

BEFORE THE
ENVIRONMENTAL QUALITY COUNCIL
STATE OF WYOMING

IN THE MATTER OF THE APPEAL AND REVIEW OF)
THE DECISION REGARDING THE PROPOSED)
WYOMING POLLUTANT DISCHARGE ELIMINATION)
SYSTEM (WYPDES) PERMITS WY0052817 AND)
WY0052833 (KENNEDY OIL), DATED NOVEMBER 30, 2005)

**PETITION FOR REVIEW, NOTICE OF APPEAL
AND REQUEST FOR CONTESTED CASE HEARING**

THIS PETITION is a petition for review and notice of appeal to that certain decision made by John V. Corra, Director of the Wyoming Department of Environmental Quality, dated November 30, 2005, issuing WYPDES Permits WY0052817 and WY0052833. Copies of the permits are attached hereto as **Appendix "A" and "B"**. This notice of appeal is timely filed pursuant to Chapter I, Section 16 of the Rules of Practice and Procedure of the Department of Environmental Quality.

Parties

The party to this appeal is:

Adami Ranch LLC
P.O. Drawer G
Buffalo, Wyoming 82834

Said property owner is aggrieved by the action of DEQ in issuing WYPDES Permits WY0052817 and WY0052833.

Appearances

The above property owner is represented in this matter by Dennis M. Kirven of Kirven and Kirven, P.C., 104 Fort Street, P.O. Box 640, Buffalo, Wyoming, 82834; Phone: (307) 684-2248; Fax: (307) 684-2242.

Reasons for Appeal

The reasons for this appeal are stated as follows:

1. **APPENDIX C TO THE APPLICATION FOR PERMIT NO. WY0052817 MISLEADS THE DEPARTMENT OF ENVIRONMENTAL QUALITY THAT AN AGREEMENT HAS BEEN REACHED BETWEEN THE LANDOWNER AND OPERATOR.**

Adami Ranch has not approved any discharge plan submitted by Kennedy and

specifically has objected to the discharge of any CBM water upon the surface of Adami Ranch. There is no beneficial use to Adami Ranch of this CBM water for its agricultural operations.

Kennedy Oil has attached an unsigned consent agreement as Appendix C to the application. The form is blank except for the owner is described as Indian Creek Ranch by Steve Adami, President. Steve Adami is not an owner or officer in Indian Creek Ranch.

Secondly, the document is not signed and Adami Ranch does not agree with the statements contained therein. The owner and operator have not mutually developed the discharge plan and the owner does not certify that the CBM water will be put to beneficial use in the indicated stream or reservoir. Leaving that blank form attached as if there were an agreement is misleading and should be removed from the record.

2. THE VOLUME OF WATER TO BE PRODUCED WILL CAUSE ACCELERATED CHANNEL EROSION ON THE LANDOWNER'S PROPERTY.

In a recent analysis on a nearby watershed has shown that smaller quantities of water being discharged on the channel has created accelerated erosion consisting of mass wasting, incision and widening. See Regional Model for Assessing Erosion Potential Due to Increased Discharge, by Gregory V. Wilkerson, Jeffrey C. Baxter, Joshua C. Johnson and Sarah K. Konrad, University of Wyoming Engineering Department (2005).

This study examined the discharges from Devon on a project identified as the Devon Energy Company LP under NPDES Permit No. WY 0048020 and states that the cumulative affects of the water discharge have not been properly presented to the DEQ.

Quality Standards for Wyoming Surface Water, Chapter I, §20, states:

All Wyoming surface waters which have the natural water quality potential for use as an agricultural water supply shall be maintained at a quality which allows continued use of such water for agricultural purposes.

Degradation of such waters shall not be of such an extent to cause a measurable decrease in crop or livestock production.

Unless otherwise demonstrated, all Wyoming surface waters have the natural water quality potential for use as an agricultural water supply. (Emphasis supplied.)

The applications for permits submitted by Kennedy failed to show that there will not be a measurable decrease in forage and livestock production caused by the discharge of water onto the property described or that the discharge will not cause significant erosion.

These permits should have been denied by DEQ/WQD.

3. THE KENNEDY PROPOSAL DOES NOT ADDRESS THE IMPACT OF COALBED METHANE DISCHARGE WATER ON LIVESTOCK PRODUCTION.

The Application submitted by Kennedy did not provide any evidence or documentation that the discharge water or stored water would be used for agricultural purposes during periods of discharge or storage. It provided no support nor are there any qualifications for the statement of beneficial use which was attached as Appendix A that there will not be a decrease in livestock production resulting from discharge of the coalbed methane (CBM) water. 40 CFR, Part 435, Subpart E, specifically requires that each applicant for a NPDES permit document the agricultural and wildlife use of the water. Included in the documentation must be the following:

. . . a formal statement, with supporting documentation from a natural resources or environmental professional accompanied by the credentials of the natural resources or environmental personnel.

The burden is on Kennedy to provide assurances to DEQ that there will not be a measurable decrease in livestock production. No analysis of existing livestock production is even attempted in the application process nor a description of current water sources. The Environmental Quality Act requires the DEQ director to issue permits only "upon proof by the applicant that the procedures of this act and the rules and regulations promulgated hereunder have been complied with." W.S. §35-11-801(a). The burden is on Kennedy to show that it has complied with the procedures and rules. Applicable rules require the permit to be issued only if (1) all existing water uses are fully maintained and protected (Chapter I, §8, Water Quality Rules); and (2) water is not degraded to such an extent to cause a measurable decrease in crop or livestock production (Chapter I, §20, Water Quality Rules).

The applicant cannot meet its burden without submitting proof that there will not be a measurable decrease in livestock production. It is not a substitute to the requirements of State law set forth in Chapter I, §20 of the Water Quality Rules to submit materials regarding the theoretical impact on livestock production. Kennedy's failure to make that showing is evident in the language of the Statement of Beneficial Use and its contents. It is conclusory only and has no supporting documentation or evidence of agricultural use.

Although Indian Creek and Timber Draw are ephemeral drainages, they provide a significant forage plant complex with grasses similar to those on higher grounds. The productivity which will be submerged by these reservoirs proposed by Kennedy to hold discharge water will negatively impact those lands by destruction of acres of grazing lands. Even after the reservoirs are emptied of CBM discharge water, it will be years before native grasses return, if they do at all.

There is no analysis of how the destruction of prime grazing land will increase production of livestock on the lands. Any discharge of produced water may over time establish wetland plants along the course of various discharge routes, including hydrophytic plants such as saltmarsh bulrush, baltic bulrush, hardstem bulrush, three-square bulrush, broadleaf cattail, Nebraska sedge inland salt grass, foxtail barley and nutells alkaligrass.

Bulrushes have been identified as plants that cattle will not graze because its palatability is low. Wetlands will not provide increased forage for livestock production and will detract from places of calving traditionally used by livestock along dry drainage bottoms.

This Application must fail for its lack of information on livestock production from CBM discharge.

4. WATER INFILTRATING FROM THE CONTAINMENT PONDS THROUGH AN UNSATURATED ZONE WILL RESULT IN VIOLATION OF GROUND WATER STANDARDS.

The application does not contain an analysis as to the long term effects of infiltrated water from the containment ponds in downgrading aquifers. A recent experience in the area involving "Skewed" reservoirs demonstrated the risk to underlying aquifers. No monitoring wells are included in the application to monitor any possible contaminant to aquifers. Adami Ranch maintains stock water wells to service its stock watering system. Contamination or degradation of those wells would seriously impact the agricultural production in the area.

Kennedy's application fails to provide documentation concerning the presence or absence of ground water beneath the reservoir sites. No soil borings were provided and no proposals for monitoring ground water protection were made in the application. The application lacks any showing that the ground water standards contained in Chapter 8, Section 4(c) of the Wyoming Water Quality Rules are adhered to.

Without such demonstration, a permit cannot be issued until the DEQ is satisfied that this project will not result in contamination of ground water sources.

5. CUMULATIVE EFFECTS.

The entire Indian Creek drainage needs to be studied for the cumulative effect of all CBM projects planned for development. At least four other companies, Lance Oil & Gas Company, Yates Petroleum, Bill Barrett Company and Devon Energy, have projects which will impact the Indian Creek drainage and the total impact must be analyzed.

Application No. WY0052817 states there are 14.8 miles of channel bottom in Indian Creek before any water can reach Powder River. However, in the February 14, 2005, letter to the DEQ, Kennedy Oil states that their calculations only require 5.67 miles, with an additional 9 miles for other use.

The March 31, 2005, letter of Kennedy Oil indicates that it will use the entire 14.8 miles of Indian Creek. The letters are inconsistent and inconclusive as to the disposition of the water. For the first time, in the March 31, 2005, letter, Kennedy introduces misters as a solution to the amount of water being discharged down Indian Creek. Kennedy does not present a realistic approach to not only Kennedy's water, but other waters which will certainly be discharged into Indian Creek from the other projects. The confusion reflects the need for a full watershed study before any discharge is allowed into the drainage.

The possibility of using misters for increasing the amount of evaporation or infiltration will significantly concentrate the salts and other minerals in the reservoir ponds and, with varied winds, will inevitably drift over grazing lands and contaminate nearby grass and soil. This would lead to a decrease in agricultural productivity.

Furthermore, the February 14, 2005, Kennedy letter states that their study indicates no water in Indian Creek. However, there are wetlands in both Indian Creek and Timber Draw that need to be protected. The downgrading of these drainages is now under appeal and any additional discharge permits should be delayed pending the outcome of that appeal. The landowner has previously filed affidavits as to the existence of these wetlands.

6. MONITORING WELLS ARE NOT DEEP ENOUGH.

The application to DEQ states that ground water under the area is at 116 feet. All of Adami's wells are deeper than that, mostly in the 200-300 foot range. Any monitoring wells need to be deeper than the 116 feet reported by Kennedy Oil.

7. APPLICATION IS INCONSISTENT WITH THE PLAN OF DEVELOPMENT SUBMITTED TO THE BUREAU OF LAND MANAGEMENT.

For the same project under Application No. WY0052817 the plan is in direct contradiction to that which Kennedy Oil submitted to the Bureau of Land Management. In the plan of development submitted to the BLM, no in-channel containment ponds are proposed. Now Kennedy is requesting permits that are contrary to the plan of development submitted to the BLM.

DEQ should acquire a copy of the plan of development submitted to the BLM prior to issuing any of its permits to insure that there is a consistent development according to Kennedy's lands on file with the BLM.

8. LACK OF ACCESS.

Any discharge from the reservoirs of Kennedy will travel across lands owned by Adami Ranch. No easement exists for conveyance of this water across the property. Artificially produced water by coalbed methane is not entitled to use a natural drainage area and would constitute a trespass across the lands of Adami Ranch. Furthermore, any use of the property for water which would be considered hazardous waste would be a trespass and violation of the Adami Ranch's civil rights.

The granting of the discharge permit without a legal easement to cross the discharge waters across the surface of owner's lands is a taking of Adami lands for the purpose of conferring a private benefit on a particular private party. This is a violation of the Fifth Amendment to the United States Constitution and Article 1, Sections 32 and 33 of the Wyoming Constitution.

Request for Hearing

The above parties hereby petition and request a contested case hearing before the Environmental Quality Council on the decision of John V. Corra, Director of the Wyoming Department of Environmental Quality, dated November 30, 2005.

DATED this 26th day of January, 2006.

