NOTICE OF PUBLIC HEARINGS

by the

U.S. Environmental Protection Agency
Region 9, WTR-5
75 Hawthorne Street
San Francisco, CA 94105-3901

Public Notice #: AZ-10-W-001A
Public Notice Date: January 20, 2010
Comment Period Closes: March 1, 2010

The U.S. Environmental Protection Agency, Region IX (USEPA) is issuing a notice of proposed action under the Clean Water Act (CWA). The USEPA is proposing to reissue National Pollutant Discharge Elimination System (NPDES) permit NN0022179 to:

Peabody Western Coal Co, Black Mesa Complex, P.O. Box 650, Kayenta, AZ 86004.

The Black Mesa/Kayenta mine has operated since the early 1970s southwest of Kayenta, Arizona. The complex is located on approximately 65,000 acres of land leased within the boundaries of the Hopi and Navajo Indian Reservations. The permit allows for the discharge of treated stormwater generated from areas of the mine site to receiving waters Coal Mine Wash, Moenkopi Wash, Dinnebito Wash, Yellow Water Canyon and their tributaries.

EPA first proposed the permit on February 19, 2009 with a 30 day comment period. On August 5, 2009, EPA issued the final permit which was subsequently appealed. Among other issues, the appellants argued that EPA did not address the concerns of the community by not holding a public hearing on the proposed permit. Therefore, EPA has decided to withdraw the permit reissuance and re-open the public comment period. EPA will hold two public hearings on the permit conditions at the following locations:

- Kayenta, Arizona, February 23, 2010. 6:00 pm to 9:00 pm, at the Kayenta Chapter House, Highway 163.
- Kykotsmovi, Arizona, February 24, 2010. 6:00 pm to 9:00 pm, at the Veterans Memorial Center.

At the public hearing a court reporter will be present and any person may submit oral or written statements and data concerning the draft permit for inclusion in the public record. A Hopi translator will be present at the hearing in Kykotsmovi, AZ and a Navajo translator will be present at the hearing in Kayenta, AZ. Reasonable limits may be set upon the time allowed for oral statements. Persons seeking reasonable accommodations should contact the person listed below.

EPA is soliciting comments on the proposal. EPA will consider all comments received during comment period before taking final action. To submit comments, or to obtain additional information including the proposed permit and administrative record, please contact:

Contact: John Tinger. (415) 972-3518 or Tinger.John@EPA.gov
Website: http://www.epa.gov/region09/water/npdes/pubnotices.html

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105

AUTHORIZATION TO DISCHARGE UNDER THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

NPDES PERMIT NO. NN 0022179

In compliance with the provisions of the Clean Water Act ("CWA") (Public Law 92-500, as amended, 33 U.S.C. 1251 et seq.), the following discharger is authorized to discharge from the identified facility at the outfall location(s) specified below, in accordance with the effluent limits, monitoring requirements, and other conditions set forth in this permit:

Discharger Name	Peabody Western Coal Company
Discharger Address	P.O. Box 650
	Kayenta, AZ 86033
Facility Name	Black Mesa Complex
Facility Location	Route 41
Address	Kayenta, AZ 86033
Facility Rating	Major

Outfall Number	General Type of Waste Discharged	Outfall Latitude	Outfall Longitude	Receiving Water
Over 100 Outfalls listed in Appendix A -C	Alkaline Mine Drainage, Coal Preparation Areas, Western Alkaline Reclamation,	Over 100 Outfalls listed in Appendix A -C	Over 100 Outfalls listed in Appendix A -C	Coal Mine Wash, Moenkopi Wash, Dinnebito Wash, Yellow Water Canyon and tributaries

This permit was issued on:	
This permit shall become effective on:	
This permit shall expire at midnight on:	
In accordance with 40 CFR 122.21(d), the discharger shall submit a new application for a permit at least 180 days before the expiration date of this permit, unless permission for a date no later than the permit expiration date has been granted by the Director.	

Signed this _____ day of _____, for the Regional Administrator.

_____
Alexis Strauss, Director
Water Division

SECTION A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

1. Alkaline Mine Drainage Outfalls

During the period beginning on the effective date of this permit and lasting through the date of expiration, the permittee is authorized to discharge mine drainage from the Outfall Numbers listed in Appendix A – "Alkaline Mine Drainage" to the receiving waters listed in Appendix A – "Alkaline Mine Drainage. Such discharges shall be limited and monitored by the permittee as specified below. Samples shall be collected prior to mixing with other waste source stream and/or discharge to surface waters.

Table A-1: Alkaline Mine Drainage Effluent Limitations and Monitoring Requirements

Effluent Parameter	Units	Monthly Average	Maximum For any 1 day	Monitoring Frequency (1)	Sampling Type
Flow	MGD	- -	- -	Continuous	Calculated(2)
TSS	mg/L	35	70	1/day(1)	Discrete
Iron, total	mg/L	3.5	7.0	1/day(1)	Discrete
pH	Std. units	between 6.5 to 9.0		1/day(1)	Discrete
Arsenic (3)(4)	ug/L	Monitor	Monitor	1/day(1)	Discrete
Cadmium (3)(4)	ug/L	Monitor	Monitor	1/day(1)	Discrete
Chromium (total as Cr)(4)	ug/L	Monitor	Monitor	1/day(1)	Discrete
Lead (3)(4)	ug/L	Monitor	Monitor	1/day(1)	Discrete
Mercury (3)(4)	ug/L	Monitor	Monitor	1/day(1)	Discrete
Selenium (3)(4)	ug/L	Monitor	Monitor	1/day(1)	Discrete

NOTES:

(1) Samples shall be taken once during each occurrence or once every 24 hours if the duration of the occurrence is greater than 24 hours.

(2) To determine total flow in gallons for each discharge and duration of discharge.

(3) Dissolved.

(4) Monitoring applies to all Outfalls located on the Hopi Reservation. No set limit at this time. Results will be evaluated for reasonable potential to exceed Hopi Tribe Water Quality Standards.

2. Coal Preparation Plants, Storage Areas, and Ancillary Area Runoff Outfalls

During the period beginning on the effective date of this permit and lasting through the date of expiration, the permittee is authorized to discharge runoff from the Outfall Numbers listed in Appendix B – "Coal Preparation & Associated Areas" to the receiving waters listed in Appendix B – "Coal Preparation & Associated Areas". Such discharges shall be limited and monitored by the permittee as specified below. Samples shall be collected prior to mixing with other waste source stream and/or discharge to surface waters.

Table A-2: Coal Preparation Areas Effluent Limitations and Monitoring Requirements

Effluent Parameter	**Units**	**Monthly Average**	**Maximum For any 1 day**	**Monitoring Frequency** [1]	**Sampling Type**
Flow	MGD	- -	- -	Continuous	Calculated[2]
TSS	mg/L	35	70	1/day[1]	Discrete
Oil and Grease	mg/L	15	---	1/day[1]	Discrete
Iron, total	mg/L	3.5	7.0	1/day[1]	Discrete
pH	Std. units	between 6.5 to 9.0		1/day[1]	Discrete
Arsenic [3][4]	ug/L	Monitor	Monitor	1/day[1]	Discrete
Cadmium [3][4]	ug/L	Monitor	Monitor	1/day[1]	Discrete
Chromium (total as Cr)[4]	ug/L	Monitor	Monitor	1/day[1]	Discrete
Lead [3][4]	ug/L	Monitor	Monitor	1/day[1]	Discrete
Mercury [3][4]	ug/L	Monitor	Monitor	1/day[1]	Discrete
Selenium [3][4]	ug/L	Monitor	Monitor	1/day[1]	Discrete

NOTES:

(1) Samples shall be taken once during each occurrence or once every 24 hours if the duration of the occurrence is greater than 24 hours.

(2) To determine total flow in gallons for each discharge and duration of discharge.

(3) Dissolved.

(4) Monitoring applies to all Outfalls located on the Hopi Reservation. No set limit at this time. Results will be evaluated for reasonable potential to exceed Hopi Tribe Water Quality Standards.

3. Western Alkaline reclamation, brushing and grubbing, topsoil stockpiling, and regraded area Outfalls.

During the period beginning on the effective date of this permit and lasting through the date of expiration, the permittee is authorized to discharge runoff from the Outfall Numbers listed in Appendix C – "Western Alkaline Reclamation Areas" to the receiving waters listed in Appendix C – "Western Alkaline Reclamation Areas".

