Wyoming Department of Environmental Quality
Water Quality Division
WYPDES (Wyoming Pollutant Discharge Elimination System) Program

STATEMENT OF BASIS

RENEWAL

APPLICANT NAME:	PacifiCorp Energy
MAILING ADDRESS:	48 Wyodak Road Gillette, WY 82718
FACILITY LOCATION:	Wyodak Plant, which is located in NW Section 27, Township 50N, Range 71W, Campbell County. The wastewater will discharge to Donkey Creek (3B), Belle Fourche River Basin
PERMIT NUMBER:	WY0001384

1. *Because the facility was non-discharging at the time of the permit application, testing required by DEQ Form G and 40 CFR 122.21 was not completed. Upon resuming discharge, the testing must be completed. As per 40 CFR 122.21, renewal applications for steam electric generating plants require at least one analysis for metals, and for volatile, acid, and base/neutral organic compounds; and miscellaneous other parameters. This is contained in DEQ Form G and U.S. EPA Form 2C. A list of required constituents for testing is included in Part I of this permit.*
2. *A reasonable potential calculation was performed for dissolved iron and dissolved copper. The result of the calculations is that statistically, there is no reasonable potential for dissolved iron or copper instream standards to be exceeded in the discharge. Therefore, this permit contains no effluent limits or monitoring for dissolved iron or copper.*
3. *Monitoring and reporting for duration of discharges is added to this permit. If the permittee only discharges for three (3) days or less during the month, the no discharge code of "Less than 3 days of discharge; Avg not applicable" may be used for the monthly and weekly averages in place of a numerical value on the Discharge Monitoring Reports (DMRs).*

Background: This permit authorizes the discharge of wastewater from six coal fired power plants, two combustion turbine power plants, and one coal mine, as described below. The generating power plants and the coal mine are located approximately six miles east of Gillette, Wyoming. Most of the wastewater generated by the facility is recycled, so this facility rarely discharges. Discharges usually occur in response to large storm events.

Note below that the facilities are air-cooled, so they do not discharge cooling water. Therefore, 316(b) regulations do not apply. In addition, make-up water is partially treated water from the Gillette wastewater treatment plant, not waters of the U.S.

The Wyodak Plant is an air cooled, coal fired steam electric generating power plant the plant is owned 80% by PacifiCorp and 20% by Black Hills Power. The Wyodak Plant contributes the following waste streams to the settling ponds; plant and yard storm water runoff, water from plant floor drains, fire protection system overflow, bottom ash sluice water, boiler blowdown water, component cooling tower water, treated effluent from the on-site wastewater treatment plan, effluent from plant rotary bacteriological system, and wastes associated with the flue gas desulphurization lime slurry system.

Periodic maintenance activities include boiler chemical cleaning activities and air heater and turbine washes.

The Neil Simpson I Plant (Abandoned and removed with this permit). Yard and storm water from the area that the Black Hills Power and Light Neil Simpson I coal fired power plant once occupied will continue to flow into the storm drain system and into the bottom ash pond. This will be effective August/September 2015.

The Neil Simpson II Plant is an air cooled, coal fired stream electric generating power plant. The pland is owned 100% by Black Hills Power. The Neil Simpson II Plant contributes the following waste streams to the settling ponds; runoff and washdown water from the ash silo area, boiler blowdown water, stormwater, neutralization basin effluent, water from plant floor drains, and treated effluent from the on-site wastewater treatment plant. Neil Simpson II's wastewater enters the Neil Simpson II waste water sump and flows into the bottom ash pond. Periodic maintenance activities include boiler chemical cleaning activities and air heater and turbine washes.

The WYGEN I Plant is an air cooled, coal fired, stream electric generating power plant. The WYGEN I Plant contributes the following waste streams to the settling ponds; runoff and washdown water from the ash silo area, boiler blowdown water, storm water, plant floor drains. Periodic maintenance activities include boiler chemical cleaning activities and air heater and turbine washes. WYGEN's wastewater enters the Neil Simpson II waste water sump and flows into the bottom ash pond.