KIRVEN and KIRVEN, P.C.:

By Dennis M. Kirven
DENNIS M. KIRVEN, Attorney for
Petitioner
P.O. Box 640
Buffalo, Wyoming 82834
Phone: (307) 684-2248

CERTIFICATE OF SERVICE

I, **DENNIS M. KIRVEN**, of Kirven and Kirven, P.C., attorneys for Petitioners, certify that I served a true and correct copy of the foregoing "Petition for Review and Notice of Appeal" as follows:

Terri A. Lorenzon
Environmental Quality Council
Herschler Building, Room 1714
Cheyenne, Wyoming 82002

U.S. Mail
 Facsimile
 Federal Express
 Hand Delivery

CERTIFIED MAIL 7160 3901 9848 6946 8069
RETURN RECEIPT REQUESTED

Mr. John V. Corra
Department of Environmental Quality
122 West 25th Street, Herschler Building
4th Floor West
Cheyenne, Wyoming 82002

U.S. Mail
 Facsimile
 Federal Express
 Hand Delivery

Randall T. Cox, Esq.
Kendrick Professional Building
400 South Kendrick, Suite 101
Gillette, Wyoming 82716

U.S. Mail
 Facsimile
 Federal Express
 Hand Delivery

Kennedy Oil
700 West 6th Street
Gillette, Wyoming 82716

U.S. Mail
 Facsimile
 Federal Express
 Hand Delivery

on the 26th day of January, 2006.



DENNIS M. KIRVEN

Certified Article Number

7160 3901 9848 6946 8069

SENDERS RECORD

APPENDIX “A”

Wyoming Department of Environmental Quality
Water Quality Division
WYPDES Program

Statement of Basis

New

APPLICANT NAME: Kennedy Oil Company

MAILING ADDRESS: 700 West 6th Street
Gillette, WY 82716

FACILITY LOCATION: Imada – Indian Creek CBM Operations, which is located in the SWNW, SWNE, NENW, SWSE, and NWNE, Section 25, and the SENW, SWNE, and NWSE, Section 26, Township 49 North, Range 79 West, Johnson County. The produced water will be discharged to various named, on-channel reservoirs (4B), which are located on various unnamed, ephemeral tributaries (4B) of Ploesser Draw (4B), and Indian Creek (4B). Indian Creek (4B), is tributary to the Powder River (2ABWW). The permit establishes a maximum daily facility flow limit of 1.21 million gallons per day (MGD), and requires that the produced water discharged from this facility originate in the Big George coal seam.

NUMBER: WY0052817

General 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 for 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, 3 or 4 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. Based on a review of this permit application and previous applications in this area, it has been determined that no active irrigation uses of surface water occur downstream from the facility on Indian Creek.

Use-Attainability Analysis

Surface water classifications and site specific criteria are revised in Wyoming on an ongoing basis. Many of these modifications are based upon structured studies called Use Attainability Analyses. A Use-Attainability Analysis (UAA) entitled "*Kennedy South Area Powder River Basin*" was approved on December 27, 2004. This UAA reclassified Indian Creek and its tributaries from class 3B waters to class 4B waters. While the facility is located within the Big George geographic area (an area currently targeted for WET testing of CBM discharges), the immediate receiving streams are class 4B streams which do not support aquatic life. Therefore, this permit does not require whole effluent toxicity (WET) testing of the effluent. However, should the discharges impact the Powder River on a more frequent, persistent, or significant basis than was indicated in the permit application, the WDEQ reserves the right to reopen the permit and establish more stringent limits and/or requirements to protect the mainstem.

Facility Description

This permit anticipates discharge of up to 1.21 million gallons per day (MGD) of CBM effluent from outfalls 001-010. The outfalls discharge to the Indian Creek drainage, which flows into the Powder River, and is located approximately 13 miles from the Indian Creek - Powder River confluence. The permittee is also planning additional CBM development in adjacent drainages, and plans to "link" the facilities to allow for additional flexibility in water management options. The permittee has demonstrated that sufficient reservoir capacity exists between the facilities to contain all CBM effluent under "dry" operating conditions. The permittee has requested to be allowed to discharge from the reservoirs on a limited basis in order to utilize stream channel infiltration and evaporation to consume a portion of the produced water being discharged by this facility. As there is a considerable amount of discharge already permitted for this drainage, the permittee has consented to the establishment of a flow monitoring station (FM1 in Table 1, Part I.B.12 of the following permit) within the Indian Creek drainage. The permittee has committed to, and will be required to, reduce, eliminate, or otherwise manage any discharges from any outfall that contributes to flow at the flow monitoring location, unless the flow is related to storm events that caused the upstream reservoirs to fill and overtop. In the event that flow related to precipitation events reaches the flow monitoring location, it is the responsibility of the permittee to adequately demonstrate the circumstances in which reservoir discharges occurred, if requested by the WDEQ. In the event that discharge from this facility reaches the Powder River, this permit establishes monitoring stations on the receiving stream (Indian Creek) prior to its confluence with the Powder River. These stations will function to monitor any effluent flows to the Powder River. However, should the discharges impact the Powder River on a more frequent, persistent, or significant basis than was indicated in the permit application, the WDEQ reserves the right to reopen the permit and establish more stringent limits and/or requirements to protect the mainstem.

Effluent Limits

Permit effluent limits are based on federal and state regulations and are effective as of the date of issuance. The daily maximum effluent flow limit for this facility is 1.21 MGD. 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.

The permit also establishes a dissolved manganese limit of 650 µg/l, and a chlorides limit of 46 mg/l. These limits are based on chronic aquatic life standards for class 2AB waters as established in the *Wyoming Water Quality Rules and Regulations, Chapter 1*. The permit also establishes a total barium limit of 1800 µg/l and a total arsenic limit of 7 µg/l, these limits are based on Water Quality Criteria as established in the *Wyoming Water Quality Rules and Regulations, Chapter 1*, for Human Health values. The limits established in this permit for metals and chlorides reflect the application of the antidegradation provisions required under the *Wyoming Water Quality Rules and Regulations, Chapter 1*. Establishment of limits protective of the class 2 mainstem are considered appropriate in this instance due to the potential for discharges from this facility to impact the class 2 mainstem.

In addition, the permit establishes a dissolved iron limit of 1000 µg/l, which is based upon chronic aquatic life standards for class 3B waters greater than one mile from the confluence of a class 2 water, and reflects the application of standards and antidegradation policies as required under *Chapter 1 of the Wyoming Water Quality Rules and Regulations*. All limits described in this section are intended to protect for the above listed designated uses, on both the immediate receiving water and the perennial mainstem, and apply at the end of pipe.

A limit for total recoverable aluminum – 750 µg/l – is also being established in this permit. This limit is based upon the acute aquatic life standard established in *Chapter 1 of the Wyoming Water Quality Rules and Regulations*. In the case of total recoverable aluminum, the chronic aquatic life value does not apply, based upon the hardness and pH of the receiving stream. This limit applies at the end of pipe.

Monitoring and Reporting

Outfall Monitoring and Reporting

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

Water Quality Station Monitoring and Reporting

The permit also requires sampling at designated water quality monitoring stations located on the receiving stream (Indian Creek) and on the mainstem (Powder River, class 2ABWW water) to which Indian Creek is tributary. Water quality monitoring stations are to be located as described in Table 1, Part LB.12 of the following permit. 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 three water quality monitoring stations when effluent from this CBM facility reaches the TRIB1 station on Indian Creek. 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.

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

Flow Monitoring Station Monitoring and Reporting

The permittee is required to perform daily monitoring of the flow monitoring location, identified as "FM1" in Table I, Part I.B.12 of the following permit. Should discharges from this facility compose any portion of the flows observed at any time at the flow monitoring locations during "dry" operating conditions, the permittee is required to reduce, eliminate, or otherwise manage this facility's discharge such that flow containing discharges from this facility no longer reach a flow monitoring location.

General Permit Limitations and 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 November 30, 2007. 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
Environmental Senior Analyst
Water Quality Division
Department of Environmental Quality
Drafted: May 31, 2005

AUTHORIZATION TO DISCHARGE UNDER THE
WYOMING 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,

Kennedy Oil Company

is authorized to discharge from the wastewater treatment facilities serving the

Imada-Indian Creek CBM Operations,

located in the

SWNW, SWNE, NENW, SWSE, and NWNE, Section 25, and the SENW, SWNE, and NWSE, Section 26, Township 49 North, Range 79 West, Johnson County,


to receiving waters named

various named, on-channel reservoirs (4B), which are located on various unnamed, ephemeral tributaries (4B) of Ploesser Draw (4B), and Indian Creek (4B). Indian Creek (4B), is tributary to the Powder River (2ABWW),

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, November 30, 2007.



John F. Wagner
Administrator - Water Quality Division

11/29/05

Date



John V. Corra
Director - Department of Environmental Quality

11/30/05

Date

PART I

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

Effective immediately and lasting through November 30, 2007, 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 serial numbers 001-010.

1.a. Discharges from all outfalls are limited as specified below:

Effluent Limits

<u>Effluent Characteristic</u>	<u>Daily Maximum, Outfall</u>
Chlorides, mg/l	46
Dissolved Iron, µg/l	1000
Dissolved Manganese, µg/l	650
pH, standard units	6.5 – 9.0
Specific Conductance, micromhos/cm	7500
Sulfates, mg/l	3000
Total Arsenic, µg/l	7
Total Barium, µg/l	1800
Total Dissolved Solids, mg/l	5000
Total Flow, MGD*	1.21
Total Recoverable Aluminum, µg/	750

*Total flow volume will be calculated as the sum of all discharge from all permitted outfalls. The produced water discharged at this facility must originate in the Big George coal seam.

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.

2) 'Total' value for metals refers to the total recoverable amount of that metal in the water column

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 produced water originating in any well authorized for discharge at this facility at any permitted outfall, as long as all permit limits and requirements can be met. This facility, as originally permitted, consists of 10 outfalls and 14 wells. This facility will be linked to adjoining facilities located adjacent drainages.

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. It is the permittee's responsibility to adequately demonstrate the circumstances under which reservoir discharges occurred, should the WDEQ request such information.

The permittee may discharge from any of the reservoirs at any time, as long as the reservoir discharge does not reach the flow monitoring station, identified as "FM1" in Table 1, Part I.B.12 of the permit below. In the event that discharges from reservoirs not related to precipitation events reaches a flow monitoring station, the permittee is required to reduce, eliminate, or otherwise manage the reservoir discharges such that flow no longer reaches a flow monitoring location. However, should the discharges impact the Powder River on a more frequent, persistent, or significant basis than was indicated in the permit application, the WDEQ reserves the right to reopen the permit and establish more stringent limits and/or requirements to protect 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.

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.

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

a. **Monitoring of the initial discharge**

Within 60 days of commencement of discharge following issuance of this permit renewal, a sample shall be collected from each outfall and analyzed for all the constituents specified below, at the required detection limits. Within 120 days of commencement of discharge following issuance of this permit, a summary report on the produced water, including copies of the laboratory analysis reports, 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 constituents specified below. 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.6.b. may be modified to require more stringent monitoring.