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

a) submit a site-specific Sediment Control Plan for EPA approval demonstrating that implementation of the Sediment Control Plan will result in average annual sediment yields that will not be greater than the sediment yield levels from pre-mined, undisturbed conditions. The Sediment Control Plan shall, at a minimum, identify Best Management Practices (BMPs), including design specifications, construction specifications, maintenance schedules, criteria for inspection, and expected performance and longevity of the BMPs.

b) demonstrate using watershed models that the implementation of the Sediment Control Plan will result in average annual sediment yields that will not be greater than the sediment yield levels from pre-mined, undisturbed conditions. The watershed model must be the same model that is being used to acquire the permittee=s SMCRA permit.

c) design, implement, and maintain the BMPs in the manner specified in the approved Sediment Control Plan throughout the term of this permit.

d) revise the Sediment Control Plan to incorporate new areas. As existing outfalls defined in this permit as Aalkaline mine drainage@ are reclaimed, the approved Sediment Control Plan shall be updated to incorporate the newly reclaimed outfalls into this subpart. A revised Sediment Control Plan and revised watershed model must be submitted to EPA and approved by EPA before it becomes effective. Revisions to the Sediment Control Plan must meet all requirements contained at 40 CFR Part 434.82, and 100% of the drainage area to an outfall that has been disturbed by mining must meet the definition of "western alkaline reclamation, brushing and grubbing, topsoil stockpiling, and regraded areas" (as defined at 40 CFR 434.80) to be considered for coverage. EPA=s approval of an updated Sediment Control Plan and reclassification of an existing outfall from Aalkaline mine drainage@ to a reclaimed area will be considered a minor modification to the permit as described in Section C of this permit.

4. Discharges resulting from precipitation events

a) The permittee is authorized to discharge runoff from Outfall Numbers listed in Appendix A – "Alkaline Mine Drainage" and Appendix B – "Coal Preparation & Associated Areas" resulting from precipitation events less than or equal to a 10-year, 24-hour precipitation event (1.80 inches within a 24 hour period)

During the period beginning on the effective date of this permit and lasting through the date of expiration, the permittee is authorized to discharge runoff from all Outfalls resulting from precipitation events less than or equal to a 10-year, 24-hour precipitation event (1.80 inches within a 24 hour period).

Such discharges shall be limited and monitored by the permittee as specified below. Samples shall be collected prior to mixing with other waste source stream and/or discharge to surface waters.

During precipitation events, samples may be collected from a sampling point representative of the type of discharge, rather than from each point of discharge. At no time shall less than 20% of discharges be sampled. If samples are collected from a representative point, the permittee shall specify the Outfalls being represented in the quarterly report narrative.

Table A-4-a: Discharges from precipitation events less than 10-yr, 24-hr event.

Effluent Parameter	Units	Monthly Average	Maximum For any 1 day	Monitoring Frequency (1)	Sampling Type
Flow	MGD	- -	- -	Continuous	Calculated(2)
Settleable Solids	mL/L	- -	0.5	1/day(1)	Discrete
pH	Std. units	between 6.5 to 9.0		1/day(1)	Discrete
Arsenic (3)(4)	ug/L	Monitor	Monitor	1/day(1)	Discrete
Cadmium (3)(4)	ug/L	Monitor	Monitor	1/day(1)	Discrete
Chromium (total as Cr)(4)	ug/L	Monitor	Monitor	1/day(1)	Discrete
Lead (3)(4)	ug/L	Monitor	Monitor	1/day(1)	Discrete
Mercury (3)(4)	ug/L	Monitor	Monitor	1/day(1)	Discrete
Selenium (3)(4)	ug/L	Monitor	Monitor	1/day(1)	Discrete

NOTES:
(1) Samples shall be taken once during each occurrence or once every 24 hours if the duration of the occurrence is greater than 24 hours.
(2) To determine total flow in gallons for each discharge and duration of discharge.
(3) Dissolved.
(4) Monitoring applies to all Outfalls located on the Hopi Reservation. No set limit at this time. Results will be evaluated for reasonable potential to exceed Hopi Tribe Water Quality Standards.

b) Discharges resulting from precipitation events great than a 10-year, 24-hour precipitation event (1.80 inches within a 24 hour period)

During the period beginning on the effective date of this permit and lasting through the date of expiration, the permittee is authorized to discharge runoff from all Outfalls resulting from precipitation events greater than a 10-year, 24-hour precipitation event (1.80 inches within a 24 hour period).

Such discharges shall be limited and monitored by the permittee as specified below. Samples shall be collected prior to mixing with other waste source stream and/or discharge to surface waters.

During precipitation events, samples may be collected from a sampling point representative of the type of discharge, rather than from each point of discharge. At no time shall less than 20% of discharges be sampled. If samples are collected from a representative point, the permittee shall specify the Outfalls being represented in the quarterly report narrative.

Table A-4-b: Discharges from precipitation events greater than 10-yr, 24-hr event.

Effluent Parameter	**Units**	**Maximum For any sample**	**Monitoring Frequency** [(1)]	**Sampling Type**
Flow	MGD	- -	Continuous	Calculated[(2)]
pH	std. units	between 6.5 to 9.0	1/day[(1)]	Discrete

NOTES:

(1) Samples shall be taken once during each occurrence or once every 24 hours if the duration of the occurrence is greater than 24 hours.

(2) To determine total flow in gallons for each discharge and duration of discharge.

5. Seepage study

Peabody Western Coal Company shall continue to implement the Seep Monitoring and Management plan designed to identify and characterize seeps; to identify those seeps that may pose a threat to water quality; and to establish Best Management Practices at seeps determined to pose a threat to water quality.

The plan shall be modified to address the construction of new impoundments, and shall include:

a. Identification of all seeps located within 100 meters downgradient of sediment impoundments including a record of the location, date, time, flow, proximity to waters of the United States, and accessibility by livestock.

b. Sampling (or summary of current data if sufficient and valid) of seepages identified in 5.a. for pH, Selenium (Total and Dissolved) and Nitrates. If Peabody submits past data, sampling techniques shall be described in order to determine validity of data. EPA, upon reviewing all data submitted, shall determine whether additional sampling should be performed.

c. Hydrogeologic modeling or studies in order to determine if the source the seeps are the impoundments and, if so, which impoundments.

d. Determination of source of Selenium and Nitrates, where data indicates that seepages have a reasonable potential to violate water quality standards.

The plan shall continue to be implemented as described in the "Interim Final Report – Seepage Monitoring and Management Report" April 1, 2008 and as approved by EPA .

The study results shall be submitted yearly to EPA.

EPA, upon reviewing the results of the study, may reopen the permit for the imposition of numerical limits and/or additional monitoring.

6. Gaging Stations

For the purpose of this permit, the gauge stations used to monitor rainfall for specific discharge points shall be:

Peabody Gauge No.		Discharge Points
1.	(ARG1)	048, 049, 050, 051, 052, 069, 070, 071, 087, 088, 089, 090, 147, 163, 169, 170, 171, 172, 173
5.	(ARG2R)	017, 018, 026, 027, 047, 086, 098, 105, 141, 142, 149, 178
7.	(ARG7R	008, 009, 013, 014, 016, 081, 094, 159, 160, 161, 162, 164, 165
8.	(ARG6R	024, 025, 030, 031, 032, 033, 039, 043, 103, 104, 127, 130, 133, 168
9.	(ARG9)	001, 002, 003, 005, 010, 012, 021, 022, 037, 045, 082, 083, 099, 139, 140, 150, 151, 153, 157
10.	(ARG3R)	054, 095, 106, 107, 118, 126, 136, 137, 143, 144, 152, 167, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194
11.	(ARG200)	079, 148, 174, 175, 176, 177, 179, 195
12.	(ARG12)	180, 181, 182, 183

SECTION B. GENERAL DISCHARGE SPECIFICATIONS

All Waters of the Navajo Nation shall be free from pollutants in amounts or combinations that, for any duration:

1. Cause injury to, are toxic to, or otherwise adversely affect human health, public safety, or public welfare.
2. Cause injury to, are toxic to, or otherwise adversely affect the habitation, growth, or propagation of indigenous aquatic plant and animal communities or any member of these communities; of any desirable non-indigenous member of these communities; of waterfowl accessing the water body; or otherwise adversely affect the physical, chemical, or biological conditions on which these communities and their members depend.
3. Settle to form bottom deposits, including sediments, precipitates and organic materials, that cause injury to, are toxic to, or otherwise adversely affect the habitation, growth or propagation of indigenous aquatic plant and animal communities or any member of these communities; of any desirable non-indigenous member of these communities; of waterfowl accessing the water body; or otherwise adversely affect the physical, chemical, or biological conditions on which these communities and their members depend.
4. Cause physical, chemical, or biological conditions that promote the habitation, growth, or propagation of undesirable, non-indigenous species of plant or animal life in the water body.
5. Cause solids, oil, grease, foam, scum, or any other form of objectionable floating debris on the surface of the water body; may cause a Elm or iridescent appearance on the surface of the water body; or that may cause a deposit on a shoreline, on a bank, or on aquatic vegetation.
6. Cause objectionable odor in the area of the water body.
7. Cause objectionable taste, odor, color, or turbidity in the water body.
8. Cause objectionable taste in edible plant and animal life, including waterfowl, that reside in, on, or adjacent to the water body.

The following General Standards apply to all surface and ground waters of the Hopi Tribe:

1. Stream Bottom Deposits: Surface waters shall be free from contaminants from other than natural causes that may settle and have a deleterious effect on the aquatic biota or that will significantly alter the physical or chemical properties of the water or the bottom sediments.