The WYGEN II Plant is an air cooled, coal fired, stream electric generating power plant operated by Black Hills Power. The WYGEN II Plant contributes the following waste streams to the settling ponds; Stormwater runoff, washdown water, boiler blowdown water, storm water, plant floor drains and additional discharges from the existing common neutralization basin. Periodic maintenance activities include boiler chemical cleaning activities and air heater and turbine washes. WYGEN II wastewater enters a wastewater basin and flows into the bottom ash pond.

The WYGEN III Plant is an air cooled, coal fired steam electric generating power plant . TheWYGEN III plant contributes the following waste streams to the settling ponds: Stormwater runoff, washdown water, boiler blowdown water, plant floor drains. Periodic maintenance activities include boiler chemical cleaning activities and air heater and turbine washes.

The Combustion Turbine I Plant is a gas fired combustion turbine generating plant. The Combustion Turbine I Plant contributes the following waste streams to the settling ponds; cooling tower blowdown enters the Neil Simpson II waste water sump and flows into the bottom ash pond.

The Combusting Turbine II Plant is a gas fired combustion turbine generating. The Combustion Turbine II plant contributes the following waste streams to the settling ponds; cooling tower blowdown enters the Neil Simpson II waste water sump and flows into the bottom ash pond.

The Wyodak Resource Mine is owned 100% by the Black Hills Corporation. Wyodak Resource Mine contributes the following waste streams to the settling ponds; groundwater inflow and surface water runoff from the Peerless Pit and the Clovis Pit.

Wastewater originating from the variety of sources is routed to a two cell settling pond. The first pond, called the Bottom Ash Settling Pond, functions to provide settlement for sediments and ash by-products. Wastewater from this pond overflows to the second pond called the Clear Pond. The Clear Pond has an outlet structure (Outfall 001) that allows the discharge of the treated wastewater to Donkey Creek (Class

3B water). However, because a majority of the wastewater that enters the settling ponds is recycled, there is seldom a discharge to the creek.

EFFLUENT LIMITS:
In developing effluent limits, all federal and state regulations and standards have been considered and the most stringent requirements incorporated into the permit. Permit limits are based on technology-based standards and water-quality based standards, as described below.

Technology-Based-Effluent Limits: EPA Effluent Guidelines and Standards for Steam Electric Power Generating Point Source Category, 40 CFR Part 423 sets the effluent limits, based on BPT (Best Practicable Control Technology Currently Available) and BAT (Best Available Technology Economically Achievable). The wastewaters are combined and used as ash transport water. The constituents requiring control in ash transport water are total suspended solids and oil and grease. These limits include total suspended solids of 100 mg/L (daily max) and 30 mg/L (monthly average); Oil and Grease of 20 mg/L (daily max) and 15 mg/L (monthly average). However, effluent limits on the previous permits are more stringent total suspended solids of 90 mg/L (daily max) and 30 mg/L (monthly average); total petroleum hydrocarbons of 10 mg/L (daily max). The facility has been able to meet these more stringent limits.

Boiler blowdown and boiler cleaning streams require control for the parameters total suspended solids, oil and grease, copper and iron. BPT and BAT limits are total copper, 1.0 mg/L (daily max and monthly average) and total iron 1.0 mg/L (daily max and monthly average).

Water-Quality-Based Effluent Limits:

Effluent Limits For E. coli: The following table shows the E. coli water quality standards, which are based on various site specific factors.