<u>Parameter</u>	<u>Required Detection Limit</u>	<u>Sample Type</u>
Total Recoverable Aluminum, µg/l	50 µg/l	Grab
Dissolved Cadmium, µg/l	0.1 µg/l	Grab
Dissolved Calcium, mg/l	as mg/l	Grab
Dissolved Calcium, me/l	as me/l	Grab
Chlorides, mg/l	5 mg/l	Grab
Dissolved Copper, µg/l	1 µg/l	Grab

<u>Parameter</u>	<u>Required Detection Limit</u>	<u>Sample Type</u>
Dissolved Iron, µg/l	30 µg/l	Grab
Dissolved Manganese, µg/l	10 µg/l	Grab
Total Hardness, mg/l	10 mg/l as CaCO ₃	Grab
Dissolved Lead, µg/l	2 µg/l	Grab
Dissolved Magnesium, mg/l	as mg/l	Grab
Dissolved Magnesium, me/l	as me/l	Grab
Dissolved Mercury, µg/l	0.06 µg/l	Grab
pH, standard units	to 0.1 pH unit	Grab
Total Radium 226, pCi/l	0.2 pCi/l	Grab
Total Selenium, µg/l	5 µg/l	Grab
Dissolved Sodium, mg/l	as mg/l	Grab
Dissolved Sodium, me/l	as me/l	Grab
Sodium Adsorption Ratio, calculated as unadjusted ratio	not applicable	Calculated
Specific Conductance, micromhos/cm	5 micromhos/cm	Grab
Sulfates, mg/l	10 mg/l	Grab
Total Alkalinity, mg/l	1 mg/l as CaCO ₃	Grab
Total Arsenic, µg/l	1 µg/l	Grab
Total Barium, µg/l	100 µg/l	Grab
Dissolved Zinc, µg/l	10 µg/l	Grab
Bicarbonate, mg/l	1 mg/l	Grab
Total Dissolved Solids, mg/l	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 (001-010)

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)	Once Every Three Months	Grab
Dissolved Calcium (mg/l)	Once Every Three Months	Grab
Dissolved Calcium (me/l)	Once Every Three Months	Grab
Chloride (mg/l)	Annually	Grab
Dissolved Iron (µg/l)	Annually	Grab
Dissolved Manganese (µg/l)	Annually	Grab
Dissolved Magnesium (mg/l)	Once Every Three Months	Grab
Dissolved Magnesium (me/l)	Once Every Three Months	Grab
pH (standard units)	Once Every Three Months	Grab
Dissolved Sodium (mg/l)	Once Every Three Months	Grab
Dissolved Sodium (me/l)	Once Every Three Months	Grab
Sodium Adsorption Ratio (unadjusted ratio)	Once Every Three Months	Calculated
Specific Conductance (micromhos/cm)	Once Every Three Months	Grab
Sulfate (mg/l)	Annually	Grab
Total Alkalinity (mg/l)	Once Every Three Months	Grab
Total Arsenic (µg/l)	Annually	Grab
Total Barium (µg/l)	Annually	Grab
Total Flow – (MGD)	Monthly	Continuous
Total Recoverable Aluminum, (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. Water Quality Monitoring Stations (TRIB1, UPR, and 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 (mg/l)	Monthly	Grab
Dissolved Calcium (me/l)	Monthly	Grab
Dissolved Magnesium (mg/l)	Monthly	Grab
Dissolved Magnesium (me/l)	Monthly	Grab
Dissolved Sodium (mg/l)	Monthly	Grab
Dissolved Sodium (me/l)	Monthly	Grab
Sodium Adsorption Ratio (calculated as unadjusted ratio)	Monthly	Calculated
Specific Conductance (micromhos/cm)	Monthly	Grab
Flow (MGD)*	Monthly	Instantaneous

*Flow measurement is not required for the two monitoring stations located on the Powder River (UPR, DPR). The permittee is only required to monitor and report flow at the tributary monitoring station located on Indian Creek (TRIB1).

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, UPR, and DPR in Table 1, Part I.B.12 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 three water quality monitoring stations when effluent from this CBM facility reaches the TRIB1 station on Indian Creek. 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.

d. Flow Monitoring Station (FM1)

The permittee is required to perform weekly monitoring of the flow monitoring station location, identified as "FM1" in Table 1, Part I.B.12 of the following permit. Should discharges from this facility compose any portion of the flows observed at any time at the flow monitoring location during "dry" operating conditions, the permittee is required to reduce, eliminate, or otherwise manage this facility's discharge such that flow containing discharges from this facility no longer reach the flow monitoring location.

In order to monitor any flows that may reach the flow monitoring location, the permittee is required to perform weekly inspections of the flow monitoring station "FM1". Should flow be present at a flow

monitoring station unrelated to a precipitation event, the permittee is required to report the presence of flow at this station to the WDEQ within one business day, and cease further discharge until effluent no longer reaches the flow monitoring station. Such notification must occur in writing, via facsimile, e-mail, or overnight mail, and will include the following: WYPDES permit number, a description of the circumstances in which the discharge reached a flow monitoring location, and the number of days in which the discharge flowed past a flow monitoring location.

Such flows are also to be reported in conjunction with the Discharge Monitoring Reports. This reporting should be in the form of an additional spreadsheet or table that includes whether or not flow originating from this facility was present at a flow monitoring station at any time during the monitoring period, dates of flow monitoring inspections, inspection findings, and the number of days in which flow originating at this facility was present at a flow monitoring location.

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 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 following issuance of this permit will be due on February 15th, 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. The permittee shall provide written notification of the establishment of each discharge point in accordance with Part I.A.6.a above.

12. **Location of Discharge Points, Flow Monitoring Stations, and Water Quality Monitoring Stations**

As of the date of permit issuance, authorized points of discharge and water quality monitoring stations were as follows:

SEE TABLE 1 FOR A LIST OF OUTFALL LOCATIONS, FLOW MONITORING STATION LOCATIONS, AND WATER QUALITY MONITORING STATION LOCATIONS.

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 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.

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.

003	Indian Creek	12.49	NENW	25	T49N	R79W	44.1901	-106.3130	Adami 25-3	YES
004	Unnamed, ephemeral tributary, Ploesser Draw	11.92	SWSE	25	T49N	R79W	44.1856	-106.3057	Adami 25-4	YES
005	Unnamed, ephemeral tributary, Indian Creek	12.28	NWNE	25	T49N	R79W	44.1942	-106.3080	Adami 25-5	YES
006	Unnamed, ephemeral tributary, Indian Creek	13.63	SEnw	26	T49N	R79W	44.1927	-106.3287	Adami 26-4	YES
007	Unnamed, ephemeral tributary, Indian Creek	13.55	SWNE	26	T49N	R79W	44.1924	-106.3273	Adami 26-5	YES
008	Unnamed, ephemeral tributary, Indian Creek	13.50	SWNE	26	T49N	R79W	44.1916	-106.3261	Adami 26-6	YES
009	Unnamed, ephemeral tributary, Indian Creek	13.68	NWSE	26	T49N	R79W	44.1892	-106.3252	Adami 26-7	YES
	Ploesser Draw									
Flow Monitoring Point										
FM1	Indian Creek	8.69	SEnw	5	T48N	R78W	44.1647	-106.2619		
Water Quality Monitoring Stations										
TRIB1	Indian Creek	0.3	SEnw	32	T49N	R77W	44.1769	-106.1494		
UPR	Powder River	NA	NWNE	32	T49N	R77W	44.1814	-106.1456		
DPR	Powder River	NA	NENW	32	T49N	R77W	44.1819	-106.1489		

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. For any incidence of noncompliance, including noncompliance related to non-toxic pollutants or non-hazardous substances, a written submission shall be provided within five (5) days of the time that the permittee becomes aware of the noncompliance circumstance.

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 as soon as possible, but no later than 24 hours from the time the permittee first 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
 - (3) Violation of a maximum daily discharge limitation for any toxic pollutants or hazardous substances, or any pollutants specifically identified as the method to control a toxic pollutant or hazardous substance listed in the permit.
- e. The administrator of the Water Quality Division may waive the written report on a case-by-case basis if the oral report has been received within 24 hours by the Water Quality Division, Watershed Management Section, NPDES Program (307) 777-7781.
 - f. Reports shall be submitted to the Wyoming Department of Environmental Quality at the address in Part I under Reporting and to the 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.
 - g. The permittee shall report all instances of noncompliance that have not been specifically addressed in any part of this permit at the time the monitoring reports are due.

3. Facilities Operation

The permittee shall, at all times, properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by the permittee only when the operation is necessary to achieve compliance with the conditions of the permit. However, the permittee shall operate, as a minimum, one complete set of each main line unit treatment process whether or not this process is needed to achieve permit effluent compliance.

4. Adverse Impact

The permittee shall take all reasonable steps to minimize any adverse impact to waters of the state resulting from noncompliance with any effluent limitations specified in this permit, including such accelerated or additional monitoring as necessary to determine the nature and impact of the noncomplying discharge.

5. Bypass of Treatment Facilities

- a. Bypass means the intentional diversion of waste streams from any portion of a treatment facility.
- b. The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of paragraphs c. and d. of this section. Return of removed substances to the discharge stream shall not be considered a bypass under the provisions of this paragraph.

- (3) The permittee submitted notice of the upset as required under Part II.A.2; and
- (4) The permittee complied with any remedial measures required under Part II.A.4.

d. Burden of proof. In any enforcement proceeding, the permittee seeking to establish the occurrence of an upset has the burden of proof.

7. Removed Substances

Solids, sludges, filter backwash or other pollutants removed in the course of treatment or control of wastewaters or intake waters shall be disposed of in a manner such as to prevent any pollutant from such materials from entering waters of the state.

8. Power Failures

In order to maintain compliance with the effluent limitations and prohibitions of this permit, the permittee shall either:

- a. In accordance with a schedule of compliance contained in Part I, provide an alternative power source sufficient to operate the wastewater control facilities; or
- b. If such alternative power source as described in paragraph a. above is not in existence and no date for its implementation appears in Part I, take such precautions as are necessary to maintain and operate the facility under its control in a manner that will minimize upsets and insure stable operation until power is restored.

9. Duty to Comply

The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the federal act and the Wyoming Environmental Quality Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. The permittee shall give the administrator of the Water Quality Division advance notice of any planned changes at the permitted facility or of any activity which may result in permit noncompliance.

10. Duty to Mitigate

The permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

11. Signatory Requirements

All applications, reports or information submitted to the administrator of the Water Quality Division shall be signed and certified.

- a. All permit applications shall be signed as follows:
 - (1) For a corporation: by a responsible corporate officer;

- (2) For a partnership or sole proprietorship: by a general partner or the proprietor, respectively;
 - (3) For a municipality, state, federal or other public agency: by either a principal executive officer or ranking elected official.
- b. All reports required by the permit and other information requested by the administrator of the Water Quality Division shall be signed by a person described above or by a duly authorized representative of that person. A person is a duly authorized representative only if:
- (1) The authorization is made in writing by a person described above and submitted to the administrator of the Water Quality Division; and
 - (2) The authorization specified either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility or an individual or position having overall responsibility for environmental matters for the company. A duly authorized representative may thus be either a named individual or any individual occupying a named position.
- c. If an authorization under paragraph II.A.11.b. is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of paragraph II.A.11.b must be submitted to the administrator of the Water Quality Division prior to or together with any reports, information or applications to be signed by an authorized representative.
- d. Any person signing a document under this section shall make the following certification:
- "I certify, under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

B. RESPONSIBILITIES

1. Inspection and Entry

If requested, the permittee shall provide written certification from the surface landowner(s), if different than the permittee, that the administrator or the administrator's authorized agent has access to all physical locations associated with this permit including well heads, discharge points, reservoirs, monitoring locations, and any waters of the state.