2. Floating Solids, Oil, and Grease: Surface waters shall be free from objectionable oils, scum, foam, grease, and other floating materials and suspended substances of a persistent nature

resulting from other than natural causes (including visible films of oil, globules of oil, grease, or solids in or on the water, or coatings on stream banks). As a guideline, oil and grease discharged into surface waters shall not exceed 10 mg/liter average or 15 mg/liter maximum.

3. Color: Surface waters shall be free from the true color-producing materials (other than those resulting from natural causes) that create an aesthetically undesirable condition. Color shall not impair the designated and other attainable uses of a water body. Color-producing substances from other than natural sources are limited to concentrations equivalent to 70 color units (CU).

4. Odor and Taste: Contaminants from other than natural causes are limited to concentrations that do not impart unpalatable flavor to fish, that do not result in offensive odor or taste arising from the water, and that do not otherwise interfere with the designated and other attainable uses of a water body. Taste and odor-producing substances from other than natural origins shall not interfere with the production of a potable water supply by modern treatment methods. Nuisance Conditions: Plant nutrients or other substances stimulating algal growth from other than natural causes shall not be present in concentrations that produce objectionable algal densities or nuisance aquatic vegetation, or that result in a dominance of nuisance species instream, or that cause nuisance conditions in any other fashion. Phosphorus and nitrogen concentrations shall not be permitted to reach levels that result in man-induced eutrophication problems. As a guideline, total phosphorus shall not exceed 100 µg/L instream or 50 µg/L in lakes and reservoirs, except in waters highly laden with natural silts or color that reduces the penetration of sunlight needed for plant photosynthesis, or in other waters where it can be demonstrated that algal production will not interfere with or adversely affect designated and other attainable uses. Alternative or additional nutrient limitations for surface waters may be established by the Hopi Tribe and incorporated into water quality management plans.

5. Pathogens: Waters shall be free from pathogens. Waters used for irrigation of table crops (e.g., lettuce) shall be free of salmonella and shigella species.

6. Turbidity: Turbidity attributable to other than natural causes shall not reduce light transmission to a point at which aquatic biota are inhibited or to a point that causes an unaesthetic and substantial visible contrast with the natural appearance of the water. Specifically, turbidity shall not exceed 5 nephelometric turbidity units (NTU, a measure of turbidity in water) over background when background turbidity is 50 NTU or less, with no more than a 10-percent increase when background turbidity is more than 50 NTU.

7. Temperature: The introduction of heat by other than natural causes shall not increase the temperature in a stream, outside a mixing zone, by more than 2.7EC (5EF), based upon the monthly average of the maximum daily temperatures measured at mid-depth or 3 feet

(whichever is less) outside the mixing zone. In lakes, the temperature of the water column or epilimnion (if thermal stratification exists) shall not be raised more than 1.7EC (3EF) above that which existed before the addition of heat of artificial origin, based upon the average of temperatures taken from the surface to the bottom of the lake, or surface to the bottom of the epilimnion (if stratified). The normal daily and seasonal variations that were present before the addition of heat from other than natural sources shall be maintained. In no case shall manintroduced heat be permitted when the maximum temperature specified for the reach (20EC/68EF for cold water fisheries and 32.2EC/90EF for warm water fisheries) would thereby be exceeded. High water temperatures caused by unusually high ambient air temperatures are not violations of these standards.

8. Salinity/Mineral Quality (total dissolved solids, chlorides, and sulfates): Existing mineral quality shall not be altered by municipal, industrial, and instream activities, or other waste discharges, so as to interfere with the designated or attainable uses for a water body. An increase of more than one-third over naturally occurring levels shall not be permitted.

9. pH: The following water quality standards for pH, expressed in standard units, shall not be violated by other than natural causes: Maximum 9.0; Minimum 4.5 ; Maximum change due to discharge: 0.5

10. Dissolved oxygen: If a stream or other water body is capable of supporting aquatic biota, the dissolved oxygen standard will be a minimum of 6 mg/L.

11. Fecal coliform: The following water quality standards for fecal coliform, expressed in colony forming units per 100 milliliters of water (cfu/100 mL), shall not be exceeded:
30-day geometric mean: (5 sample minimum): 200
10% of samples for a 30-day: 400
Single sample maximum: 800

12. Toxic Substances: Toxic substances shall not be present in receiving waters in quantities that are toxic to human, animal, plant, or aquatic life, or in quantities that interfere with the normal propagation, growth, and survival of the sensitive indigenous aquatic biota. Within the mixing zone, there shall be no acute toxicity.

13. Water discharged under this permit shall not contain settleable materials or suspended materials in concentrations great than or equal to ambient concentrations present in the receiving stream that cause nuisanc or adversely affect beneficial uses.

14.Activities conducted under this permit shall not result in the violations of any narrative and numeric criteria established in the Hopi Tribe's Water Quality Standards.

SECTION C. PERMIT REOPENER

Should any of the monitoring indicate that the discharge causes, has the reasonable potential to cause, or contributes to excursions above water quality criteria, the permit may be reopened for the imposition of water quality based limits and/or whole effluent toxicity limits. Also, this permit may be modified, in accordance with the requirements set forth at 40 CFR Parts 122.44 and 124.14, to include appropriate conditions or limits to address demonstrated effluent toxicity based on newly available information, or to implement any EPA-approved new Tribal water quality standards.

This permit authorizes the discharge of wastewater from over 110 outfalls in 3 distinct subcategories. Throughout the permit term, as mine operations continue in a linear fashion, new outfall locations may become necessary to treat runoff and other outfalls may need to be authorized under a different subcategory. Therefore, EPA may modify the list of Outfalls in the Appendixes during the permit term to add, terminate or reclassify a discharge that occurs during the anticipating course of the existing mining activities. This will be accomplished thru a minor modification of the permit in accordance with 40 CFR Part 122.63. The permit may be reopened to authorize new outfalls for an area not currently being mined through a major modification to the existing permit 40 CFR Part 122.63.

SECTION D. MONITORING AND REPORTING

1. Reporting of Monitoring Results

a. Monitoring results shall be reported on Discharge Monitoring Report (ADMR@) forms (EPA No. 3320-1) to be supplied by the EPA Regional Administrator, to the extent that the information reported may be entered on the forms. Results of the Seep Monitoring and Management Plan shall be reported in a separate format, as specified in Section A.5 of the permit, and shall be submitted yearly to EPA.

Monitoring results obtained during the previous three (3) months shall be summarized for each month and submitted on forms to be supplied by the EPA Regional Administrator, to the extent that the information reported may be entered on the forms. Monitoring results obtained from sampling any discharge shall be entered directly on the DMR forms. In cases where No Discharge has occurred, monitoring results may be reported in narrative format due the large number (over 100) of outfalls permitted.

The results of all monitoring required by this permit shall be submitted in such a format as to allow direct comparison with the limitations and requirements of the permit. Unless otherwise specified, discharge flow shall be reported in terms of the average

flow over that 30 day period. These reports are due January 28, April 28, July 28, and October 28 of each year. Duplicate signed copies of these, and all other reports required herein, shall be submitted to the Regional Administrator at the following addresses:

NPDES Compliance Office
Environmental Protection Agency (WTR-1)
75 Hawthorne Street
San Francisco, CA 94105
Telephone: (415) 972-3519

Navajo Nation Environmental Protection Agency
Navajo Nation EPA
P.O. Box 339
Window Rock, AZ 86515
Telephone: (928) 871-7185

Hopi Tribe Department of Natural Resources
Water Resources Office
P.O. Box 123
Kykotsmovi, AZ 86039
Telephone: (928) 734-2441

b. For effluent analyses, the permittee shall utilize an EPA-approved analytical method with a Method Detection Limit (MDL) that is lower than the effluent limitations (or lower than applicable water quality criteria if monitoring is required but no effluent limitations have been established.) MDL is the minimum concentration of an analyte that can be detected with 99% confidence that the analyte concentration is greater than zero, as defined by the specific laboratory method listed in 40 CFR Part 136. The procedure for determination of a laboratory MDL is in 40 CFR Part 136, Appendix B.

c. If all published MDLs are higher than the effluent limitations (or applicable criteria concentrations), the permittee shall utilize the EPA-approved analytical method with the lowest published MDL.

d. The permittee shall develop a Quality Assurance (QA) Manual/QA Plan. The purpose of the QA Manual is to assist in planning for the collection and analysis of samples and explaining data anomalies if they occur. As appropriate and applicable,

the QA Manual shall include the details enumerated below. The QA Manual shall be retained on the permittee=s premises and be available for review by USEPA or Navajo Nation EPA upon request. The permittee shall review its QA Manual annually and revise it when appropriate. Throughout all field sampling and laboratory analyses, the permittee shall use quality assurance/quality control (QA/QC) procedures as documented in their QA Manual.

i. Project Management including roles and responsibilities of the participants; purpose of sample collection; matrix to be sampled; the analytes or compounds being measured; applicable technical, regulatory, or program-specific action criteria; personnel qualification requirements for collecting samples.

ii. Sample collection procedures; equipment used; the type and number of samples to be collected including QA/QC samples (i.e., background samples, duplicatives, and equipment or field blanks); preservatives and holding times for the samples (see 40 CFR Part 136.3).

iii. Identification of the laboratory to be used to analyze the samples; provisions for any proficiency demonstration that will be required by the laboratory before or after contract award such as passing a performance evaluation sample; analytical method to be used; required QC results to be reported (e.g., matrix spike recoveries, duplicate relative percent differences, blank contamination, laboratory control sample recoveries, surrogate spike recoveries, etc.) and acceptance criteria; and corrective actions to be taken by the permittee or the laboratory as a result of problems identified during QC checks.

iv. Discussion of how the permittee will perform data review and requirements for reporting of results to USEPA or Navajo Nation EPA to include resolving of data quality issues and identifying limitations on the use of the data.

e. Sample collection shall be performed as stated in the QA Manual. The QA Manual shall include a discussion on the preservation and handling, preparation and analysis of samples as described in the most recent edition of 40 CFR Part 136.3, unless otherwise specified in this permit.