E. coli Bacteria Standards, In Waters Designated for Primary Contact Recreation			
April through September			October through March
Monthly Average Standard	Daily Maximum Standards	Criteria	Monthly Average and Daily Maximum
126 colonies/100 mL	236 colonies/100 mL	High Use Swimming Areas	630 colonies/100 mL
	298 colonies/100 mL	Moderate Fully Body Contact	
	410 colonies/100 mL	Lightly Used Full Body Contact	
	576 colonies/100 mL	Infrequently Used Full Body Contact	

Source: Chapter 1, Wyoming Water Quality Rules and Regulations

The source water for the facility is the Gillette Wastewater Treatment Plant, so E. coli is an expected contaminant. The permit includes E. coli effluent limits equal to the instream standards because the receiving stream is considered impaired for fecal coliform. The daily maximum of 576 colonies for "infrequently used full body contact" is utilized for the daily maximum, April through September. The monthly average and daily maximum E. coli limit for the October through March time period is 630 colonies/100 mL. Historical sampling results for fecal coliform from WY0001384 confirm that negligible coliform bacteria have been present in the discharge.

ANTIDEGRADATION, IMPAIRMENT REVIEW: 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. An evaluation has been completed to ensure that the receiving water has not been listed on the 303(d) list as a waterbody that cannot support designated uses. The evaluation has revealed that the receiving water is included on this list for fecal coliform impairment, but the facility is not considered a source of the impairment. See previous paragraph.

Total Recoverable Selenium Monitoring: Because of past concerns raised by the U.S. Fish and Wildlife Agency, monitoring for total recoverable selenium is required at the outfall(number 001) and upstream of the outfall. Whether discharge occurs or not from outfall 001, a monthly sample for total recoverable selenium is required. Monitoring for selenium is for data gathering. The need for selenium effluent limits will be evaluated. Currently, because the facility discharges only occasionally, water quality standards exceedance of selenium is not a concern. Limits may be instituted if monitoring shows a reasonable potential for exceedances of selenium instream standards due to the discharge.

Self-monitoring of effluent quality and quantity is required on a regular basis with reporting of results quarterly. The permit is scheduled to expire on September 30, 2020.

Roland Peterson
Water Quality Division
Department of Environmental Quality
Drafted: April 2, 2015

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,

PacifiCorp Energy

is authorized to discharge from the wastewater treatment facilities serving the

Wyodak Plant

located in

NW Section 27 Township 50N, Range 71W, Campbell County

to receiving waters named

Donkey Creek (3B), Belle Fourche River Basin

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 October 1, 2015.

This permit and the authorization to discharge shall expire September 30, 2020 at midnight.

Kevin Frederick, Administrator
Water Quality Division

Todd Parfitt, Director
Department of Environmental Quality

Date of Issuance: _____

PART I

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

1. Effective October 1, 2015 and lasting through September 30, 2020 the quality of effluent discharged by the permittee shall, at a minimum, meet the limitations set forth below. The permittee is authorized to discharge from outfall serial number(s) 001.

Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	Discharge Limitations		
	Monthly Average	Weekly Average	Daily Maximum
Total Suspended Solids, mg/L	30	45	90
Total Residual Chlorine, mg/L	N/A	N/A	0.0
Total Petroleum Hydrocarbons, mg/L	N/A	N/A	10
Total Iron, mg/L	1.0	N/A	1.0
Total Copper, mg/L	1.0	N/A	1.0
E. coli, colonies/100 ml, April-September	126	N/A	576
E. coli, colonies/100 ml, October -March	630	N/A	630
Biochemical Oxygen Demand (BOD), mg/L	30	45	90
pH, s.u.	N/A	N/A	6.5-9.0

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

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

All waters shall be discharged in a manner to prevent erosion, scouring, or damage to stream banks, stream beds, ditches, or other waters of the state at the point of discharge. Discharges shall not occur in such a manner that will result in violations of Water Quality Rules and Regulations, Chapter 1, Section 15. In addition, there shall be no deposition of substances in quantities which could result in significant aesthetic degradation, or degradation of habitat for aquatic life, plant life or wildlife; or which could adversely affect public water supplies or those intended for agricultural or industrial use.

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

a. Routine monitoring End of Pipe—for outfall(s) 001

For the duration of the permit, at a minimum, samples for the constituents described below shall be collected at the indicated frequencies.