The permittee shall allow the administrator of the Water Quality Division or an authorized representative, upon the presentation of credentials and other documents as may be required by law, to:

- a. Enter upon the permittee's premises where a regulated facility or activity is located or conducted or where records must be kept under the conditions of this permit;
- b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- c. Inspect, at reasonable times, any facilities, equipment (including monitoring and control equipment), practices or operations regulated or required under this permit; and
- d. Sample or monitor, at reasonable times, for the purpose of assuring permit compliance or as otherwise authorized by the federal act, any substances or parameters at any location.

2. Transfer of Ownership or Control

In the event of any change in control or ownership of facilities from which the authorized discharges emanate, the permittee shall notify the succeeding owner or controller of the existence of this permit by letter, a copy of which shall be forwarded to the regional administrator of the Environmental Protection Agency and the administrator of the Water Quality Division. The administrator of the Water Quality Division shall then provide written notification to the new owner or controller of the date in which they assume legal responsibility of the permit. The permit may be modified or revoked and reissued to change the name of the permittee and incorporate such other requirements as described in the federal act.

3. Availability of Reports

Except for data determined to be confidential under Section 308 of the federal act, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the offices of the Wyoming Department of Environmental Quality and the regional administrator of the Environmental Protection Agency. As required by the federal act, effluent data shall not be considered confidential. Knowingly making any false statement on any such report may result in the imposition of criminal penalties as provided for in Section 309 of the federal act.

4. Toxic Pollutants

The permittee shall comply with effluent standards or prohibitions established under Section 307 (a) of the federal act for toxic pollutants within the time provided in the regulations that establish

those standards or prohibitions, even if the permit has not yet been modified to incorporate the requirement.

5. Changes in Discharge of Toxic Substances

Notification shall be provided to the administrator of the Water Quality Division as soon as the permittee knows of, or has reason to believe:

- a. That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":
 - (1) One hundred micrograms per liter (100 µg/l);
 - (2) Two hundred micrograms per liter (200 µg/l) for acrolein and acrylonitrile; five hundred micrograms per liter (500 µg/l) for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter (1 mg/l) for antimony;
 - (3) Five (5) times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 CFR 122.21 (g) (7); or
 - (4) The level established by the director of the Environmental Protection Agency in accordance with 40 CFR 122.44 (f).
- b. That any activity has occurred or will occur which would result in any discharge, on a non-routine or infrequent basis, of a toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":
 - (1) Five hundred micrograms per liter (500 µg/l);
 - (2) One milligram per liter (1 mg/l) for antimony;
 - (3) Ten (10) times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 CFR 122.21 (g) (7); or
 - (4) The level established by the director of the Environmental Protection Agency in accordance with 40 CFR 122.44 (f).

6. Civil and Criminal Liability

Nothing in this permit shall be construed to relieve the permittee from civil or criminal penalties for noncompliance. As long as the conditions related to the provisions of "Bypass of Treatment Facilities" (Part II.A.5), "Upset Conditions" (Part II.A.6), and "Power Failures" (Part II.A.8) are satisfied then they shall not be considered as noncompliance.

7. Need to Halt or Reduce Activity not a Defense

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

8. Oil and Hazardous Substance Liability

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities or penalties to which the permittee is or may be subject under Section 311 of the federal act.

9. State Laws

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities or penalties established pursuant to any applicable state or federal law or regulation. In addition, issuance of this permit does not substitute for any other permits required under the Clean Water Act or any other federal, state, or local law.

10. Property Rights

The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights nor any infringement of federal, state or local laws or regulations.

11. Duty to Reapply

If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and obtain a new permit. The application should be submitted at least 180 days before the expiration date of this permit.

12. Duty to Provide Information

The permittee shall furnish to the administrator of the Water Quality Division, within a reasonable time, any information which the administrator may request to determine whether cause exists for modifying, revoking and reissuing or terminating this permit or to determine compliance with this permit. The permittee shall also furnish to the administrator, upon request, copies of records required by this permit to be kept.

13. Other Information

When the permittee becomes aware that it failed to submit any relevant facts in a permit application or submitted incorrect information in a permit application or any report to the administrator of the Water Quality Division, it shall promptly submit such facts or information.

14. Permit Action

This permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

PART III

A. OTHER REQUIREMENTS

1. Flow Measurement

At the request of the administrator of the Water Quality Division, the permittee must be able to show proof of the accuracy of any flow measuring device used in obtaining data submitted in the monitoring report. The flow measuring device must indicate values of within plus or minus ten (10) percent of the actual flow being measured.

2. 208(b) Plans

This permit may be modified, suspended or revoked to comply with the provisions of any 208(b) plan certified by the Governor of the State of Wyoming.

3. Reopener Provision

This permit may be reopened and modified (following proper administrative procedures) to include the appropriate effluent limitations (and compliance schedule, if necessary) or other appropriate requirements if one or more of the following events occurs:

a. The state water quality standards of the receiving water(s) to which the permittee discharges are modified in such a manner as to require different effluent limits than contained in this permit;

b. A total maximum daily load (TMDL) and/or watershed management plan is developed and approved by the state and/or the Environmental Protection Agency which specifies a wasteload allocation for incorporation in this permit;

c. A revision to the current water quality management plan is approved and adopted which calls for different effluent limitations than contained in this permit;

d. Downstream impairment is observed and the permitted facility is contributing to the impairment;

e. The limits established by the permit no longer attain and/or maintain applicable water quality standards;

f. The permit does not control or limit a pollutant that has the potential to cause or contribute to a violation of a state water quality standard.

g. If new applicable effluent guidelines and/or standards have been promulgated and the standards are more stringent than the effluent limits established by the permit.

h. In order to protect water quality standards in neighboring states, effluent limits may be incorporated into this permit or existing limits may be

modified to ensure that the appropriate criteria, water quality standards and assimilative capacity are attained.

4. Permit Modification

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

- a. Violation of any terms or conditions of this permit;
- b. Obtaining this permit by misrepresentation or failure to disclose fully all relevant facts;
- c. A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge; or
- d. If necessary to comply with any applicable effluent standard or limitation issued or approved under Sections 301(b) (2) (C) and (D), 304 (b) (2) and 307 (a) (2) of the federal act, if the effluent standard or limitation so issued or approved:
 - (1) Contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or
 - (2) Controls any pollutant not limited in the permit.

5. Toxicity Limitation - Reopener Provision

This permit may be reopened and modified (following proper administrative procedures) to include a new compliance date, additional or modified numerical limitations, a new or different compliance schedule, a change in the whole effluent protocol or any other conditions related to the control of toxicants if one or more of the following events occur:

- a. Toxicity was detected late in the life of the permit near or past the deadline for compliance;
- b. The TRE results indicate that compliance with the toxic limits will require an implementation schedule past the date for compliance and the permit issuing authority agrees with the conclusion;
- c. The TRE results indicate that the toxicant(s) represent pollutant(s) that may be controlled with specific numerical limits and the permit issuing authority agrees that numerical controls are the most appropriate course of action;
- d. Following the implementation of numerical controls on toxicants, the permit issuing authority agrees that a modified whole effluent protocol is necessary to compensate for those toxicants that are controlled numerically;
- e. The TRE reveals other unique conditions or characteristics which, in the opinion of the permit issuing authority, justify the incorporation of unanticipated special conditions in the permit.

APPENDIX “B”

Wyoming Department of Environmental Quality
Water Quality Division
WYPDES Program

Statement of Basis

New

APPLICANT NAME: Kennedy Oil Company

MAILING ADDRESS: 700 West 6th Street
Gillette, WY 82716

FACILITY LOCATION: Crazy Woman Creek CBM Operations, which is located in the NESW, NESE, SWSE, SESW, and SWSW, Section 11, Township 50 North, Range 79 West, and in the SWNW, NWSW, and SWSW, Section 26 and the NENE, Section 34, Township 49 North, Range 79 West, and in the NESE, Section 6, the NESW, Section 7, and the NESW and SENE, Section 8, Township 48 North, Range 79 West, Johnson County. The produced water will be discharged to various on-channel reservoirs (3B), which are located on McCray Draw (4B), Timber Draw (4B), Morris Draw (3B), and unnamed, ephemeral tributaries of Crazy Woman Creek (3B). These streams are all tributary to the Powder River (2ABWW), via Crazy Woman Creek (2AB). The permit establishes 5 irrigation compliance points, located as described in Table 2, Part I.B.12 of the following permit. The permit establishes a maximum daily facility flow limit of 2.55 million gallons per day (MGD), and requires that the produced water discharged from this facility originate in the Big George coal seam.

NUMBER: WY0052833

General 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 for 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, 3 or 4 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. Based on a review of this permit application and previous applications in this area, it has been determined that active irrigation uses of surface water occur downstream from the facility on Crazy Woman Creek.

Facility Description

This permit anticipates discharge of up to 2.55 million gallons per day (MGD) of CBM effluent from outfalls 001-014. The outfalls discharge to on-channel reservoirs located on unnamed and named ephemeral tributaries of the Crazy Woman Creek drainage, which flows into the Powder River, and are located between 43 and 70 stream miles from the Powder River confluence, and approximately 5 to 7 miles from confluence with Crazy Woman Creek. The permittee has demonstrated that sufficient reservoir capacity exists in the proposed reservoirs to contain all CBM effluent in addition to stormwater runoff from variously-sized storm events. This permit establishes 5 irrigation compliance points. In the event that discharge from this facility reaches the irrigation compliance points, this permit establishes limits protective of the irrigation use on Crazy Woman Creek. Effluent limits associated with the irrigation compliance point (dissolved sodium = 135 mg/l, EC=1760 micromhos/cm) were determined from a combination of one or more of the following: technical information submitted by the applicant, published scientific literature, credible water quality data that has been through formally adopted quality control/quality assurance review, and best professional judgement.

The permit also establishes water quality monitoring stations located on Crazy Woman Creek near the Powder River confluence, and on the Powder River proper, upstream and downstream of the Powder River - Crazy Woman Creek confluence. These stations will function to monitor any effluent flows to the Powder River, and are located as described in Table 2, Part I.B.12 of the following permit.

Use-Attainability Analyses

Surface water classifications and site specific criteria are revised in Wyoming on an ongoing basis. Many of these modifications are based upon structured studies called Use Attainability Analyses. Use-Attainability Analyses (UAAs) entitled "*Kennedy North Area Powder River Basin*" and "*Kennedy South Area Powder River Basin*" were approved on December 27, 2004. These UAAs reclassified tributaries of Crazy Woman Creek - McCray Draw and Timber Draw - from class 3B waters to class 4B waters. While this facility is located within the Big George geographic area (an area currently targeted for WET testing of CBM discharges), the immediate receiving streams described above are class 4B streams which do not support aquatic life. Therefore, this permit does not require whole effluent toxicity (WET) testing of the effluent for any outfalls on streams reclassified under the UAA processes described above. However, should the discharges impact the Powder River on a more frequent, persistent, or significant basis than was indicated in the permit application, the WDEQ reserves the right to reopen the permit and establish more stringent limits and/or requirements to protect the mainstem.

For outfalls immediately discharging to stream channels not covered under the UAA processes described above (outfalls 011-014), acute WET requirements as described below do apply.