2. Monitoring and Records

Records of monitoring information shall include:

a. Date, exact location, and time or sampling or measurements performed, preservatives used;
b. Individual(s) who performed the sampling or measurements;
c. Date(s) analyses were performed;
d. Laboratory(ies) which performed the analyses;
e. Analytical techniques or methods used;
f. Any comments, case narrative or summary of results produced by the laboratory. These should identify and discuss QA/QC analyses performed concurrently during sample analyses and should specify whether they met project and 40 CFR Part 136 requirements. The summary of results must include information on initial and continuing calibration, surrogate analyses, blanks, duplicates, laboratory control samples, matrix spike and matrix spike duplicate results, sample receipt condition, holding times, and preservation.
g. Summary of data interpretation and any corrective action taken by the permittee.
h. Effluent limitations for analytes/compounds being analyzed.

3. Twenty Four-Hour Reporting of Noncompliance

The permittee shall report any non-compliance which may endanger human health or the environment. This information shall be provided orally within 24 hours from the time the permittee becomes aware of the circumstances to the following persons or their offices:

CWA Compliance Office Manager	Navajo Nation EPA
U.S. EPA Region 9	Attn: Patrick Antonio
(415) 972-3577	(928) 871-7185

If the permittee is unsuccessful in contacting the persons above, the permittee shall report by 9 a.m. on the first business day following the noncompliance. A written submission shall also be provided within five (5) days of the time the permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including dates and times, and, if the noncompliance has not been corrected, the time it is expected to continue; and steps or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

SECTION E. INSPECTION AND ENTRY

The permittee shall allow the Director, or an authorized representative, upon the presentation of credentials and such other documents as may be required by law, to perform inspections under authority of Section 10: Inspection and Entry of the EPA Region 9 AStandard Federal NPDES Permit Conditions,@ dated June 3, 2002, as attached.

SECTION F. DEFINITIONS

The following definitions shall apply unless otherwise specified in the permit:

1. ADiscrete sample@ means any individual sample collected in less than 15 minutes.

2. ADaily discharge@ means the discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar for purposes of sampling. For pollutants with limitations expressed in terms of mass, the Adaily discharge@ is calculated as the total mass of the pollutant discharges over the sampling day. For pollutants with limitations expressed in other units of measurement, the Adaily discharge@ is calculated as the average measurement of the pollutant over the sampling day. ADaily discharge@ determination of concentration made using a composite sample shall be the concentration of the composite sample. When grab samples are used, the Adaily discharge@ determination of concentration shall be the arithmetic average (weighted by flow value) of all samples collected during that sampling day.

3. ADaily average@ discharge limitation means the highest allowable average of Adaily discharges@ over a calendar month, calculated as the sum of all Adaily discharges@ measured during a calendar month divided by the number of Adaily discharges@ measured during that month.

4. ADaily maximum@ concentration means the measurement made on any single discrete sample of composite sample.

5. ADaily maximum@ mass limit means the highest allowable Adaily discharge@ by mass during any calendar day.

6. A Acomposite sample@ means, for flow rate measurements, the arithmetic mean of no fewer than 4 individual measurements taken at equal intervals for one hour or for the duration of discharge, whichever is shorter. A composite sample means, for other than

flow rate measurements, a combination of 4 individual portions obtained at equal time intervals for 4 hours or for the duration of the discharge, whichever is shorter. The volume of each individual portion shall be directly proportional to the discharge flow rate at the time of sampling. The sampling period shall coincide with the period of maximum discharge flow.

7. A Amonthly or weekly average@ concentration limitation means the arithmetic mean of consecutive measurements made during a calendar month or weekly period, respectively.

8. A Amonthly or weekly average@ mass limitation means the total discharge by mass during a calendar monthly or weekly period, respectively, divided by the number of days in the period that the facility was discharging. Where less than daily sampling is required by this permit, the monthly or weekly average value shall be determined by the summation of all the measured discharges by mass divided by the number of days during the monthly or weekly period when the measurements were made.

APPENDIX A – "Alkaline Mine Drainage"

Serial Number/ Outfall Number	Latitude Deg.Min.Sec.	Longitude Deg.Min.Sec.	Receiving Water
005/N5-A	36-31-15	110-24-45	Coal Mine Wash
008/N10-A1	36-32-45	110-22-30	Coal Mine Wash
010/J3-A	36-28-45	110-25-00	Coal Mine Wash Trib.
012/N6-E	36-30-30	110-25-15	Coal Mine Wash Trib.
013/N10-B	36-33-00	110-22-15	Coal Mine Wash Trib.
018/J3-D	36-28-15	110-24-00	Moenkopi Tributary
024/N14-F	36-30-30	110-18-30	Moenkopi Tributary
025/N14-G	36-30-30	110-18-15	Moenkopi Tributary
026/MW-A	36-27-30	110-23-45	Moenkopi Wash
027/MW-B	36-27-30	110-23-45	Moenkopi Wash
030/J16-D	36-30-00	110-18-30	Moenkopi Tributary
031/J16-E	36-30-00	110-18-30	Moenkopi Tributary
032/J16-F	36-30-00	110-18-45	Moenkopi Tributary
033/J16-G	36-29-45	110-19-00	Moenkopi Tributary
039/N14-H	36-30-45	110-17-30	Moenkopi Tributary
045/WW-6	36-30-00	110-22-15	Moenkopi Tributary
048/J7-G	36-25-00	110-24-15	Red Peak Valley
052/J7-K	36-24-30	110-23-00	Sagebrush Wash
069/J7-I	36-24-45	110-24-30	Yucca Flat Wash Trib.
070/J7-J	36-24-30	110-24-30	Yucca Flat Wash Trib.
071/J7-M	36-24-15	110-24-15	Yucca Flat Wash Trib.
079/J21-A	36-26-15	110-14-45	Dinnebito Wash
081/N1-O	36-32-00	110-24-00	Coal Mine Wash
082/N5-E	36-31-15	110-25-00	Coal Mine Wash
086/WW-4	36-26-45	110-24-45	Moenkopi Wash
087/WW-9	36-23-45	110-24-45	Yucca Flat Wash Trib.
088/WW-9A	36-23-45	110-24-45	Yucca Flat Wash Trib.
089/WW-9B	36-23-45	110-24-45	Yucca Flat Wash Trib.
090/WW-9C	36-24-15	110-24-30	Yucca Flat Wash Trib.
141/J3-F	36-28-00	110-25-15	Coal Mine Wash Trib.
142/J3-G	36-28-00	110-25-15	Coal Mine Wash Trib.
143/N7-D	36-32-30	110-25-45	Yellow Water Canyon Trib.
144/N7-E	36-32-30	110-25-30	Yellow Water Canyon
147/J7-A	36-25-30	110-23-30	Red Peak Valley
148/J21-C	36-26-00	110-15-30	Dinnebito Wash
150/N6-G	36-29-30	110-23-00	Coal Mine Wash
151/N6-H	36-29-30	110-23-00	Coal Mine Wash
153/N6-I	36-31-45	110-24-15	Coal Mine Wash
157/N6-J	36-31-45	110-24-00	Coal Mine Wash
159/N11-A	36-32-20	110-22-40	Coal Mine Wash
160/N11-C	36-32-25	110-22-35	Coal Mine Wash
161/N11-E	36-32-35	110-22-25	Coal Mine Wash