Monitoring Requirements		
Effluent Characteristic	Measurement Frequency	Sample Type
Flow - MGD	Weekly	Instantaneous
Total Suspended Solids, mg/L	Weekly	Grab
Total Residual Chlorine, mg/L	Weekly	Grab
pH	Weekly	Grab
Total Petroleum Hydrocarbons, mg/L	Weekly	Grab
Total Iron, mg/L	Weekly	Grab
Total Copper, mg/L	Weekly	Grab
E. coli, colonies/100 mL	Weekly	Grab
Biochemical Oxygen Demand, mg/L	Weekly	Grab
Ammonia, mg/L	Monthly	Grab
Selenium, Total Recoverable, mg/L	Monthly	Grab
Duration of Discharge [(a)]	Monthly	Report Number of Days Discharged

[(a)] If the permittee only discharges for three (3) days or less during the month, the no discharge code of "Less than 3 days of discharge; Avg not applicable" may be used for the monthly and weekly averages in place of a numerical value on the Discharge Monitoring Reports (DMRs).

Samples taken in compliance with the monitoring requirements specified above shall be taken at the outfall from the final treatment unit and prior to admixture with diluent water or the receiving stream.

b. **Upstream Monitoring Point –UMP1**

For the duration of the permit, at a minimum, samples for the constituents described below shall be collected at the indicated frequencies.

Parameter	Measurement Frequency	**Sample Type**
Selenium, Total Recoverable, µg/L	Monthly	Grab

The permit requires monitoring in order to determine background levels of selenium at the upstream monitoring location (UMP1 listed in Table 1, in Part I (B) (10) of the permit). Results are to be reported quarterly this facility. It is intended only as a location to gather upstream water quality data.

3. One-Time Initial Monitoring

Discharges shall be monitored by the permittee specified as follows. Within 60 days of discharge, a sample shall be collected from outfall 001 and analyzed for the constituents specified below (on pages 5-10). Within 120 days of discharge, a summary report on the produced water must be submitted to the Wyoming Department of Environmental Quality. This summary report must include the results and detection limits for each of the constituents. After receiving the monitoring results for the initial discharge, the effluent limits and monitoring requirements established in this permit may be modified. If not discharging during this time interval, report to the DEQ with an initial monitoring report that states that the facility is not discharging.

Test results from wastewater discharged from outfall 001, taken 12 months or less previous to this permit activation, may be submitted for this requirement.

You must provide the results of at least one analysis for every pollutant in this table.

GAS CHROMATOGRAPHY/MASS SPECTOMETRY, VOLATILE COMPOUNDS							
Pollutant	Maximum Daily Value		Maximum 30-day value (if available)		Long term average value (if available)		Number of Analyses
	Mass	Concentration	Mass	Concentration	Mass	Concentration	
1 V acrolein							
2 V acrylonitrile							
3 V benzene							
4V. Bis (*Chloromethyl*) Ether (542-88-1)							
5 V bromoform							
6 V carbon tetrachloride							
7 V chlorobenzene							
8 V chlorodibromomethane							
9 V chloroethane							
10 V 2-chloroethylvinyl ether							
11 V chloroform							
12 V dichlorobromomethane							
13V. Dichlorodifluoromethane (75-71-8)							
14 V 1,1-dichloroethane							
15 V 1,2-dichloroethane							
16 V 1,1-dichloroethylene							
17 V 1,2-dichloropropane							
18 V 1,3-dichloropropylene							
19 V ethylbenzene							
20 V methyl bromide							
21 V methyl chloride							
22 V methylene chloride							
23 V 1,1,2,2-tetrachloroethane							
24 V tetrachloroethylene							
25 V toluene							
26 V 1,2-trans-dichloroethylene							

27 V 1,1,1-trichloroethane							
28 V 1,1,2-trichloroethane							
29 V trichloroethylene							
30V. Trichlorofluoromethane (75-69-4)							
31 V vinyl chloride							

You must provide the results of at least one analysis for every pollutant in this table.

