicated that the facility was capable of containing a maximum daily flow of 5.41 MGD, the permit establishes a total maximum daily flow limit of 5.41 MGD, which is to be calculated as the sum of all discharge from all permitted outfalls. The permittee's renewal is also based upon historic water quality from this facility, representative of water quality from the Canyon, Cook, Wall, and/or Anderson coal seams, therefore, the permit requires that the produced water being discharged by this facility originate in one or more of the following formations - the Canyon, Cook, Wall, and/or Anderson coal seams.

As part of the renewal process, this permit is being "consolidated" with several other NPDES permit renewals (WY0040835, WY0041301, WY0041319, WY0040827, and WY0041335) into a single NPDES permit, WY0039934. Upon issuance of this renewal, permits WY0040835, WY0041301, WY0041319, WY0040827, and WY0041335 will be terminated.

Monitoring and Reporting

Results are to be reported twice-yearly and if no discharge occurs at the outfall then "no discharge" is to be reported. 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 90 days of the commencement of discharge.

The permit 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.

The designated water quality monitoring stations are located on the tributary – TRIB1- (Wild Horse Creek) and the mainstem – UPR and DPR- (Powder River) as described in the outfall location table located in Part I.B.13 of the following permit. Established water quality monitoring stations on the mainstem are to be located outside the mixing zone of the tributary with the mainstem. The permit requires sampling at the designated water quality monitoring stations. Effluent samples at the designated

water quality monitoring stations must be collected on a monthly basis and are to be reported semiannually. If no flow occurs at the tributary monitoring station (TRIB1), located on Wild Horse Creek then "no discharge" is to be reported and samples need not be collected at the three water quality monitoring stations for that monthly sampling period. If flow occurs at the TRIB1 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 three 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.

General 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. Discharge water is to be released at a rate which does not cause significant erosion to the channel or receiving lands.

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 December 31, 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: February 1, 2005

Revised: April 25, 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,

Pennaco Energy, Inc.

is authorized to discharge from the wastewater treatment facilities serving the

Hank Williams Project,

located in the

SENE and NWSW, Section 1, the NWNE and SWNW, Section 2, the NWNE and SWNW, Section 3, the NWNW, NWSW, NWNE, SENE, SENW, and SWSW, Section 4, the NWNE, SWNE, and NESW, Section 5, the NENE, SENW, SESW, SESE, SENE, and SWSE, Section 6, the SWNW, Section 7, the NWNE, SENE, and NWSW, Section 8, the SWNE, Section 10, the SENE and NWNE, Section 11, the NWNE, Section 12, the NWNE and NESW, Section 17, and the NENW, Section 18, Township 54 North, Range 76 West, the NWNW, SWNW, SWNE, and SESW, Section 1, the SESE, Section 11, the NWSW, SESW, NWNE, and SWNE, Section 12, the SENE, SENW, NWNW, NWSW, SESE, and NWSE, Section 13, the SESW, NWNE, NWSW, NWSE and SENE, Section 14, Township 54 North, Range 77 West, the SESE, Section 29, the SESW, Section 31, the SESW, SWNE, and SESE, Section 32, the NWSW, SWSE, SWSW, and NENE, Section 33, and the SENW, Section 34, Township 55 North, Range 76 West, Campbell County,

to receiving waters named

various unnamed, ephemeral tributaries (3B) of North Prong, Wild Horse Creek (3B), Coulee Draw (3B), and Wild Horse Creek (3B), to North Prong, Wild Horse Creek (3B), North Draw (3B), Oliver Draw (3B), North Fork, Okeson Draw (3B), Okeson Draw (3B), Larey Draw (3B), Carter Draw (3B), Carter Draw #2 (3B), and to Wild Horse Creek proper (3B), which are all tributary to the Powder River (2ABWW), via Wild Horse Creek (3B),

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

This permit renewal shall become effective on May 1, 2005.

This permit and the authorization to discharge shall expire December 31, 2008, at midnight .