162/N11-G	36-32-30	110-21-40	Coal Mine Wash

APPENDIX A – "Alkaline Mine Drainage" - Continued

163/J7-B1	36-25-10	110-23-58	Red Peak Valley
164/N6-L	36-31-58	110-23-58	Coal Mine Wash
165/N6-M	36-32-12	110-23-27	Coal Mine Wash
168/N14-T	36-30-20	110-18-20	Moenkopi Tributary
169/J7-R	36-24-05	110-24-00	Moenkopi Tributary
170/J7-S	36-24-05	110-23-50	Yucca Flat Wash
171/J7-T	36-24-00	110-23-40	Yucca Flat Wash
172/J7-U	36-24-10	110-23-30	Yucca Flat Wash
173/J7-V	36-24-10	110-23-20	Yucca Flat Wash
176/J21-F	36-25-23	110-16-00	Dinnebito Wash
177/J21-G	36-24-44	110-16-40	Dinnebito Wash
178/J27-RC	36-27-08	110-23-02	Moenkopi Tributary
179/J7-JR	36-26-13	110-19-52	Red Peak Valley Wash
180/J19-A	36-27-28	110-19-24	Reed Valley Wash
181/J19-B	36-27-16	110-20-10	Red Peak Valley Wash
182/J19-D	36-26-50	110-19-55	Red Peak Valley Wash
183/J19-E	36-26-42	110-19-55	Red Peak Valley Wash
184/N9-A	36-34-49	110-23-56	Yellow Water Canyon
185/N9-B	36-33-49	110-24-13	Yellow Water Canyon
186/N9-C	36-33-23	110-24-49	Yellow Water Canyon
187/N9-D	36-33-18	110-25-02	Yellow Water Canyon
188/N9-E	36-32-56	110-25-24	Yellow Water Canyon
189/N9-F	36-32-44	110-25-31	Yellow Water Canyon
190/N9-G	36-33-27	110-25-51	Yazzie Wash
191/N9-H	36-33-58	110-25-46	Yazzie Wash
192/N9-I	36-34-13	110-25-32	Yazzie Wash
193/N9-J	36-34-25	110-25-24	Yazzie Wash
194/N9-K	36-33-43	110-25-57	Yazzie Wash
194/J21-H	36-24-29	110-17-04	Dinnebito Wash

APPENDIX B – "Coal Preparation & Associated Areas"

Serial Number/ Outfall Number	Latitude Deg.Min.Sec.	Longitude Deg.Min.Sec.	Receiving Water
001/N1-F	36-31-45	110-24-45	Coal Mine Wash
002/N1-L	36-31-45	110-24-15	Coal Mine Wash
003/N1-M	36-32-45	110-24-15	Coal Mine Wash
009/N10-C	36-32-00	110-24-00	Coal Mine Wash
014/N10-D	36-32-30	110-23-00	Coal Mine Wash Trib.
016/N12-C	36-32-15	110-23-15	Coal Mine Wash Trib.
017/BM-A1	36-26-30	110-24-00	Moenkopi Tributary
043/N14-Q	36-30-00	110-19-15	Moenkopi Tributary
047/J7-DAM	36-25-30	110-23-30	Red Peak Valley
054/N1-AC	36-32-00	110-25-45	Yellow Water Canyon
083/N5-F	36-31-15	110-25-00	Coal Mine Wash
094/N10-B1	36-33-00	110-22-15	Coal Mine Wash Trib.
095/KM-D	36-31-30	110-25-15	Coal Mine Wash Trib.
098/BM-SS	36-27-00	110-23-45	Moenkopi Tributary
099/J3-E	36-28-45	110-23-30	Moenkopi Tributary
103/N14-B	36-31-00	110-20-30	Moenkopi Tributary
104/N14-C	36-30-00	110-19-15	Moenkopi Tributary
105/BM-B	36-26-45	110-24-00	Moenkopi Tributary
106/KM-A3	36-31-45	110-26-00	Yellow Water Canyon
107/KM-B	36-31-30	110-26-00	Yellow Water Canyon
118/TPC-A	36-33-00	110-29-15	Long House Valley Trib.
126/TS-A	36-33-45	110-31-00	Klethla Valley
127/J16-A	36-30-00	110-18-15	Moenkopi Tributary
130/N14-P	36-31-00	110-20-30	Moenkopi Tributary
133/J16-L	36-30-45	110-19-30	Reed Valley
136/KM-TPB	36-31-15	110-28-00	Yellow Water Canyon Trib.
137/KM-TPB1	36-33-00	110-28-00	Yellow Water Canyon Trib.
139/KM-E	36-31-15	110-25-30	Coal Mine Wash Trib.
140/J2-A	36-29-00	110-25-45	Wild Ram Valley
149/J27-A	36-27-15	110-23-15	Moenkopi Tributary
152/TS-B	36-33-30	110-31-15	Klethla Valley
167/TPF-E	36-32-00	110-26-02	Yellow Water Canyon

APPENDIX C – "Western Alkaline Reclamation Areas"

Serial Number/ Outfall Number	Latitude Deg.Min.Sec.	Longitude Deg.Min.Sec.	Receiving Water
021/N6-C	36-29-30	110-22-45	Moenkopi Tributary
022/N6-D	36-29-15	110-23-00	Moenkopi Tributary
037/N6-F	36-30-45	110-22-30	Moenkopi Tributary
049/J7-CD	36-24-45	110-22-15	Sagebrush Wash
050/J7-E	36-24-45	110-22-30	Sagebrush Wash
051/J7-F	36-24-30	110-22-30	Sagebrush Wash
174/J21-D	36-25-39	110-15-37	Dinnebito Wash
175/J21-E	36-25-32	110-15-49	Dinnebito Wash

FACT SHEET
Peabody Western Coal Company - Black Mesa Complex
NPDES Permit No. NN0022179

Proposed Permit
January 2010

Applicant address: Peabody Western Coal Company
Black Mesa Complex
P.O. Box 650
Kayenta, AZ 86033

Applicant contact: Gary Wendt, Environmental Manager
(928) 677-5130
gwendt@peabodyenergy.com

Address: P.O. Box 650
Kayenta, AZ 86004

I. Status of Permit

EPA re-issued the current National Pollutant Discharge Elimination System Program (NPDES) Permit (No. NN0022179) for the discharge of treated wastewater to the Peabody Western Coal Company (PWCC), Black Mesa/Kayenta Mine Complex on December 29, 2000. On August 3, 2005 PWCC filed a timely renewal of its NPDES permit for discharge of wastewater into waters of the United States. EPA has administratively continued the permit since its expiration on February 1, 2006. PWCC also has coverage under the federal Multi-Sector General Permit for stormwater (AZR05A80F). During the past permit term, EPA modified the permit several times to incorporate new outfalls and to eliminate expired outfalls due to the ongoing mining activities.

EPA proposed the permit renewal on February 19, 2009. EPA received two comments on the permit during the public comment period: one from the applicant PWCC and the other from several nonprofit organizations. On August 5, 2009, EPA issued the final permit, which the nonprofit groups that had previously commented on the permit subsequently appealed. Among other issues, the appellants argued that EPA did not address the concerns of the community because EPA did not holding a public hearing during the public comment period. In response, EPA has decided to re-open the public comment period and to hold two public hearings on the permit to allow further opportunity for public review and comment. Hearings will be held on the Navajo and Hopi Reservations.

This proposed permit is substantially similar to the previous (2000) permit but does include several changes. First, the proposed permit incorporates new regulatory requirements for the Western Alkaline Coal Mining Subcategory for reclamation areas that were promulgated in January 2002. Second, several new outfall locations have been added and several have been eliminated to reflect changes due to ongoing mining activities. Finally, the proposed permit also incorporates revisions to the Seep Monitoring and Management Plan, which was created pursuant to the previous permit, in order to reflect the results of previous monitoring and to address the impoundments causing seeps. No other significant changes have been made to the permit.

II. Background

The Black Mesa/Kayenta mine has operated since the early 1970s southwest of Kayenta, Arizona. The complex is located on approximately 64,858 acres of land leased within the boundaries of the Hopi and Navajo Indian Reservations primarily located in Navajo County, Arizona. About 25,000 acres of the lease area mineral rights are owned exclusively by the Navajo Nation, and 40,000 are owned jointly by the Navajo Nation and Hopi Tribe. The Kayenta mining operation is the sole supplier of coal to the Navajo Generation Station, located near Page, Arizona. The Black Mesa mining operation was the sole supplier of coal to the Mojave Generating Station, located in Laughlin, Nevada. Coal supplied to the Mojave Generating Station was supplied via a 273 mile long pipeline thru which coal was slurried. The Mojave Generating Station ceased production in December 2005, and PWCC temporarily suspended mining operations at the Black Mesa Mine.

In addition to this NPDES permit, PWCC was required to obtain a Life-of-Mine permit from the Office of Surface Mining Reclamation and Enforcement (OSMRE). The Life-of-Mine permit is a separate permitting activity from the NPDES permit and authorizes PWCC to mine coal, whereas the NPDES permit authorizes PWCC to discharge treated wastewater from the mine site that is composed of runoff from active mine areas, coal preparation plant areas, and reclamation areas. On February 17, 2004 PWCC filed a Life-of-Mine permit revision application to OSMRE proposing several revisions to its previous Life-of-Mine permit. EPA was a Cooperating Agency on the environmental impact analysis conducted for the Life-of-Mine permit revision. OSMRE published a draft Environmental Impact Statement in November 2006 (DOI DES 06-48). PWCC submitted a revised Life of Mine application to OSM in July, 2008. OSMRE published the Final EIS in November 2008 (DOI FES 08-49) and issued the Life-of-Mine permit on December 22, 2008.