GAS CHROMATOGRAPHY/MASS SPECTOMETRY ACID COMPOUNDS							
Pollutant	Maximum Daily Value		Maximum 30-day value *(if available)*		Long term average value *(if available)*		Number of Analyses
	Mass	Concentration	Mass	Concentration	Mass	Concentration	
1A 2-chlorophenol							
2A 2,4-dichlorophenol							
3A 2,4-dimethylphenol							
4A 4,6-dinitro-o-cresol							
5A 2,4-dinitrophenol							
6A 2-nitrophenol							
7A 4-nitrophenol							
8A p-chloro-m-cresol							
9A pentachlorophenol							
10A phenol							
11A 2,4,6-trichlorophenol							

You must provide the results of at least one analysis for every pollutant in this table.

GAS CHROMATOGRAPHY/MASS SPECTOMETRY, BASE/NEUTRAL COMPOUNDS							
Pollutant	Maximum Daily Value		Maximum 30-day value *(if available)*		Long term average value *(if available)*		Number of Analyses
	Mass	Concentration	Mass	Concentration	Mass	Concentration	
1 B acenaphthene							
2 B acenaphthylene							
3 B anthracene							
4 B benzidine							
5 B benzo(a)anthracene							

You must provide the results of at least one analysis for every pollutant in this table.

GAS CHROMATOGRAPHY/MASS SPECTOMETRY, BASE/NEUTRAL COMPOUNDS							
Pollutant	Maximum Daily Value		Maximum 30-day value *(if available)*		Long term average value *(if available)*		Number of Analyses
	Mass	Concentration	Mass	Concentration	Mass	Concentration	
6 B benzo(a)pyrene							
7 B 3,4-benzofluoranthene							
8 B benzo(ghi)perylene							
9 B benzo(k)fluoranthene							
10B. Bis (*2-Chloroethoxy*) Methane (111-91-1)							
11 B bis(2-chloroethyl)ether							
12 B bis(2-chloroisopropyl)ether							
13 B bis (2-ethylhexyl)phthalate							
14 B 4-bromophenyl phenyl ether							
15 B butylbenzyl phthalate							
16 B 2-chloronaphthalene							
17 B 4-chlorophenyl phenyl ether							
18 B chrysene							
19 B dibenzo(a,h)anthracene							
20 B 1,2-dichlorobenzene							
21 B 1,3-dichlorobenzene							
22 B 1,4-dichlorobenzene							
23 B 3,3'-dichlorobenzidine							
24 B diethyl phthalate							
25 B dimethyl phthalate							
26 B di-n-butyl phthalate							
27 B 2,4-dinitrotoluene							
28 B 2,6-dinitrotoluene							
29 B di-n-octyl phthalate							
30B. 1,2-Diphenylhydrazine (*as Azobenzene*) (122-66-7)							
31B. Fluoranthene (206							
32B. Fluorene (86							

You must provide the results of at least one analysis for every pollutant in this table.

GAS CHROMATOGRAPHY/MASS SPECTOMETRY, BASE/NEUTRAL COMPOUNDS							
Pollutant	Maximum Daily Value		Maximum 30-day value *(if available)*		Long term average value *(if available)*		Number of Analyses
	Mass	Concentration	Mass	Concentration	Mass	Concentration	
33B. Hexachlorobenzene (118							
34B. Hexachlorobutadiene (87							
35B. Hexachlorocyclopentadiene (77							
36B Hexachloroethane (67							
37B. Indeno (*1,2,3*							
38B. Isophorone (78							
39B. Naphthalene (91							
40B. Nitrobenzene (98							
41B. N-Nitrosodimethylamine (62-75-9)							
42B. N-Nitrosodi-N-Propylamine(621-64-7)							
43B. N-Nitrosodiphenylamine(86-30-6)							
44B. Phenanthrene (85-01-8)							
45B. Pyrene (129-00-0)							
46B. 1,2,4-Trichlorobenzene (120-82-1)							

You must provide the results of at least one analysis for every pollutant in this table.