John F. Wagner, Administrator - Water Quality

4/27/05
Date


John V. Corra, Director - Department of Environmental Quality

5/2/05
Date

PART I

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

Effective immediately and lasting through December 31, 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 outfalls(s) serial numbers 001, 002, 004, 005, 007, 008, 010 - 066.

1.a Effluent Limits Applicable at all Outfalls: The quality of the effluent discharged by this facility shall, at a minimum, meet the limitations set forth below at the end of pipe.

<u>Effluent Characteristic</u>	<u>Daily Maximum Outfall</u>
Chlorides, mg/l	46
Dissolved Iron, µg/l	1000
Dissolved Manganese, µg/l	630
pH, standard units	6.5 - 8.5
Specific Conductance, micromhos/cm	7500
Sulfates, mg/l	3000
Total Arsenic, µg/l	7
Total Dissolved Solids, mg/l	5000
Total Flow, MGD*	5.41
Total Barium, µg/l	1800

*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 in one or more of the following formations: the Big George/Wyodak, the Felix, and/or the Wall coal seams

b. Distance-based effluent limits by outfall:

In addition to the limits established in Part I.A.1.a of the permit, the following effluent limits apply to the outfalls listed below.

Distance-Based Effluent Limits by Outfall*

<u>Outfall</u>	<u>Distance (stream miles) to Nearest Class 2</u>		<u>Total Radium 226, pCi/l</u>
	<u>Stream</u>		
007	7.9		5
008	8.7		5
044	7.6		5
045	5.8		5
046	6		5
047	5.5		5
049	3		3
050	6.5		5

<u>Outfall</u>	<u>Distance (stream miles) to Nearest Class 2 Stream</u>	<u>Total Radium 226, pCi/l</u>
051	5.6	5
052	5.1	5
053	5	5
054	2.6	3
055	3.8	5
056	4.7	5
057	4.9	5
058	7.5	5
059	8.4	5
060	7.9	5
061	8.2	5
062	7.4	5
063	7	5
064	7.4	5
065	6.5	5
066	8.3	5

*Outfalls not listed on the table above have no effluent limitations for total radium ²²⁶.

1.c Requirements Applicable at all Outfalls:

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. Upon renewal, this facility consists of 63 outfalls and 552 wells.

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.

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.

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:

If the outfalls being authorized for discharge under this permit renewal have already been sampled and analyzed for initial monitoring constituents, the permittee is not required to re-sample and re-analyze the outfalls if results have been obtained for all the constituents listed below and reported to the WDEQ.

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 25 constituents specified below, at the required detection limits. Within 120 days of commencement of discharge, a summary report, including a copy of the laboratory analyses, 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 26 constituents, and a copy of the laboratory analyses reports. 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.

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

Parameter* (See notes following the table on chemical states)	Required Detection Limits and Required Units
Alkalinity, Total	1 mg/l as CaCO ₃
Sodium Adsorption Ratio	Calculated as unadjusted ratio
Sodium, Dissolved	100 µg/l, report as me/l
Sodium, Dissolved	100 µg/l, report as mg/l
Specific Conductance	5 micromhos/cm
Sulfates	10 mg/l
Zinc, Dissolved	50 µg/l

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
 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 – All Outfalls (001, 002, 004, 005, 007, 008, 010-066)

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	Once every six months	Grab
Dissolved Calcium	Monthly	Grab
Chloride	Annually	Grab
Dissolved Iron	Annually	Grab
Dissolved Manganese	Annually	Grab
Dissolved Magnesium	Monthly	Grab
pH	Once Every Six Months	Grab
Dissolved Sodium	Monthly	Grab
Sodium Adsorption Ratio	Monthly	Calculated
Specific Conductance	Monthly	Grab
Sulfate	Annually	Grab
Total Alkalinity	Once Every Six Months	Grab
Total Arsenic	Annually	Grab
Total Barium	Annually	Grab
Total Flow - (MGD)	Monthly	Continuous
Total Petroleum Hydrocarbons	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. **Routine monitoring End of Pipe – constituents and requirements applicable only to outfalls 007, 008, 044-047, and 049-066:**

In addition to the routine monitoring requirements and constituents as described in Part I.A.2.b of the permit above, the following constituent shall be included in the list of routine monitoring constituents for outfalls 007, 008, 044 - 047, and 049 - 066. All requirements regarding routine monitoring, sampling and reporting apply as described in Part I.A.2.b for this additional constituent.