III. Receiving Water

The Black Mesa/Kayenta Complex discharge to receiving waters located on the Navajo Nation and Hopi Tribe Reservations. The receiving waters are two principal drainages within the Black Mesa/ Kayenta Complex, the Moenkopi Wash and Dinnebito Wash. Both are ephemeral washes with short intermittent reaches that drain southwest to the Little Colorado River system.

Five large washes are tributaries to the Moenkopi Wash – the Coal Mine, Yellow Water Canyon, Yucca Flat, Red Peak Valley, and Reed Valley Washes. No waterbodies receiving discharges from Black Mesa Complex have been identified as impaired and therefore have not been listed on the Clean Water Act Section 303(d) list.

Both the Navajo Nation Surface Water Quality Standards (NNSWQS) and the Hopi Surface Water Quality Standards apply to the receiving waters previously mentioned, and thus, the proposed permit incorporates limits and standards for the protection of receiving waters in accordance with those standards. The Resources Committee of the Navajo Nation Council approved the NNSWQS on November 9, 1999 and amended the NNSWQS on July 30, 2004. Subsequently, the Navajo Nation received Treatment as a State for the purposes of Sections 106 and 303 of the CWA. EPA approved the Navajo Nation's water quality standards in March 2006. Similarly, the Hopi Tribe approved Surface Water Quality Standards in August 29, 1997, and subsequently, the Hopi Tribe has received Treatment as a State for the purposes of Sections 106 and 303 of the CWA.

The designated uses of the receiving waters for the Moenkopi Wash and its tributaries and Dinnebito Wash are Secondary Human Contact (ScHC), Ephemeral Warm Water Habitat (EphWWhbt), and Livestock and Wildlife Watering (L&W).

IV. Description of Discharge

The discharge from the Black Mesa/Kayenta Complex includes runoff from active mine areas, coal preparation plant areas, and reclamation areas. The discharge meets the definition of "alkaline, mine drainage," defined at 40 CFR Part 434 and is mine drainage which, before any treatment, has a pH equal to or greater than 6.0 and total iron concentration of less than 10 mg/l. 40 C.F.R. § 434.11(c).

The permit authorizes discharge from 112 outfalls. During the previous permit term (from 2005-2009), there have been a total 31 discharges from the Black Mesa Mine Complex, either due to precipitation events or as a result of pond dewatering. The following is a table of the discharges occurring from 2005-2009 and the volume of each discharge:

Year	Number of Discharges	Cause of Discharge	Amount Discharged
2009	1	dewatering stormwater ponds	8.946 acre-feet
2008	4	dewatering stormwater ponds	326.59 acre-feet
	5	precipitation events	46.58 acre-feet
2007	5	dewatering stormwater ponds	8.097 acre-feet

	5	precipitation events	57.81 acre-feet
2006	2	dewatering stormwater ponds	5.701 acre-feet
	2	precipitation events	1.416 acre-feet
2005	3	dewatering stormwater ponds	7.933 acre-feet
	4	precipitation events	0.61 acre-feet

V. Regulatory Basis of Proposed Effluent Limits

Section 301(a) of the Clean Water Act provides that the discharge of any pollutant to waters of the United States is unlawful except in accordance with a NPDES permit. Section 402 of the Act establishes the NPDES program. The program is designed to limit the discharge of pollutants into waters of the United States from point sources through a combination of various requirements including technology-based and water quality-based effluent limitations.

1. Technology-based effluent limitations

The discharge of wastewater from coal mines is subject to 40 C.F.R. Part 434: Coal Mining Point Source Category Best Practicable Control Technology (BPT), Best Available Technology (BAT), Best Conventional Pollutant Control Technology (BCT) Limitations and New Source Performance Standards. The Black Mesa/Kayenta Complex has the potential to discharge wastewater from separate sources that are subject to separate subcategories of Part 434. These include:

A. Appendix A Outfalls – "Alkaline Mine Drainage"

The outfalls listed in Appendix A of the proposed permit meet the definition of "alkaline, mine drainage" in 40 C.F.R. § 434.11(c). Therefore, the proposed permit sets effluent limits for these outfalls in accordance with the requirements of Subpart D - Alkaline Mine Drainage for BPT, BCT, and BAT regulations that apply to such discharges. The proposed permit sets discharge limits for these outfalls for Iron (3.5 mg/l daily average and 7.0 mg/l daily maximum), Total Suspended Solids (TSS)(35 mg/l daily average and 70 mg/l daily maximum), and pH (no less than 6.0 or greater than 9.0 standard pH units). Flow volumes, iron, TSS and pH monitoring is required during any event. These requirements are consistent with those of the previous permit.

B. Appendix B Outfalls – "Coal Preparation & Associated Areas"

The outfalls listed in Appendix B of the proposed permit meet the definition in 40 C.F.R.

Part 434.11(e), (f) and (g) for "coal preparation plants," "coal preparation plant and associated areas", and "coal preparation plant water circuit," respectively. Therefore, the proposed permit sets limits for the outfall in accordance with Subpart B - Coal Preparation Plants and Coal Preparation Plant Associated Areas for BPT, BCT, and BAT regulations that apply to such discharges. The requirements for the outfalls listed in Appendix B are the same as those for "alkaline, mine drainage," with the addition of limitations and monitoring requirements for manganese (2.0 mg/l daily average and 4.0 mg/l daily maximum). These requirements are consistent with those of the previous permit.

C. Appendix C Outfalls – "Western Alkaline Reclamation Area

The outfalls listed in Appendix C of the proposed permit meet the definition of Subpart H- Western Alkaline Coal Mining, which applies to "alkaline mine drainage at western coal mining operations from reclamation areas, brushing and grubbing areas, topsoil stockpiling areas, and regraded areas." 40 C.F.R. § 434.81. As established by the Memorandum of Understanding between EPA Region IX and the Office of Surface Mining Reclamation and Enforcement (OSMRE) of December 19, 2003: Process for Obtaining A NPDES Permit Under Subpart H - Western Alkaline Mine Drainage Category, in order for the technology standards in Subpart H to apply to outfalls, the permittee must meet the basic requirements listed in Subpart H and OSMRE will conduct a technical review and approve the permittee's Sediment Control Plan.

First, EPA has determined that PWCC has met the basic requirements of Subpart H. In accordance with the requirements established in Subpart H, PWCC has:

1) submitted a site-specific Sediment Control Plan to EPA incorporating the minimum requirements of 40 C.F.R. § 434.82, and

2) demonstrated that implementation of the Sediment Control Plan will result in average annual sediment yields that will not be greater than the sediment yield levels from pre-mined, undisturbed conditions.

The operator submitted these materials to EPA in a letter and attachments on September 24, 2008. These materials are part of the Administrative Record for the proposed permit and are available for public review.

The proposed permit approves the Sediment Control Plan as being consistent with the requirements of Subpart H. Additionally, in accordance with Subpart H, the proposed permit incorporates the Sediment Control Plan as an effluent limit and requires that the permittee design, implement, and maintain the best management practices (BMPs) in the manner specified in the Sediment Control Plan.

Second, OSMRE completed a technical review of PWCC's Sediment Control Plan, which PWCC submitted in order to re-categorize outfalls as Western Alkaline Reclamation Areas and to apply for a revision of its permit under the Surface Mining and Control Reclamation Act. See

January 28, 2009 letter from Dennis Winterringer, OSMRE to Gary Wendt, PWCC. OSMRE concluded that PWCC's Sediment Control Plan complied with the requirements of the Clean Water Act and SMCRA because it contained text, appendices, surface water modeling results for the applicable areas, methodology for pond removal, and sediment control traps. However, OSMRE expressed concerns with the seep management results (documented in Section VI of this fact sheet) for Outfalls 031 and 032 (Ponds J16-E and J16-F, respectively). As a result of this review and EPA's continuation of the revised seep management plan, EPA has decided that Outfalls 031/J16-E and 032/J16-F will remain classified as "Alkaline, Mine Drainage" and will not be categorized as "Western Alkaline Reclamation Areas" until PWCC addresses the concerns raised in OSMRE's technical evaluation. As described in Section VI of this fact sheet, EPA will require continued monitoring and BMPs for the seeps identified in the final permit.

As existing outfalls defined in this permit as "alkaline, mine drainage" are reclaimed, PWCC may update the Sediment Control Plan to incorporate additional outfalls. PWCC must submit a revised plan to be approved by EPA before it becomes effective. A revised plan will also be reviewed by OSMRE prior to EPA approving the revisions. Revisions to the Sediment Control Plan must meet all requirements contained at 40 CFR § 434.82, and all of the drainage areas to an outfall that have been disturbed by mining must meet the definition of Subpart H to be considered for coverage under Subpart H. EPA's approval of an updated Sediment Control Plan and reclassification of an existing outfall from "alkaline, mine drainage" to Subpart H requirements will be considered a minor modification to this permit.