Whole Effluent Toxicity (WET) Testing

WDEQ has determined that discharges from outfalls 011-014 of this facility have a reasonable potential to exert a toxic effect on aquatic life in the mainstem (Crazy Woman Creek). Therefore, in accordance with 40 CFR 122.44(d)(1), the permit contains a requirement to conduct annual static replacement toxicity tests on a grab sample of the discharge from the end of pipe. This requirement is only applicable to those discharges that immediately impact a class 3 drainage (outfalls 011, 012, 013, and 014), and does not apply to those discharges that immediately impact class 4 drainages (outfalls 001-010). Each year during the life of this permit, a minimum of 20% of the discharging outfalls are to be sampled and tested for toxicity as described in Part I of the permit below. Since the discharge from this facility is not expected to reach a perennial water body (Powder River and/or Crazy Woman Creek) on a frequent and/or continual basis, WDEQ has determined that acute toxicity testing only is appropriate at outfalls (011, 012, 013, and 014) to characterize the impact that this discharge may have on aquatic life in the receiving waters.

Acute WET Testing:

The permittee will conduct acute 48-hour static tests using *Daphnia magna* (water flea) and acute 96-hour static tests using *Pimephales promelas* (fathead minnow) at all outfalls permitted for discharge. The acute whole effluent toxicity tests will be conducted in accordance with the latest procedures set forth in 40 CFR 136.3 and the "Region VIII EPA NPDES Acute Test Conditions - Static Renewal Whole Effluent Toxicity Tests". In the case of conflicts in method, the Region VIII document will prevail. If the results of two consecutive annual reports indicate no acute toxicity (as defined in part I of the permit below), the permittee may reduce the monitoring to annual acute toxicity testing on only one species on an alternating basis. The test procedures for alternating species shall be the same as specified above.

Effluent Limits

Permit effluent limits are based on federal and state regulations and are effective as of the date of issuance. The daily maximum effluent flow limit for this facility is 2.55 MGD. 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.

The permit also establishes a dissolved manganese limit of 840 µg/l, and a chlorides limit of 46 mg/l. These limits are based on chronic aquatic life standards for class 2AB waters as established in *the Wyoming Water Quality Rules and Regulations, Chapter 1*. The permit also establishes a total barium limit of 1800 µg/l and a total arsenic limit of 6 µg/l, these limits are based on Water Quality Criteria as established in *the Wyoming Water Quality Rules and Regulations, Chapter 1*, for Human Health values. The limits established in this permit for metals and chlorides reflect the application of the antidegradation provisions required under *the Wyoming Water Quality Rules and Regulations, Chapter 1*. Establishment of limits protective of the class 2 mainstem are considered appropriate in this instance due to the potential for discharges from this facility to impact the class 2 mainstem.

The permit also establishes an effluent limit for total radium ²²⁶ of 5 pCi/l at the end of pipe for all outfalls. For outfalls less than 10 stream miles but more than 2 stream miles from a class 2 water, as is

the case for all outfalls in this permit, the total radium²²⁶ limit has been determined to be 5 pCi/l, which reflects the application of "tier two" anti-degradation protection for the class 2 immediate receiving water.

In addition, the permit establishes a dissolved iron limit of 1000 µg/l for all outfalls, which is based upon chronic aquatic life standards for class 3B waters greater than one mile from the confluence of a class 2 water, and reflects the application of standards and antidegradation policies as required under *Chapter 1 of the Wyoming Water Quality Rules and Regulations*. All limits described in this section are intended to protect for the above listed designated uses, on both the immediate receiving water and the perennial mainstem, and apply at the end of pipe.

A limit for total recoverable aluminum – 750 µg/l – is also being established in this permit for outfalls discharging to class 3 streams (011-014). This limit is based upon the acute aquatic life standard established in *Chapter 1 of the Wyoming Water Quality Rules and Regulations*. In the case of total recoverable aluminum, the chronic aquatic life value does not apply, based upon the hardness and pH of the receiving stream.

Irrigation Protection

In order to monitor and regulate coal bed methane discharge for compliance with Chapter 1, Section 20 (protection of agricultural water supply), effluent limits for dissolved sodium and specific conductance (EC) are included in this permit. The Wyoming DEQ has determined that a dissolved sodium limit of 135 mg/l and specific conductance limit of 1,760 micromhos/cm is intended to be protective of agriculture use in the Crazy Woman Creek drainage. The specific conductance and dissolved sodium limits being established in this permit are based upon the average of approximately 250 measurements taken by the United States Geological Survey from 1950 until 2003. As these limits represent ambient water quality within the drainage that has been historically applied to the irrigated fields, applying water meeting these limits should not result in a reduction in crop production, or soil infiltration rates. In addition, maintaining the water quality of Crazy Woman Creek should not cause any degradation of the Powder River with respect to irrigation water quality. Year-round protection of irrigation water quality within the Crazy Woman and Powder River drainages has been deemed necessary in order to protect passively irrigated systems and to ensure that water quality standards established by the State of Montana for the Powder River are not exceeded.

In this instance, a dissolved sodium limit, rather than a sodium adsorption ratio limit, was judged to be more protective of irrigation uses within the Crazy Woman Creek basin due to the low concentrations of both dissolved calcium and dissolved magnesium within both the discharge and the immediate class 2 receiving stream (Crazy Woman Creek). The low concentrations of both dissolved calcium and dissolved magnesium indicates that there is no buffering capacity available either within Crazy Woman Creek or the discharge to mitigate the impact of sodium loading within the drainage, and that impacts to irrigation are almost entirely the result of sodium loading within the drainage. Establishment of a dissolved sodium limit rather than a sodium adsorption ratio limit is therefore more conservative, and provides a higher degree of protection for irrigation use within the drainage. Mixing analyses submitted by the permittee indicates that, in the event discharges from this facility are carried by stormwater runoff to the irrigation compliance point locations, the combined effluent and stormwater will meet limits for dissolved sodium (135 mg/l) and specific conductance (1760 micromhos/cm. These limits satisfy provisions under *Chapter 1, Section 20 (protection of agricultural water supply) of the Wyoming Water Quality Rules and Regulations*.

The effluent limits at the ICP are intended to demonstrate compliance with *Chapter 2, Section 20 (protection of agricultural water supply) of the Wyoming Water Quality Rules and Regulations*. If produced water from this facility reaches an ICP and results in a violation of the ICP effluent limits, this action will constitute a violation of this permit, regardless of the cause of the violation (i.e., natural conditions of the stream channel or other operators in the drainage.) If this facility's effluent does not reach an irrigation compliance point, then monitoring and compliance with the ICP effluent limits are not required.

Violation of the ICP effluent limits may result in enforcement action from the Water Quality Division, termination of the discharge until an acceptable plan to mitigate the violation has been developed and/or other appropriate enforcement action.

Monitoring and Reporting

Outfall Monitoring and Reporting

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

Irrigation Compliance Point Monitoring and Reporting

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 or the downstream irrigated lands along Crazy Woman Creek. According to information submitted by the permittee in the permit application, CBM effluent from this facility is only expected to reach the irrigated fields when it is conveyed by a sufficient precipitation event. Should flow containing effluent reach an irrigation compliance point, the permittee is required to collect samples at the irrigation compliance point. Irrigation compliance point monitoring and reporting is required year-round due to the downstream irrigator's inability to divert flows containing effluent away from the fields undergoing irrigation.

Sampling will be required at the 5 irrigation compliance points being established in this permit for flow volume, calcium, magnesium, sodium, bicarbonate, sodium adsorption ratio and specific conductance if effluent from this facility is present at an irrigation compliance point. Sampling of the water quality present at the irrigation compliance point must occur within 24 hours of any flows containing effluent occurring at an irrigation compliance point. This permit does not require sampling of discharge at the ICPs if flow at an ICP is not hydrologically connected to the outfalls or reservoirs at this CBM facility.

The permit requires daily monitoring on Crazy Woman Creek to determine whether effluent discharged from the outfalls is reaching the irrigation compliance point. Daily monitoring is necessary because the permit establishes different sampling and analysis requirements based on whether the effluent from this facility has reached an ICP. Once a sample is taken at the irrigation compliance point as required above, then weekly monitoring of flow is required for the remainder of that month at that ICP. At the beginning of each calendar month, the monitoring frequency will revert to daily until such time as a sample is collected to represent effluent quality for irrigation compliance point constituents for that month. Results are to be reported twice-yearly and if no effluent from this facility reaches an irrigation compliance point for an entire sampling month, then "no discharge" is to be reported for that ICP for that sampling month.

Water Quality Station Monitoring and Reporting

The permit also requires sampling at designated water quality monitoring stations located on the immediate receiving streams, Crazy Woman Creek (class 2AB water), and on the mainstem (Powder River, class 2ABWW water) to which Crazy Woman Creek is tributary. Water quality monitoring stations are to be located as described in Table 2, Part I.B.12 of the following permit. 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 the associated water quality monitoring stations when effluent from this CBM facility reaches any of the tributary water quality monitoring stations as noted in Table 2, Part I.A.5.d. Due to the nature of this facility, which consists of discharge points located on several spatially distant tributaries of Crazy Woman Creek, a monitoring network is being established. This network consists of water quality monitoring stations located upstream and downstream of the confluences of the northernmost and the middle and southernmost groupings of outfalls being authorized for discharge under this permit, in the main channel of Crazy Woman Creek, with associated mainstem water quality monitoring stations to be located in the main channel of Crazy Woman Creek, just prior to the confluence of Crazy Woman Creek and the Powder River, and in the main channel of the Powder River, upstream and downstream of the Powder River - Crazy Woman Creek confluence. If flow containing effluent from this facility occurs at an irrigation compliance point 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 associated 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 an irrigation compliance point. If no flow at all occurs at an irrigation compliance point for an entire monthly monitoring period, then "no flow" is to be reported and samples need not be collected at the associated water quality monitoring stations for that monthly monitoring period.

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

General Permit Limitations and 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, 2007. 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
Environmental Senior Analyst
Water Quality Division
Department of Environmental Quality
Drafted: June 1, 2005

AUTHORIZATION TO DISCHARGE UNDER THE
WYOMING 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,

Kennedy Oil Company,

is authorized to discharge from the wastewater treatment facilities serving the

Crazy Woman Creek CBM Operations,

located in the

NESW, NESE, SWSE, SESW, and SWSW, Section 11, Township 50 North, Range 79 West, and in the SWNW, NWSW, and SWSW, Section 26 and the NENE, Section 34, Township 49 North, Range 79 West, and in the NESE, Section 6, the NESW, Section 7, and the NESW and SENE, Section 8, Township 48 North, Range 79 West, Johnson County,

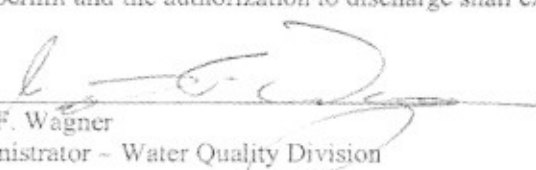
to receiving waters named

various on-channel reservoirs (3B or 4B), which are located on McCray Draw (4B), Timber Draw (4B), Morris Draw (3B), and unnamed, ephemeral tributaries of Crazy Woman Creek (3B). These streams are all tributary to the Powder River (2ABWW), via Crazy Woman Creek (2AB),

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, 2007.


John F. Wagner
Administrator - Water Quality Division

11/29/05
Date


John V. Corra
Director - Department of Environmental Quality

11/30/05
Date

PART I

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

Effective immediately and lasting through June 30, 2007, 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 serial numbers 001-014.