Other Constituents							
	Maximum Daily Value		Maximum 30-day value *(if available)*		Long term average value *(if available)*		Number of Analyses
Parameter	Mass	Concentration	Mass	Concentration	Mass	Concentration	
Biochemical Oxygen Demand (BOD)							
Total Suspended Solids (TSS)							
Total Organic Carbon (TOC)							
Chemical Oxygen Demand (COD)							
Ammonia (as N)							
Antimony, Total							
Arsenic, Total							
Beryllium, Total							
Cadmium, Total							
Chromium, Total							
Copper, Total							
Cyanide, Total							
Lead, Total							
Mercury, Total							
Nickel, Total							
Phenols, Total							
Selenium, Total							

Silver, Total						
Thallium, Total						
Zinc, Total						
Flow, discharge, MGD	Value		Value		Value	
pH (range) S.U.	Max	Min	Max	Min		
Temperature (Winter) °C	Value		Value		Value	
Temperature (Summer) °C	Value		Value		Value	

4. The chemicals in the following table are in use at the plant, with DEQ approval and potentially discharged through outfall 001. The permittee must administer these chemicals as per manufacturers' instructions and ensure that effluent limits are met in the event of a discharge. The facility only sporadically discharges. Periodic maintenance activities include boiler chemical cleaning activities and air heater and turbine washes. If different chemicals than listed below are to be used, DEQ permission must be obtained before use.

Chemical Name	Purpose	Constituents of Concern	Waste Stream
Anodamine HPFG	Corrosion control, anti-scalant	Proprietary non-toxic mixture of surface-active polyamines	Boiler cycle
Mercontrol 7895	Mercury Control		Flue Gas Desulphurization
Citric Acid	pH Control		Clear Pond
Granular Calcium Hypochlorite	Disinfection		Turbines
Powder Activated Carbon(PAC)	Mercury Sorbent	Carbon	Flue Gas Desulphurization
B-PAC	Mercury Sorbent	Carbon	Flue Gas Desulphurization
L-PAC	Mercury Sorbent	Carbon	Flue Gas Desulphurization
Mercontrol 8034	Mercury Control in combination with PACs	Sodium Sulfide, Sodium Hydroxide	Flue Gas Desulphurization
Hydrogen Peroxide 30%	Clean water treatment continuous deionizers	Hydrogen Peroxide	Clean Water Treatment
Sodium Carbonate	Clean water treatment continuous deionizers	Sodium Carbonate	Clean Water Treatment
FIN- FOAMER CONCENTRATE I	Descalant	Blend of anionic and non-ionic polymerized surfactants with biodegradable aliphatic having a content of approx. 25% of the glycol ether	Boiler cycle
MC-2000 SCALE INHIBITOR	Descalant	Potassium Hydroxide, polymaleic acid (PMA)	Boiler cycle
PermaClean PC-11	Biocide	Dibromoacetonitrile, 2,2-Dibromo-3-nitrilopropionamide, polyethylene glycol	Turbines

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 wastestream, body of water, or substance. Monitoring points shall not be changed without notification to and approval by, the permit issuing authority.

2. Reporting

Effluent monitoring results obtained during the previous three month(s) shall be summarized and reported on a Discharge Monitoring Report Form. If the permit requires whole effluent toxicity (WET) (biomonitoring) testing, WET test results must be reported on the most recent version of EPA Region 8 Guidance for Whole Effluent Reporting. Legible copies of these, and all other reports required herein, shall be signed and certified in accordance with the Signatory Requirements (see Part II.A.11.), and submitted to the state water pollution control agency at the following address. The reports must be received by the agency no later than the 28th day of the month following the completed reporting period. The first report is due January 28, 2016.