1. Water Quality-Based Effluent Limitations

In addition to technology-based effluent limitations, Sections 402 and 301(b)(1)(C) of the Clean Water Act require that a NPDES permit contain effluent limitations that, among other things, are necessary to meet water quality standards. A NPDES permit must contain effluent limits for pollutants that are determined to be discharged at a level which has "the reasonable potential to cause or contribute to an excursion above any State [or Tribal] water quality standard, including State [or Tribal] narrative criteria for water quality." 40 C.F.R. § 122.44(3)(1)(i). To determine whether the discharge causes, has the reasonable potential to cause or contributes to an excursion of a numeric or narrative water quality criterion for individual toxicants, the regulatory authority must consider a variety of factors.[1] 40 C.F.R. § 122.44(d)(1)(ii). These factors include the following:

- Dilution in the receiving water,
- Existing data on toxic pollutants,
- Type of industry,
- History of compliance problems and toxic impacts,

1 Guidance for the determination of reasonable potential to discharge toxic pollutants is included in both the Technical Support Document for Water Quality-Based Toxics Control (TSD) - Office of Water Enforcement and Permits, U.S. EPA, dated March 1991 and the U.S. EPA NPDES Permit Writers Manual - Office of Water, U.S. EPA, dated December 1996.

- Type of receiving water and designated use.

Based on an application of these factors to the Black Mesa/Kayenta Complex operations and projected wastewater quality data provided in the application, EPA concluded that the discharges do not present a "reasonable potential" to cause or contribute to an exceedance of water quality standards. Due to the facility potentially discharging to dry washes, EPA has not considered available dilution which may be present in the receiving waters. Therefore, EPA has made the most conservative and protective assumption of no available dilution in its analysis and that water quality standards must be met at the end of pipe prior to discharge. As noted above, the complex discharges infrequently: with over 100 permitted outfalls located over a 65,000 acre lease area, the facility has discharged 31 times over the past five years from 2005-2009. All drainages have been treated in pond systems in order to remove sediment that may have accumulated from the mining activities prior to discharge. Therefore, based on sampling data and an evaluation of discharge characteristics, EPA has concluded, consistent with the previous permit, that the proposed effluent limitations for pH, TSS, Oil and Grease, and iron protect receiving water quality standards and that there is no reasonable potential for other pollutants to cause or contribute to a violation of receiving water standards. However, EPA has included monitoring in the permit for several additional parameters in order to further verify these assumptions.

Although EPA has determined that the discharges do not have a reasonable potential to cause or contribute to a exceedance of water quality standards, the proposed permit sets general conditions based on narrative water quality standards contained in Section 203 of the NNSWQS and Chapter 3 (General Standards) of the Hopi Water Quality Standards (August 29, 1997). These standards are set forth in Section B (General Discharge Specifications) of the permit.

VI. Special Conditions- Seep Monitoring and Management Plan

Section A.5 of the previous permit required that PWCC design and conduct a Seepage Monitoring and Management Plan to determine the source of and pollutants in seepages below impoundments. The permit specifically required PWCC to:

- Identify all seeps located within 100 meters downgradient of sediment impoundments;
- Conduct sampling (or summary of current data if sufficient and valid) of seepages identified for pH, Iron (Total and Dissolved), Dissolved Oxygen, Selenium (Total and Dissolved) and Nitrates;
- Conduct hydrogeologic modeling or studies in order to determine if the source of the seeps are the impoundments and, if so, which impoundments; and
- Determine the source of Selenium and Nitrates if data indicates that seepages have a reasonable potential to violate water quality standards.

Over 230 impoundments exist on the Black Mesa/Kayenta Complex. Many are internal impoundments for treatment and storage, which do not discharge to a water of the United States. There are currently 111 impoundments that discharge to waters of the United States and which, therefore, are listed as NPDES outfalls in compliance with this permit. Seeps have been identified at 33 of these impoundments. A seep is an area not related to the outfall location which may exhibit moisture or flow, generally at the toe of an impoundment where the stormwater has filtered into the soils and then re-appears at an area hydrologically downgradient of the impoundment. As documented in the characterization reports, seeps may exhibit flows up to a few gallons per minute, although many do not exhibit measurable volumes of flow. Typically, the seeps will disappear back into the soils with a short distance (ranging from several feet to a hundred feet).

PWCC has been monitoring and characterizing seeps on the Black Mesa/Kayenta Complex since 1999. Each year, PWCC sampled the seeps where there was an identifiable flow:

Year	Number of Seeps Identified and Sampled
1999	11
2000	9
2001	7
2002	12
2003	16
2004	14
2005	12
2006	16
2007	14

In addition, the previous permit required PWCC to create and submit an annual Seepage Monitoring and Management Report based on the monitoring required by the Seep Monitoring and Management Plan, such as regular inspections of outfall impoundments for seeps, documented seep discharge volumes, and sampling results. On April 1, 2008, Peabody submitted an "Interim Final Report" summarizing the data collected at each of the seeps, including a description of the following information:

- Number of seep inspections;
- Number of flows observed;
- Range of flows observed;
- Number of samples taken;

- Exceedances of livestock standards, acute standards, and chronic standards;
- Current use of impoundment (e.g., outfall location or treatment within the mine site; treatment for reclaimed area, active, shop areas, etc.);
- Final use of impoundment, including an estimation of whether the impoundment can be removed;
- BMPs utilized (e.g., vegetation, fencing, dewatering);
- Potential BMPs to be evaluated (e.g., pond removal, vegetation, passive pH treatment, clay lining, dewatering, other);

Using the information PWCC gathered, EPA evaluated the risk level to water quality from the seeps and assessed what BMPs would be applicable to control that risk. The following is a description of the three risk levels EPA used to evaluate the seeps:

- Level 1: Generally contains very low flows, few instances of observed seeps. If seep observed, seep meets water quality standards (WQS) or had one sample slightly above WQS.

- Level 2: Generally contains medium flows, but seeps detected at higher frequencies. Multiple samples may be above WQS, but samples above WQS are only slightly above WQS. No samples significantly above WQS. No bioaccumulative toxic pollutant above WQS.

- Level 3: May be one or a combination of high flows, high occurrences of seeps, multiple samples above WQS, or any sample significantly above WQS. Any sample of bioaccumulative toxic pollutant above WQS is a Level 3 risk.

Impoundment	Does Seep Characterization meet WQS ?	Risk Level	Type	Existing BMPS	Notes	Peabody Conclusion for Revised Seep Management Plan	EPA Assessment for Continued Monitoring & Management
BM-A1	No. Low pH, Nitrate, Aluminum.	2	Temporary		Pond treats process areas & cannot be removed	Install passive treatment. Remove pond eventually. Continue monitoring.	OK
J2-A	Yes Few seeps present	1	Permanent			Permanent Discontinue inspections.	OK

J3-D	No, Chloride. TDS. Aluminum, sulfate. Selenium (1/5 @ 67)	3	Permanent			Permanent Pursue Variance for Alum, TDS & sulfate	Selenium potential concern. Explore remove this pond and /or mitigation.
J3-E	Generally Yes Few seeps Alum, pH slightly above	1	Permanent		Drains shop area	Permanent Discontinue inspections	OK
J7-A	No TDS, Sulfate	1	Temporary		Will remove ~2011	Pond Removal ~2011 Pursue Variance for TDS, Sulfate	OK. Continue monitoring.
J7-CD	No Alum, TDS, sulfate, chromium	3	Temporary		Drains reclaimed mining areas	Remove Pond	OK. Remove ASAP
J7-Dam	No. Historically, TDS, Sulfate, pH. Se (4/16 @ 51-64)	3	Permanent	Artificial wetland. Fenced	Has met all standards over past 3 years. Levels decreasing.	Permanent. Increase wetland treatments. Continue annual monitoring	OK
J7-JR	No but very low flows [<0.01 gpm] TDS, Sulfate, Alum	2	Permanent		Drains Active mining areas	Permanent Pursue Variance for TDS, Sulfate, Alum	OK. Continue monitoring.
J16-A	No. TDS, sulfate	2	Permanent		Drains coal prep areas	Permanent Pursue Variance for TDS, sulfate	OK. Continue monitoring.
J16-E	No. pH. Se (5/5 @ 71-160)	3	Temporary		Drains reclaimed mining areas	Remove ~ 2009	PWCC must mitigate / document pre-existing seep.
J16-L	No seeps found	1	Permanent			Permanent Discontinue monitoring	OK
J19-D	No. TDS , sulfate	2	Temporary		New. Will treat stormwater for active areas for some time	Continue monitoring Pursue Variance for TDS, sulfate	OK. Continue monitoring.
J21-C	No. Aluminum	2	Permanent			Variance for Alum	OK. Continue monitoring.
J27-A	No. (1 sample) TDS, chloride	1	Temporary			Pursue Variance for TDS, chloride	OK. Continue monitoring.
J27-RC	No. (1 of 10 samples). TDS Sulfate	1	Permanent			Pursue Variance for TDS, sulfate	OK. Continue monitoring.