I. Discharges from all outfalls are 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 Manganese, µg/l	840	
pH, standard units	6.5 – 9.0	
Specific Conductance, micromohs/cm	7500	1760
Sulfates, mg/l	3000	
Total Arsenic, µg/l	6	
Total Barium, µg/l	1800	
Total Dissolved Solids, mg/l	5000	
Total Flow, MGD*	2.55	
Total Recoverable Aluminum, µg/l	750	
Dissolved Iron, µg/l	1000	
Total Radium 226, pCi/l	5	
Dissolved Sodium, mg/l		135

* The total flow volume will be calculated as the sum of all discharge from all permitted outfalls. The produced water discharged at this facility must originate in the Big George coal seam.

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.

2) 'Total' value for metals refers to the total recoverable amount of that metal in the water column.

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 produced water originating in any well authorized for discharge at this facility at any permitted outfall, as long as all permit limits and requirements can be met. This facility, as originally permitted, consists of 14 outfalls and 28 wells.

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. Intentional discharge (draining) of the reservoirs will not be allowed under this permit. It is the permittee's responsibility to adequately

demonstrate the circumstances under which reservoir discharges occurred, should the WDEQ request such information.

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.

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.

2. **Effluent Limitations (Toxic Pollutants)**

Effective immediately upon issuance of this permit modification, there shall be no acute toxicity occurring in the effluent from outfalls serial numbers 011-014. The remaining outfalls authorized for discharge under this permit discharge to class 4 immediate receiving waters, and thus are not subject to acute toxicity requirements.

3. **Whole Effluent Testing (Acute)**

Upon issuance of this permit, the permittee shall, at least once annually, conduct acute static replacement toxicity tests on a grab sample of the discharge from outfalls 011- 014. If initial monitoring of the effluent is required for this permit (within 60 days of commencement of discharge), then the first annual acute toxicity test is to be conducted at that time. At a minimum, 20 percent of all discharging outfalls that immediately flow to Class 3 waters (outfalls 011 – 014) are to be sampled and tested annually for acute whole effluent toxicity (WET). Each year, a different 20 percent minimum portion of the outfalls currently discharging to class 3 waters (outfalls 011 – 014) is to be sampled and tested for acute whole effluent toxicity. Consecutive yearly samples may not be collected from an identical outfall unless the outfall is the only discharging outfall that complies with the criteria listed above. The permittee may select the outfall(s) that will be sampled each year unless the permit issuing authority specifically identifies which outfalls must be sampled. The permittee must also provide written notification to the permit issuing authority at least two weeks prior to WET-related sampling. The written notification will specify which outfall(s) are discharging and which outfalls will be selected and sampled for the WET test.

The replacement static toxicity tests shall be conducted in accordance with the procedures set forth in 40 CFR 136.3 and the "Region VIII EPA NPDES Acute Test Conditions - Static Renewal Whole Effluent Toxicity Tests". In the case of conflicts in method, the Region VIII Document will prevail. The permittee shall conduct an acute 48-hour static toxicity test using *Daphnia magna* and an acute 96 hour static toxicity test using *Pimephales promelas*. All tests will be conducted utilizing a multi-dilution series consisting of at least five (5) concentrations and a control as defined below:

100% effluent
85% effluent
67% effluent
50% effluent
25% effluent
control (or 0% effluent)

All tests will be conducted utilizing a minimum of 5 replicates for each test. In the event of inconclusive test results, the WDEQ reserves the right to require the permittee to perform additional tests at alternate dilutions and/or replicates. The WDEQ also reserves the right to require the submission of all information regarding all initiated tests, regardless of whether the tests were carried to completion or not.

Acute toxicity occurs when 50 percent or more mortality is observed for either species at any effluent concentration at any outfall. If acute toxicity occurs at any outfall during a sampling period, then WDEQ will assume that all outfalls, which have not yet been sampled, exhibit similar acute toxicity characteristics as well.

If more than 10 percent control mortality occurs, the test is not valid. The test shall be repeated until satisfactory control survival is achieved.

If acute toxicity occurs, an additional test on the failing outfall(s) shall be initiated within two (2) weeks of the date of when the permittee learned of the test failure. If only one species fails, retesting may be limited to this species. Should acute toxicity occur in the second test, the Toxicity Identification Evaluation (TIE) and Toxicity Reduction Evaluation (TRE) process described below shall be implemented on a schedule established by the DEQ.

Annual test results shall be reported on a Discharge Monitoring Report (DMR) that must be submitted by February 15th of each year. The format for the report shall be consistent with the latest revision of the "Region VIII Guidance for Acute Whole Effluent Reporting", and shall include all chemical and physical data as specified.

If the results of two consecutive annual reports indicate no acute toxicity for all sampled outfalls, the permittee may reduce the monitoring to annual acute toxicity testing on only one species on an alternating basis. The test procedures for alternating species shall be the same as specified above.

4. **Toxicity Identification Evaluation (TIE) and Toxicity Reduction Evaluation (TRE)**

Should toxicity be detected in the permittee's discharge, a TIE-TRE shall be undertaken by the permittee to establish the cause of the toxicity, locate the source(s) of the toxicity, and develop control of, or treatment for the toxicity. Failure to initiate, or conduct an adequate TIE-TRE, or delays in the conduct of such test, shall not be considered a justification for noncompliance with the whole effluent toxicity limits contained in this permit. A TRE plan needs to be submitted to the permitting authority within 45 days after confirmation of the continuance of effluent toxicity.

If acceptable to the permit issuing authority, and if in conformance with current regulations, this permit may be reopened and modified to incorporate TRE conclusions relating to additional numerical limitations, a modified compliance schedule, and/or modified whole effluent protocol.

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

a. **Monitoring of the initial discharge**

Within 60 days of commencement of discharge following issuance of this permit renewal, 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 following issuance of this permit, a summary

report on the produced water, including copies of the laboratory analysis reports, 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.6.b. may be modified to require more stringent monitoring.

Parameter	Required Detection Limit	Sample Type
Total Recoverable Aluminum, µg/l	50 µg/l	Grab
Dissolved Cadmium, µg/l	0.1 µg/l	Grab
Dissolved Calcium, mg/l	as mg/l	Grab
Dissolved Calcium, me/l	as me/l	Grab
Chlorides, mg/l	5 mg/l	Grab
Dissolved Copper, µg/l	1 µg/l	Grab
Dissolved Iron, µg/l	30 µg/l	Grab
Dissolved Manganese, µg/l	10 µg/l	Grab
Total Hardness, mg/l	10 mg/l as CaCO ₃	Grab
Dissolved Lead, µg/l	2 µg/l	Grab
Dissolved Magnesium, mg/l	as mg/l	Grab
Dissolved Magnesium, me/l	as me/l	Grab
Dissolved Mercury, µg/l	0.06 µg/l	Grab
pH, standard units	to 0.1 pH unit	Grab
Total Radium 226, pCi/l	0.2 pCi/l	Grab
Total Selenium, µg/l	5 µg/l	Grab
Dissolved Sodium, mg/l	as mg/l	Grab
Dissolved Sodium, me/l	as me/l	Grab
Sodium Adsorption Ratio, calculated as unadjusted ratio	not applicable	Calculated
Specific Conductance, icromohs/cm	5 micromhos/cm	Grab
Sulfates, mg/l	10 mg/l	Grab
Total Alkalinity, mg/l	1 mg/l as CaCO ₃	Grab
Total Arsenic, µg/l	1 µg/l	Grab
Total Barium, µg/l	100 µg/l	Grab
Dissolved Zinc, µg/l	10 µg/l	Grab
Bicarbonate, mg/l	1 mg/l	Grab
Total Dissolved Solids, mg/l	5 mg/l	Grab

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

Planning and Targeting Program, SENF-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 (001-014)

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)	Once Every Three Months	Grab
Dissolved Calcium (mg/l)	Once Every Three Months	Grab
Dissolved Calcium (me/l)	Once Every Three Months	Grab
Chloride (mg/l)	Annually	Grab
Dissolved Iron (µg/l)	Annually	Grab
Dissolved Manganese (µg/l)	Annually	Grab
Dissolved Magnesium (mg/l)	Once Every Three Months	Grab
Dissolved Magnesium (me/l)	Once Every Three Months	Grab
pH (standard units)	Once Every Three Months	Grab
Dissolved Sodium (mg/l)	Once Every Three Months	Grab
Dissolved Sodium (me/l)	Once Every Three Months	Grab
Sodium Adsorption Ratio (unadjusted)	Once Every Three Months	Calculated
Specific Conductance (micromohs/cm)	Once Every Two Months	Grab

<u>Parameter</u>	<u>Measurement Frequency</u>	<u>Sample Type</u>
Sulfate (mg/l)	Annually	Grab
Total Alkalinity (mg/l)	Once Every Six Months	Grab
Total Arsenic (µg/l)	Annually	Grab
Total Barium (µg/l)	Annually	Grab
Total Flow - (MGD)	Monthly	Continuous
Total Radium 226 (pCi/l)	Annually	Grab
Total Recoverable Aluminum (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 Point (ICPI – ICP5)**

For the duration of the permit, at a minimum, samples for the constituents described below shall be collected at the indicated frequencies when effluent discharged from the outfalls reaches an irrigation compliance point at any time during the year. Sampling will be based on monthly time frames and reported semi-annually.

<u>Parameter</u>	<u>Measurement Frequency</u>	<u>Sample Type</u>
Bicarbonate (mg/l)	Monthly	Grab
Dissolved Calcium (mg/l)	Monthly	Grab
Dissolved Calcium (me/l)	Monthly	Grab
Dissolved Magnesium (mg/l)	Monthly	Grab
Dissolved Magnesium (me/l)	Monthly	Grab
Dissolved Sodium (mg/l)	Monthly	Grab
Dissolved Sodium (mg/l)	Monthly	Grab
Sodium Adsorption Ratio (calculate 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 location: at the irrigation compliance points, located as described in Table 2, Part I.B.12 of the permit.

The permit requires daily monitoring on Crazy Woman Creek to determine whether effluent discharged from the outfalls is reaching an irrigation compliance point. Daily monitoring is necessary because the permit establishes different sampling and analysis requirements based on whether the effluent from this facility is reaching an ICP. Once a sample is taken at an irrigation compliance point as required above, then weekly monitoring of flow is required for the remainder of that month at that ICP. At the beginning of each calendar month, the monitoring frequency will revert to daily until such time as a sample is collected to represent effluent quality for irrigation compliance point constituents for that month. Results are to be reported twice-yearly and if no effluent from this facility reaches an irrigation compliance point for an entire sampling month, then "no discharge" is to be reported for that ICP for that sampling month.

The effluent limits at the ICPs are intended to demonstrate compliance with *Chapter 2, Section 20 (protection of agricultural water supply) of the Wyoming Water Quality Rules and Regulations*. If produced water from this facility reaches an ICP and results in a violation of the ICP effluent limits, this action will constitute a violation of this permit, regardless of the cause of the violation (i.e., natural conditions of the stream channel or other operators in the drainage.) If this facility's effluent does not reach an irrigation compliance point, then monitoring and compliance with the ICP effluent limits are not required.