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

Concentration Values

a. Daily Maximum (mg/L) - The highest single reading from any grab or composite sample collected during the reporting period.

b. Monthly Average (mg/L) - The arithmetic mean (geometric mean in the case of fecal coliform and E. coli) of all composite and/or grab samples collected during a calendar month.

c. Weekly Average (mg/L) - The arithmetic mean (geometric mean in the case of fecal coliform and E. coli) of all composite and/or grab samples collected during any week. A week begins at 12:01 a.m. Sunday morning and ends at 12:00 midnight Saturday evening.

Quantity Values

d. Daily Maximum - The highest single daily quantity reading (see Calculations below) recorded during the reporting period.

e. Monthly Average - The arithmetic mean (geometric mean in the case of fecal coliform and E. coli bacteria) of all the daily quantity readings (see Calculations below) recorded during a calendar month.

f. Weekly Average - The arithmetic mean (geometric mean in the case of fecal coliform and E. coli bacteria) of all the daily quantity readings (see Calculations below) recorded during a week. A week begins at 12:01 a.m. Sunday morning and ends at 12:00 midnight Saturday evening.

Flow Values

g. Daily Flow - The flow volume recorded on any single day. The daily flow volume may be determined by using an instantaneous reading (if authorized by this permit) or a continuous recorder.

h. Daily Maximum Flow - The highest single daily flow reading recorded during a reporting period.

i. Monthly Average Flow - The arithmetic mean of all daily flow values recorded during a calendar month.

j. Weekly Average Flow - The arithmetic mean of all daily flow values recorded during a week. A week begins at 12:01 am on Sunday morning and ends at 12:00 midnight Saturday evening.

Calculations

k. Daily Quantity (kg/day) - The quantity, in kilograms per day, of pollutant discharged on a single day. The Daily quantity shall be calculated by multiplying the composite or grab sample concentration value for that day in milligrams/liter (mg/L) times the flow volume (in millions of gallons per day - MGD) for that day times 3.78. If a flow volume reading for the day the sample is collected is not available, the average flow volume reading for the entire reporting period shall be used.

l. Daily Quantity (#/day) - The quantity, in number per day, of bacteria or other pollutants discharged on a single day. The number per day shall be calculated by multiplying the composite or grab sample result for that day, in number per 100 milliliters (#/100 ml), times the flow volume (in millions of gallons per day - MGD) times 3.78×10^7. If a flow volume reading for the day the sample is collected is not available, the average flow volume reading for the entire reporting period shall be used.

m. Geometric Mean - Calculated in accordance with the procedure described in the most recent edition of "Standard Methods for the Examination of Water and Wastewater".

Miscellaneous

n. A "composite" sample, for monitoring requirements, is defined as a minimum of four (4) grab samples collected at equally spaced two (2) hour intervals and proportioned according to flow.

o. An "instantaneous" measurement for monitoring requirements is defined as a single reading, measurement, or observation.

p. "MGD", for monitoring requirements, is defined as million gallons per day.

q. "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.

r. A "pollutant" is any substance or substances that, 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.

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 (3) years from the date of the sample, measurement, report or application. This period may be extended by request of the administrator at any time. Data collected on site, copies of Discharge Monitoring Reports and a copy of this WYPDES 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 (2) 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. Location of Discharge Points

TABLE 1
OUTFALLS
WY0001384, Wyodak Plant

TABLE 1							
Outfall	**Qtr/Qtr**	**Section**	**Township-North**	**Range-West**	**Latitude**	**Longitude**	**Receiving Water**
001	NW	27	50N	71W	44.28623	-105.3870694	Donkey Creek (3B), Belle Fourche River Basin
UMP1	NW	27	50N	71W	44.28542	-105.38782	Donkey Creek (class 3B)

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, WYPDES 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, WYPDES 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, 1595 Wynkoop Street, Denver, CO 80202-1129.

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. (l) 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/1) 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/1) 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 toxicity reduction evaluation (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.

6. Severability

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

7. Penalties for Falsification of Reports

The federal act provides that any person who knowingly makes any false statement, representation or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or noncompliance 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.