N6-C	No. 1 seep, 1 sample TDS, sulfate	1	temporary			Remove Pond	OK
N6-F	No. Low pH . high Alum	3	temporary			Remove Pond	OK
N14-B	No. Sulfate, TDS, Alum (1 sample > chronic)	2	temporary		Treats conveyor areas	Pursue Variance for TDS, sulfate, Alum	OK. (Temp pond.) Continue monitoring
N14-H	No. Sulfate (1 sample)	1	Permanent			Pursue Variance for sulfate	OK. Continue monitoring.
N14-P	No Sulfate, TDS, pH (5.3), Cadmium, Aluminum	2	temporary			Continue Monitoring Pursue Variance for TDS, sulfate, Aluminum	OK (Temp pond). Continue monitoring.
WW-9	No. sulfate, TDS, Aluminum	1	temporary			Continue monitoring Pursue Variance for TDS, sulfate, Aluminum	OK. Continue monitoring.

Based on PWCC's report and the analysis above, EPA and PWCC prioritized measures to address seeps, including:

1) Reclaim as many ponds as possible;
2) Eliminate monitoring requirements for seeps not causing problems;
3) Continue monitoring where data is inconclusive;
4) Establish a permanent fix for problem areas; and
5) Explore if regulatory variances may be applicable for certain non-bioaccumulative parameters.

Based on this assessment, EPA has concluded that PWWC must continue to implement its Seep Monitoring and Management Plan, which will include a few revisions from the previous permit conditions. Several impoundments where water quality problems in the seeps have been identified will be removed. At several other ponds, PWWC will use BMPs to treat the seep and will continue to monitor. Where parameters such as aluminum, TDS, and sulfate are present due to suspected natural causes and which do not exceed naturally occurring background levels, EPA may explore the feasibility of granting a water quality variance with the Navajo and Hopi Tribes. Any potential water quality variance would require a water quality standards revision and would require public notice and comment, and EPA is not considering a variance as option at this time.

VII. Monitoring Requirements

The proposed permit requires discharge data obtained during the previous three months to be summarized and reported quarterly. If there is no discharge for the quarter, PWCC shall indicate Zero Discharge. These reports are due January 28, April 28, July 28, and October 28 of each year. Duplicated signed copies of these, and all other required reports, shall be submitted to the Regional Administrator, the Navajo Nation EPA, and the Hopi Tribe Water Resources Office.

VIII. Threatened and Endangered Species

Section 7 of the Endangered Species Act (ESA) of 1973 requires federal agencies to ensure that any action authorized, funded, or carried out by a federal agency does not jeopardize the continued existence of a listed or candidate species, or result in the destruction or adverse modification of its habitat. 16 U.S.C. § 1536(a)(1). A federal agency must consult with the relevant Service, either U.S. Fish and Wildlife Service (FWS) or the National Marine Fisheries Service, if it determines that there is an endangered or threatened species is present in the area affected by the federal action and that the implementation of such action will likely affect the species. ESA §7(a)(3); 16 U.S.C. § 1536(a)(3).

To identify the endangered and threatened species that are present in the action area, EPA used the list generated for OSMRE during the revision of PWCC's Life-of-Mine permit. FWS created a list of threatened and endangered species on June 13, 2005 as part of the Final Black Mesa Project Biological Assessment (November 2008) for OSMRE's revision to the Life-of-Mine permit action. The species identified as potentially affected by the proposed project were presented in Table 1-1 "Federally Listed Species Considered for Evaluation in the Biological Assessment" and are listed below:

Mammals

- Black Footed Ferret (*Mustela nigripes*): Endangered

Birds

- Southwestern willow flycatcher (*Empidonax traillii extimus*): Endangered
- Mexican Spotted owl (*strix occidentalis lucida*): Endangered
- Bald eagle (*haliaeetus leucocephalus*): Threatened
- California condor (*Gymnogyps californicus*): Endangered

Plants

- Navajo sedge (*Cares specuicola*): Threatened

The species identified which were determined to have no effect were presented in Table 1-2 "Special Status Species Excluded from Further Consideration and Reasons for their Exclusion."

The species and the reason for the no effect determination are listed below:

Birds

- Yellow-billed Cuckoo (*Coccyzus americanus*): Candidate species: No suitable habitat in project area.
- California Brown Pelican (*Pelecanus occidentalis californicus*): Endangered: No breeding records in Arizona, but an uncommon transient on many Arizona lakes and rivers, including the Colorado River.

Reptiles/Amphibians

- Chiricahua leopard frog (*Rana chiricahuensis*) Threatened: Project areas is outside current range of species.

Fish

- Apache trout (*Oncorhynchus apache*) Threatened: No suitable habitat in project area.
- Little Colorado spinedace (*Lepidomeda vittata*) Threatened: No suitable habitat in project area.
- Spikedace (*Meda fulgida*) Threatened: No suitable habitat in project area.
- Loach minnow (*Tiaroga cobitis)* Threatened: Project area is outside current range of species.

Plants

- Peebles Navajo cactus (*Pediocactus peeblesianus peeblesianus)* Endangered: Project area is outside current range of species.
- Welsh's milkweed (*Asclepias welshii*): Threatened : No habitat is present in the project area.

OSMRE and FWS determined that the proposed project may affect, but is not likely to adversely affect the endangered black-footed ferret, endangered southwestern willow flycatcher, threatened Mexican spotted owl, threatened Navajo sedge and its critical habitat, or the California condor. The agencies determined that any potential direct or indirect effects on the species are either insignificant or discountable.

EPA has determined that this action will have no effect on threatened and endangered species. First, as documented in Section IV, the permitted discharge occurs infrequently and the discharges has previously met, and must continue to meet, all water quality standards which have been set at a level necessary to protect aquatic wildlife. Second, as evidenced by OSMRE's Biological Assessment for the Life-of-Mine permit, no threatened or endangered aquatic species are located in the project area. While the Biological Assessment for the Life-of-Mine permit found the mine may affect, but is not likely to adversely affect, several mammals, birds, and plants, FWS concluded that the potential impacts from the Life-of-Mine project were insignificant or discountable for the entire mine site. Further, FWS did not identify any effects

on listed species due to the discharges that would be regulated by PWCC's NPDES permit. Therefore, due to the low frequency of discharge, the requirement that the discharge must meet water quality standards, and the absence of aquatic species or species that could be detrimentally impacted by the wastewater discharge, EPA has made a no affect determination.

In considering all information available, EPA concluded that a determination of no effect is appropriate for this federal action. A copy of the statement of basis and proposed permit are being sent to the US Fish and Wildlife Services and the Arizona Game and Fish Department for review and comment during the 30-day public review period.

EPA's determination is consistent with the previous permit (issued 2000) for the Black Mesa Mine permit, where EPA concluded the permitting action will have no effect on threatened and endangered species.

IX. Permit Reopener

The permit contains a reopener clause to allow for modification of the permit if it is demonstrated that the discharges have a reasonable potential to exceed applicable water quality standards during the life of the permit.

X. Standard Conditions

Conditions applicable to all NPDES permits are included in accordance with 40 CFR, Part 122.

XI. Administrative Information

Public Notice (A.A.C. R18-9-A907)

The public notice is the vehicle for informing all interested parties and members of the general public of the contents of a draft NPDES permit or other significant action with respect to an NPDES permit or application. The basic intent of this requirement is to ensure that all interested parties have an opportunity to comment on significant actions of the permitting agency with respect to a permit application or permit. This permit will be public noticed in a local newspaper after a pre-notice review by the applicant and other affected agencies.

Public Comment Period (A.A.C. R18-9-A908)

Rules require that permits be public noticed in a newspaper of general circulation within the area affected by the facility or activity and provide a minimum of 30 calendar days for interested parties to respond in writing to EPA. After the closing of the public comment period, EPA is required to respond to all significant comments at the time a final permit decision is reached or at the same time a final permit is actually issued.

Public Hearing (A.A.C R18-9-A908(B))

Public hearings will be held in the vicinity of the mine site as detailed in the public notice.

XII. Additional Information

Additional information relating to this proposed permit may be obtained from the following locations:

U.S. Environmental Protection Agency,
75 Hawthorne Street (WTR-5)
San Francisco, California 94105

Attn: John Tinger or email: Tinger.John@EPA.gov
Telephone: (415) 972-3518

XIII. Information Sources

While developing effluent limitations, monitoring requirements and special conditions for the draft permit, the following information sources were used:

1. EPA Technical Support Document for Water Quality-based Toxics Control dated March 1991.

2. U.S. EPA NPDES Basic Permit Writers Manual (December 1996).

3. 40 CFR Parts 122, 131, and 133.

4. NPDES permit application forms 2A and 2S, provided in letter from Mr. Gary Wendt, PWCC, August 3, 2005.

5. Memorandum of Understanding: AProcess for Obtaining A NPDES Permit Under Subpart H - Western Alkaline Mine Drainage Category, EPA Region IX and the Office of Surface Mining Reclamation and Enforcement Office (OSM), dated December 19, 2003.

6. Annual Seep Monitoring Reports, PWCC.

7. Technical Evaluation of Permit Revisions, OSRME, January 28, 2009. Letter from Dennis Winterringer, OSMRE to Gary Wendt, PWCC.

8 Black Mesa Project Biological Assessment. OSMRE, November 2009.