Violation of the ICP effluent limits may result in enforcement action from the Water Quality Division, termination of the discharge until an acceptable plan to mitigate the violation has been developed and/or other appropriate enforcement action.

d. Water Quality Monitoring Stations (TRIB1, UPR, DPR, UCWC, DCWC, CWUMD, CWDMD, CWUTD, CWDTD, CWUMD, CWDMD, CWUUT, CWDUT)

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 (mg/l)	Monthly	Grab
Dissolved Calcium (me/l)	Monthly	Grab
Dissolved Magnesium (mg/l)	Monthly	Grab
Dissolved Magnesium (me/l)	Monthly	Grab
Dissolved Sodium (mg/l)	Monthly	Grab
Dissolved Sodium (me/l)	Monthly	Grab
Sodium Adsorption Ratio (calculated)	Monthly	Calculated
Specific Conductance (micromhos/cm)	Monthly	Grab
Flow (MGD)*	Monthly	Instantaneous

*Flow measurement is not required for the two monitoring stations located on the Powder River (UPR, DPR). The permittee is only required to monitor and report flow at the monitoring stations located on Crazy Woman Creek (TRIB1, CWUND, CWDND, CWUSD, and CWDSD)

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following locations: designated water quality monitoring stations identified in Table 2, Part I.B.12 of the permit below. Established water quality monitoring stations on the mainstems are to be located outside the mixing zone with the tributary and the mainstem. Monthly water quality samples are to be collected at all applicable water quality monitoring stations when effluent from this CBM facility reaches an irrigation compliance point (ICP) identified in Table 2, Part I.B.12 of the permit below. If flow occurs at an irrigation compliance point 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 associated 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 an irrigation compliance point. If no flow at all occurs at an irrigation compliance point for an entire monthly monitoring period, then "no flow" is to be reported and samples need not be collected at the associated water quality monitoring stations for that monthly monitoring period. See table 1 below for monitoring requirements associated with each irrigation compliance point in the event flow containing effluent reaches an irrigation compliance point.

Table 1: Water Quality Monitoring Station Monitoring Schedules Associated with Flows at Irrigation Compliance Points

Irrigation Compliance Points	Description of Station and Location	Associated Water Quality Monitoring Stations	Daily Monitoring Necessary	Sampling Necessary if Flow Containing Effluent Present at This ICP
ICP1	Irrigation Compliance Point, McCray Draw near mouth	TRIB1, UPR, DPR, CWUND, CWDND	Visual Inspection of ICP1, or determination that flow from outfalls 001-006 is not present at ICP1	Sample at stations TRIB1, UPR, DPR, CWUND, CWDND
ICP2	Irrigation Compliance Point, Timber Draw	TRIB1, UPR, DPR, CWUSD, CWDSO	Visual Inspection of ICP2, or determination that flow from outfalls 007-009 is not present at ICP2	Sample at stations TRIB1, UPR, DPR, CWUSD, CWDSO
ICP3	Irrigation Compliance Point, Morris Draw	TRIB1, UPR, DPR, CWUSD, CWDSO	Visual Inspection of ICP3, or determination that flow from outfall 013 is not present at ICP3	Sample at stations TRIB1, UPR, DPR, CWUSD, CWDSO
ICP4	Irrigation Compliance Point, Unnamed, Ephemeral Tributary of Crazy Woman Creek	TRIB1, UPR, DPR, CWUSD, CWDSO	Visual Inspection of ICP4, or determination that flow from outfalls 011, 012, and/or 014 is not present at ICP4	Sample at stations TRIB1, UPR, DPR, CWUSD, CWDSO
ICP5	Irrigation Compliance Point, Unnamed Ephemeral Tributary of Timber Draw	TRIB1, UPR, DPR, CWUSD, CWDSO	Visual Inspection of ICP5, or determination that flow from outfall 010 is not present at ICP5	Sample at stations TRIB1, UPR, DPR, CWUSD, CWDSO

Water Quality Monitoring Stations

Associated Water Quality Monitoring Stations	Description of Station and Location	Associated Water Quality Monitoring Stations	Description of Station and Location
TRIB1	Crazy Woman Creek at Powder River Road	CWDND	Crazy Woman Creek downstream of confluence with northern discharges (outfalls 001-006)
UPR	Powder River Upstream of Crazy Woman Creek Confluence	CWUSD	Crazy Woman Creek upstream of confluence with southern discharges (outfalls 007-014)
DPR	Powder River Downstream of Crazy Woman Creek Confluence	CWDSO	Crazy Woman Creek downstream of confluence with southern discharges (outfalls 007-014)
CWUND	Crazy Woman Creek upstream of confluence with northern discharges (outfalls 001-006)		

For ICP and water quality monitoring station locations, see Table 2, Part I.B.12 of the permit.

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 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 following issuance of this permit will be due on February 15th, 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. The permittee shall provide written notification of the establishment of each discharge point in accordance with Part I.A.6.a above.

12. **Location of Discharge Points, Irrigation Compliance Points, Irrigation Diversion Points, and Water Quality Monitoring Stations**

As of the date of permit issuance, authorized points of discharge and water quality monitoring stations were as follows:

SEE TABLE 2 FOR A LIST OF OUTFALLS

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 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.

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 2: OUTFALL, IRRIGATION COMPLIANCE POINT, AND WATER QUALITY STATION LOCATION INFORMATION, WY0052833

Outfall #	Immediate Receiving Stream	Distance from outfall to Powder River (stream miles)	Distance from outfall to Crazy Woman Creek (stream miles)	Q/Q	Sec	Tnp	Rng	Latitude	Longitude	Reservoir Name	Groundwater approval required before discharge?
001	Unnamed, ephemeral tributary, McCray Draw	43.12	6.09	NESW	11	T50N	R79W	44.3201	-106.3291	Ruby 11-2	YES
002	Unnamed, ephemeral tributary, McCray Draw	43.53	6.49	NESE	11	T50N	R79W	44.3195	-106.3204	Ruby 11-3	YES
003	Unnamed, ephemeral tributary, McCray Draw	43.64	6.61	NESE	11	T50N	R79W	44.3181	-106.3187	Ruby 11-6	YES
004	Unnamed, ephemeral tributary, McCray Draw	43.47	6.44	SWSE	11	T50N	R79W	44.3154	-106.3262	Ruby 11-4	YES
005	Unnamed, ephemeral tributary, McCray Draw	43.27	6.23	SESW	11	T50N	R79W	44.3163	-106.3313	Ruby 11-5	YES
006	McCray Draw	44.79	7.75	SWSW	11	T50N	R79W	44.3155	-106.3358	Ruby 11-7	YES
007	Unnamed, ephemeral tributary, Timber Draw	68.41	8.07	SWNW	26	T49N	R79W	44.1904	-106.3377	Adami 26-1	YES
008	Timber Draw	68.69	8.34	NWSW	26	T49N	R79W	44.1865	-106.3364	Adami 26-2	YES
009	Timber Draw	68.84	8.50	SWSW	26	T49N	R79W	44.1846	-106.3352	Adami 26-3	YES
010	Unnamed, ephemeral tributary, Timber Draw	68.73	9.15	NENE	34	T49N	R79W	44.1804	-106.3412	Nicholas-Stadfeld 34-2	YES
011	Unnamed, ephemeral tributary, Crazy Woman Creek	70.11	7.38	SENE	8	T48N	R79W	44.1435	-106.3857	Welles 8-2	YES
012	Unnamed, ephemeral tributary, Crazy Woman Creek	70.03	7.30	NESW	8	T48N	R79W	44.1462	-106.3775	Welles 8-1	YES
013	Unnamed, ephemeral tributary, Morris Draw	72.36	3.60	NESW	7	T48N	R79W	44.1435	-106.4143	Welles 7-1	YES
014	Unnamed, ephemeral tributary, Crazy Woman Creek	69.21	6.48	NESE	6	T48N	R79W	44.1571	-106.3957	Welles 6-1	YES

TABLE 2: (Continued) OUTFALL, IRRIGATION COMPLIANCE POINT, AND WATER QUALITY STATION LOCATION INFORMATION, WY0052833

IRRIGATION COMPLIANCE POINT LOCATION INFORMATION									
Station Name	Immediate Receiving Stream	Distance from outfall to Powder River (stream miles)	Distance from outfall to Crazy Woman Creek (stream miles)	Q/Q	Sec	Tnp	Rng	Latitude	Longitude
ICP1	McCray Draw	37.41	0.37	SWSW	20	T51N	R79W	44.3730	-106.3961
ICP2	Timber Draw	68.27	7.92	NESE	27	T49N	R79W	44.1896	-106.3393
ICP3	Morris Draw	67.50	0.69	NESE	26	T49N	R80W	44.1867	-106.4433
ICP4	Crazy Woman Creek	62.87	0.13	NWSW	13	T49N	R80W	44.2172	-106.4356
ICP5	Timber Draw	68.65	8.30	NENE	34	T49N	R79W	44.1824	-106.3410
WATER QUALITY MONITORING STATION LOCATION INFORMATION									
Station Name	Immediate Receiving Stream	Purpose of Monitoring Station		Q/Q	Sec	Tnp	Rng	Latitude	Longitude
TRIB1	Crazy Woman Creek at Powder River Road	Monitor impacts of discharges on Crazy Woman Creek prior to confluence with Powder River		NWNW	16	T52N	R77W	44.4863	-106.1380
UPR	Powder River upstream of Crazy Woman Creek confluence	Acquisition of baseline Powder River water quality		NWSE	16	T52N	R77W	44.4800	-106.1300
DPR	Powder River downstream of Crazy Woman Creek confluence	Monitor impacts of discharges from Crazy Woman Creek on Powder River water quality		SWNE	16	T52N	R77W	44.4822	-106.1272
CWUND	Crazy Woman Creek upstream of McCray Draw confluence	Acquisition of baseline Crazy Woman Creek water quality prior to influence from discharges in northern part of facility, serves outfalls 001-006		SENE	30	T51N	R79W	44.3664	-106.3999
CWDND	Crazy Woman Creek downstream of McCray Draw confluence	Monitor impacts of discharges from outfalls located in the northern section of facility on Crazy Woman Creek water quality, serves outfalls 001-006		NWSW	20	T51N	R79W	44.3765	-106.3948
CWUSD	Crazy Woman Creek upstream of Timber Draw confluence	Acquisition of baseline Crazy Woman Creek water quality prior to influence from discharges in southern part of facility, serves outfalls 007-014		NESW	26	T49N	R80W	44.1860	-106.4525
CWSDS	Crazy Woman Creek upstream of Timber Draw confluence	Monitor impacts of discharges from outfalls located in the southern section of facility on Crazy Woman Creek water quality, serves outfalls 007-014		NWSW	1	T49N	R80W	44.2453	-106.4345

C. RESERVOIR / IMPOUNDMENT REQUIREMENTS

1. **Groundwater Monitoring Beneath Impoundments**

Table 2 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. For any incidence of noncompliance, including noncompliance related to non-toxic pollutants or non-hazardous substances, a written submission shall be provided within five (5) days of the time that the permittee becomes aware of the noncompliance circumstance.

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 as soon as possible, but no later than 24 hours from the time the permittee first 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
 - (3) Violation of a maximum daily discharge limitation for any toxic pollutants or hazardous substances, or any pollutants specifically identified as the method to control a toxic pollutant or hazardous substance listed in the permit.
- e. The administrator of the Water Quality Division may waive the written report on a case-by-case basis if the oral report has been received within 24 hours by the Water Quality Division, Watershed Management Section, NPDES Program (307) 777-7781.
- f. Reports shall be submitted to the Wyoming Department of Environmental Quality at the address in Part I under Reporting and to the 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.
- g. The permittee shall report all instances of noncompliance that have not been specifically addressed in any part of this permit at the time the monitoring reports are due.

3. Facilities Operation

The permittee shall, at all times, properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by the permittee only when the operation is necessary to achieve compliance with the conditions of the permit. However, the permittee shall operate, as a minimum, one complete set of each main line unit treatment process whether or not this process is needed to achieve permit effluent compliance.