<u>Parameter</u>	<u>Measurement Frequency</u>	<u>Sample Type</u>
Total Radium 226 (pCi/l)	Annually	Grab

d. Water Quality Monitoring Stations TRIB1, UPR, DPR

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>
Dissolved Calcium	Monthly	Grab
Dissolved Magnesium	Monthly	Grab
Dissolved Sodium	Monthly	Grab
Sodium Adsorption Ratio	Monthly	Calculated
Specific Conductance	Monthly	Grab
Flow	Monthly	Instantaneous

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 Wild Horse Creek in the main channel of the Powder River, upstream and downstream of the confluence with the Powder River. The designated water quality monitoring stations are located as described in Table 1, Part I.B.13 of the permit. If no flow occurs at the tributary monitoring station on Wild Horse Creek then "no discharge" is to be reported and samples need not be collected at the three water quality monitoring stations for that monthly sampling period. If flow occurs at the TRIB1 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 three 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.

Established water quality monitoring stations on the mainstem are located outside the mixing zone with the tributary and the mainstem. Results are to be reported semiannually.

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 and submitted with a copy of the laboratory analysis report for each outfall, clearly marked with permit and outfall numbers, 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 is due on August 15, 2005.

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 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

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.

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 WDQ.

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.

TABLE 1: OUTFALL and WATER QUALITY MONITORING STATION LOCATION INFORMATION-HANK WILLIAMS PROJECT RENEWAL (WY0039934)

Original Permit and Outfall #	New Outfall #	Immediate Receiving Stream	Distance from outfall to mainstem (stream miles)	Quarter / Quarter	Section	Township	Range	Latitude	Longitude	Reservoir Name	Groundwater approval required before discharge?
WY0039934-001	WY0039934-001	Unnamed, ephemeral tributary to North Prong, Wild Horse Creek	11.5	SESE	29	55	76	44.707937	-106.025158	Malli Teton #1 Stock Reservoir T55_R76_Sec3 2_SESW1 T55_R76_Sec3 2_SESW2	NO
WY0039934-002	WY0039934-002	Unnamed, ephemeral tributary to North Prong, Wild Horse Creek	10.2	SESW	32	55	76	44.695160	-106.032467	T55_R76_Sec3 2_SESW1 T55_R76_Sec3 2_SESW2	NO
WY0039934-004	WY0039934-004	Unnamed, ephemeral tributary to North Prong, Wild Horse Creek	9.6	NENE	6	54	76	44.690186	-106.045895	T54_R76_Sec6 _NENE	NO
WY0039934-005	WY0039934-005	Unnamed, ephemeral tributary to North Prong, Wild Horse Creek	9.2	SENW	6	54	76	44.685910	-106.051673	Hull #1 Stock Reservoir	NO
WY0039934-007	WY0039934-007	North Prong, Wild Horse Creek	7.9	SESW	6	54	76	44.679277	-106.055451	Oscar Purves #3 Stock Reservoir	NO
WY0039934-008	WY0039934-008	North Prong, Wild Horse Creek	8.7	SESE	6	54	76	44.681140	-106.044697	--	NO
WY0039934-010	WY0039934-010	North Prong, Wild Horse Creek	10.2	NWNE	5	54	76	44.692518	-106.027978	T54_R76_Sec5 _NWNE	NO
WY0039934-011	WY0039934-011	North Prong, Wild Horse Creek	10.3	SWNE	5	54	76	44.688027	-106.025816	William Suranyi Stock Reservoir	NO