4. Adverse Impact

The permittee shall take all reasonable steps to minimize any adverse impact to waters of the state resulting from noncompliance with any effluent limitations specified in this permit, including such accelerated or additional monitoring as necessary to determine the nature and impact of the noncomplying discharge.

5. Bypass of Treatment Facilities

- a. Bypass means the intentional diversion of waste streams from any portion of a treatment facility.
- b. The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of paragraphs c. and d. of this section. Return of removed substances to the discharge stream shall not be considered a bypass under the provisions of this paragraph.

- c. Notice:
 - (1) Anticipated bypass. If the permittee knows in advance of the need for a bypass, it shall submit prior notice at least 60 days before the date of the bypass.
 - (2) Unanticipated bypass. The permittee shall submit notice of an unanticipated bypass as required under Part II.A.2.
- d. Prohibition of bypass.
 - (1) Bypass is prohibited and the administrator of the Water Quality Division may take enforcement action against a permittee for a bypass, unless:
 - (a) The bypass was unavoidable to prevent loss of life, personal injury or severe property damage;
 - (b) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and
 - (c) The permittee submitted notices as required under paragraph c. of this section.
- e. The administrator of the Water Quality Division may approve an anticipated bypass, after considering its adverse effects, if the administrator determines that it will meet the three conditions listed above in paragraph d. (1) of this section.

6. Upset Conditions

- a. Upset means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improper designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.
- b. An upset constitutes an affirmative defense to an action brought for noncompliance with technology based permit effluent limitations if the requirements of paragraph c. of this section are met.
- c. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs or other relevant evidence that:
 - (1) An upset occurred and that the permittee can identify the cause(s) of the upset;
 - (2) The permitted facility was at the time being properly operated;
 - (3) The permittee submitted notice of the upset as required under Part II.A.2; and

(4) The permittee complied with any remedial measures required under Part II.A.4.

d. Burden of proof. In any enforcement proceeding, the permittee seeking to establish the occurrence of an upset has the burden of proof.

7. Removed Substances

Solids, sludges, filter backwash or other pollutants removed in the course of treatment or control of wastewaters or intake waters shall be disposed of in a manner such as to prevent any pollutant from such materials from entering waters of the state.

8. Power Failures

In order to maintain compliance with the effluent limitations and prohibitions of this permit, the permittee shall either:

- a. In accordance with a schedule of compliance contained in Part I, provide an alternative power source sufficient to operate the wastewater control facilities; or
- b. If such alternative power source as described in paragraph a. above is not in existence and no date for its implementation appears in Part I, take such precautions as are necessary to maintain and operate the facility under its control in a manner that will minimize upsets and insure stable operation until power is restored.

9. Duty to Comply

The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the federal act and the Wyoming Environmental Quality Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. The permittee shall give the administrator of the Water Quality Division advance notice of any planned changes at the permitted facility or of any activity which may result in permit noncompliance.

10. Duty to Mitigate

The permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

11. Signatory Requirements

All applications, reports or information submitted to the administrator of the Water Quality Division shall be signed and certified.

- a. All permit applications shall be signed as follows:
 - (1) For a corporation: by a responsible corporate officer;

- (2) For a partnership or sole proprietorship: by a general partner or the proprietor, respectively;
 - (3) For a municipality, state, federal or other public agency: by either a principal executive officer or ranking elected official.
- b. All reports required by the permit and other information requested by the administrator of the Water Quality Division shall be signed by a person described above or by a duly authorized representative of that person. A person is a duly authorized representative only if:
- (1) The authorization is made in writing by a person described above and submitted to the administrator of the Water Quality Division; and
 - (2) The authorization specified either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility or an individual or position having overall responsibility for environmental matters for the company. A duly authorized representative may thus be either a named individual or any individual occupying a named position.
- c. If an authorization under paragraph II.A.11.b. is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of paragraph II.A.11.b must be submitted to the administrator of the Water Quality Division prior to or together with any reports, information or applications to be signed by an authorized representative.
- d. Any person signing a document under this section shall make the following certification:
- "I certify, under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

B. RESPONSIBILITIES

1. Inspection and Entry

If requested, the permittee shall provide written certification from the surface landowner(s), if different than the permittee, that the administrator or the administrator's authorized agent has access to all physical locations associated with this permit including well heads, discharge points, reservoirs, monitoring locations, and any waters of the state.

The permittee shall allow the administrator of the Water Quality Division or an authorized representative, upon the presentation of credentials and other documents as may be required by law, to:

- a. Enter upon the permittee's premises where a regulated facility or activity is located or conducted or where records must be kept under the conditions of this permit;
- b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- c. Inspect, at reasonable times, any facilities, equipment (including monitoring and control equipment), practices or operations regulated or required under this permit; and
- d. Sample or monitor, at reasonable times, for the purpose of assuring permit compliance or as otherwise authorized by the federal act, any substances or parameters at any location.

2. Transfer of Ownership or Control

In the event of any change in control or ownership of facilities from which the authorized discharges emanate, the permittee shall notify the succeeding owner or controller of the existence of this permit by letter, a copy of which shall be forwarded to the regional administrator of the Environmental Protection Agency and the administrator of the Water Quality Division. The administrator of the Water Quality Division shall then provide written notification to the new owner or controller of the date in which they assume legal responsibility of the permit. The permit may be modified or revoked and reissued to change the name of the permittee and incorporate such other requirements as described in the federal act.

3. Availability of Reports

Except for data determined to be confidential under Section 308 of the federal act, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the offices of the Wyoming Department of Environmental Quality and the regional administrator of the Environmental Protection Agency. As required by the federal act, effluent data shall not be considered confidential. Knowingly making any false statement on any such report may result in the imposition of criminal penalties as provided for in Section 309 of the federal act.

4. Toxic Pollutants

The permittee shall comply with effluent standards or prohibitions established under Section 307 (a) of the federal act for toxic pollutants within the time provided in the regulations that establish

those standards or prohibitions, even if the permit has not yet been modified to incorporate the requirement.

5. Changes in Discharge of Toxic Substances

Notification shall be provided to the administrator of the Water Quality Division as soon as the permittee knows of, or has reason to believe:

- a. That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":
 - (1) One hundred micrograms per liter (100 µg/l);
 - (2) Two hundred micrograms per liter (200 µg/l) for acrolein and acrylonitrile; five hundred micrograms per liter (500 µg/l) for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter (1 mg/l) for antimony;
 - (3) Five (5) times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 CFR 122.21 (g) (7); or
 - (4) The level established by the director of the Environmental Protection Agency in accordance with 40 CFR 122.44 (f).
- b. That any activity has occurred or will occur which would result in any discharge, on a non-routine or infrequent basis, of a toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":
 - (1) Five hundred micrograms per liter (500 µg/l);
 - (2) One milligram per liter (1 mg/l) for antimony;
 - (3) Ten (10) times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 CFR 122.21 (g) (7); or
 - (4) The level established by the director of the Environmental Protection Agency in accordance with 40 CFR 122.44 (f).

6. Civil and Criminal Liability

Nothing in this permit shall be construed to relieve the permittee from civil or criminal penalties for noncompliance. As long as the conditions related to the provisions of "Bypass of Treatment Facilities" (Part II.A.5), "Upset Conditions" (Part II.A.6), and "Power Failures" (Part II.A.8) are satisfied then they shall not be considered as noncompliance.

7. Need to Halt or Reduce Activity not a Defense

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

8. Oil and Hazardous Substance Liability

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities or penalties to which the permittee is or may be subject under Section 311 of the federal act.

9. State Laws

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities or penalties established pursuant to any applicable state or federal law or regulation. In addition, issuance of this permit does not substitute for any other permits required under the Clean Water Act or any other federal, state, or local law.

10. Property Rights

The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights nor any infringement of federal, state or local laws or regulations.

11. Duty to Reapply

If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and obtain a new permit. The application should be submitted at least 180 days before the expiration date of this permit.

12. Duty to Provide Information

The permittee shall furnish to the administrator of the Water Quality Division, within a reasonable time, any information which the administrator may request to determine whether cause exists for modifying, revoking and reissuing or terminating this permit or to determine compliance with this permit. The permittee shall also furnish to the administrator, upon request, copies of records required by this permit to be kept.

13. Other Information

When the permittee becomes aware that it failed to submit any relevant facts in a permit application or submitted incorrect information in a permit application or any report to the administrator of the Water Quality Division, it shall promptly submit such facts or information.

14. Permit Action

This permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

PART III

A. OTHER REQUIREMENTS

1. Flow Measurement

At the request of the administrator of the Water Quality Division, the permittee must be able to show proof of the accuracy of any flow measuring device used in obtaining data submitted in the monitoring report. The flow measuring device must indicate values of within plus or minus ten (10) percent of the actual flow being measured.

2. 208(b) Plans

This permit may be modified, suspended or revoked to comply with the provisions of any 208(b) plan certified by the Governor of the State of Wyoming.

3. Reopener Provision

This permit may be reopened and modified (following proper administrative procedures) to include the appropriate effluent limitations (and compliance schedule, if necessary) or other appropriate requirements if one or more of the following events occurs:

a. The state water quality standards of the receiving water(s) to which the permittee discharges are modified in such a manner as to require different effluent limits than contained in this permit;

b. A total maximum daily load (TMDL) and/or watershed management plan is developed and approved by the state and/or the Environmental Protection Agency which specifies a wasteload allocation for incorporation in this permit;

c. A revision to the current water quality management plan is approved and adopted which calls for different effluent limitations than contained in this permit;

d. Downstream impairment is observed and the permitted facility is contributing to the impairment;

e. The limits established by the permit no longer attain and/or maintain applicable water quality standards;

f. The permit does not control or limit a pollutant that has the potential to cause or contribute to a violation of a state water quality standard.

g. If new applicable effluent guidelines and/or standards have been promulgated and the standards are more stringent than the effluent limits established by the permit.

h. In order to protect water quality standards in neighboring states, effluent limits may be incorporated into this permit or existing limits may be modified to

ensure that the appropriate criteria, water quality standards and assimilative capacity are attained.

4. Permit Modification

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

- a. Violation of any terms or conditions of this permit;
- b. Obtaining this permit by misrepresentation or failure to disclose fully all relevant facts;
- c. A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge; or
- d. If necessary to comply with any applicable effluent standard or limitation issued or approved under Sections 301(b) (2) (C) and (D), 304 (b) (2) and 307 (a) (2) of the federal act, if the effluent standard or limitation so issued or approved:
 - (1) Contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or
 - (2) Controls any pollutant not limited in the permit.

5. Toxicity Limitation - Reopener Provision

This permit may be reopened and modified (following proper administrative procedures) to include a new compliance date, additional or modified numerical limitations, a new or different compliance schedule, a change in the whole effluent protocol or any other conditions related to the control of toxicants if one or more of the following events occur:

- a. Toxicity was detected late in the life of the permit near or past the deadline for compliance;
- b. The TRE results indicate that compliance with the toxic limits will require an implementation schedule past the date for compliance and the permit issuing authority agrees with the conclusion;
- c. The TRE results indicate that the toxicant(s) represent pollutant(s) that may be controlled with specific numerical limits and the permit issuing authority agrees that numerical controls are the most appropriate course of action;
- d. Following the implementation of numerical controls on toxicants, the permit issuing authority agrees that a modified whole effluent protocol is necessary to compensate for those toxicants that are controlled numerically;
- e. The TRE reveals other unique conditions or characteristics which, in the opinion of the permit issuing authority, justify the incorporation of unanticipated special conditions in the permit.