RATIONALE PAGE

NPDES Number: WV0020834 (NPR-6-Minor) County: Marshall

Company Name: MCELROY COAL COMPANY

Facility Name: MCELROY MINE

SMA/Permit No.: O102392, U003383, U102692, U200707

Other Apps:

Date of Draft: 12/04/2013

Permit Writer: Dennis Phipps

Region: Philippi

1. New or expanded discharge? NO

2. Facility eligible for General Permit? NO

3. Basis for effluent limitation:

A. Determine uses of each receiving stream.

Stream Uses	Stream Name
1	CONNER RN
1	FISH CK
1	GRAVEYARD RN
1	LEFT FK/MAGGOTY RN
2	OHIO RV
1	UT of BEN RUN
1	UT of BIG TRIBBLE CREEK
1	UT of LOWER BOWMAN RUN
1	UT of MAGGOTY RUN
1	UT of North Fork
2	UT of OHIO RIVER
1	UT of UT of FISH CREEK

B. Parameters of concern: YES pH YES Fe YES Mn
YES Al (D) YES Al (T) NO Others

Specify Others:

C. Justification Review: McElroy Coal Company has submitted a Reissuance application to maintain, monitor and operate Haulroads, Access Roads, Preparation/Cleaning Plant, Loadout Facility, Refuse Areas, Bathhouse/Sewage and a Deep Mine in the Pittsburgh Seam of coal. The operation will discharge Treated Water and Storm Water into Ben Run of Pennsylvania Fork and Cedar Run and Squirrel Alley and Unnamed Tributaries of Maggoty Run and Unnamed Tributary of Left Fork and Left Fork and Unnamed Tributary of Speakeasy Hollow and Seldom Seen Hollow and Unnamed Tributary of Upper Bowman Run and Unnamed Tributary of Lower Bowman Run and Lower Bowman Run and Unnamed Tributary of Big Tribble Creek and Little Tribble Creek of Big Tribble Creek and Unnamed Tributary of Unnamed Tributary of Fish Creek and Fish Creek and Conner Run and Long Run and Coon Run and Graveyard Run and Unnamed Tributary of Hog Run and Hog Run and Hot Hollow and an Unnamed Tributary of Laurel Run and Laurel Run and French Run and Straight Run and Unnamed Tributary of North Fork and North Fork of Grave Creek and Grave Creek, all of Upper Ohio River and is located 8 miles south of Moundsville, in Cameron, Franklin, Liberty and Meade Districts of Marshall County in West Virginia.

This permit is located in the Upper Ohio South Watershed which has an approved TMDL (Approved 2009). This permit is located in thirty-one (31) SWS's 23, 541, 549, 550, 551, 552, 554, 555, 556, 564, 568, 569, 570, 621, 702, 703, 705, 706, 708, 713, 714, 723, 724, 725, 727, 728, 729, 730, 734, 735 and 736. Out of the thirty-one (31) only eleven (11) receives treated water the other twenty (20) only receives storm water. The TMDL did not assign any allocations to mining in these SWS and Fish Creek was not modeled in the TMDL. Therefore, all the outlets will keep their approved limits for Fe and Mn, and Al will be modified as necessary to assign appropriate warm water quality criterion limits. There are no new impairments listed in the 2010 303(d) List or the "Draft" 2012 303(d) List for any of the receiving streams of this permit. The streams that this permit discharges into are not considered trout water.

The applicant is requesting three changes in this application. The first one is to

delete Outlet 010, because the structure that this outlet monitors was removed during the reclamation of the site. The second on is to delete Outlet 032 and Instream Monitoring Stations DGC and UGC, because the structure that it would have monitored was not built and will not be built in the future. The third one is to delete Outlet 417 because Outlet 419 replaces it. These Outlets and Instream Monitoring Stations will be deleted in this Reissuance.

EFFLUENT LIMITATIONS -

This permit is subject to new source performance standards (NSPS) 40 CFR 434.35. As such, effluent limitations for pH and Total Suspended Solids (TSS) are in accordance with NSPS. The water quality effluent limitations assigned for Iron, Manganese and Aluminum are as or more stringent than would be required by NSPS ELGs. The proposed site is located well outside of the 5-mile zone upstream of a known public water supply; therefore manganese human health criterion does not apply.

The following three (3) parameters (Specific Conductance, Sulfates and Total Dissolved Solids) are being added to the outlets and the In-Stream Monitoring Points as report only. Hardness is being added to each In-Stream Monitoring Point and to any In-Stream Outlets as report only.

Effluent limitations for Iron at Outlets 002, 005, 016, 019, 020, 021, 022, 023, 026, 027, 028, 029, 030, 031 and 033 were previously set at Tech Based and will remain the same in this reissuance. Outlets 006, 011 and 017 were previously set at water quality end-of-pipe and will remain the same in this reissuance.

Effluent limitations for Manganese at Outlets 002, 005, 006, 011, 016, 017, 019, 020, 021, 022, 023, 026, 027, 028, 029, 030, 031 and 033 were previously set at Tech Based and will remain the same in this reissuance.

Effluent limitations for Total Aluminum at Outlets 005, 006, 011, 016, 017, 019, 020, 021, 022, 023, 026, 027, 028, 029, 030 and 031 were report only and will capped at water quality end-of-pipe in this reissuance. Outlet 002 is being granted a compliance schedule of 12 months then on the 13 months water quality end-of-pipe limitations. Outlet 006 was previously set at water quality end-of-pipe and will remain the same in this reissuance. Outlet 033 was previously set at Tech Based and will remain the same in this reissuance.

Selenium - As discussed above the TMDL did not assign allocations or request any reductions. The selenium concentrations on the Table 2-IV-C were non-detect with a detection limit of 5 ug/l. In the last two approved reissuances the selenium concentrations have been non-detect with a detection limit of 2 ug/l. Therefore, selenium will not be added as a parameter on concern on this permit. All other parameters that are on Table 2-IV-C were below the acceptable MDL or were below their water quality standard, with the exception of Total Chromium on Outlet 022. Therefore, Total Chromium will be added to Outlets 022 and 023 as report only, because Outlet 022 represented Outlet 023. Hardness will be added also because chromium is a hardness dependent metal. Please see the attached Parameter of Concern Assessment worksheet for more details.

As mentioned above, the following Outlets and Instream Monitoring Stations are being deleted.
Outlets 010, 032 and 417
Instream Monitoring Stations DGC and UGC

The following limitations and report only parameters apply to the outlets as they are listed below.

Outlet 002 will have the following limitations;
pH - 6 Standard Units (SU) Monthly Average and 9 SU Daily Maximum
Total Suspended Solids - 35 mg/l Monthly Average and 70 mg/l Daily Maximum
Settleable Solids - 0.5 ml/l Daily Maximum
Total Iron - 3 mg/l Monthly Average and 6 mg/l Daily Maximum
Total Manganese - 2 mg/l Monthly Average and 4 mg/l Daily Maximum
Total Aluminum - Interim Limits - Report Only (12 Months)
Final Limits - 0.43 mg/l Monthly Average and 0.75 mg/l Daily Maximum
Report Only Parameters;
Flow, Specific Conductance, Hardness, Sulfates, Dissolved Aluminum and Total Dissolved Solids.

Outlets 005, 016, 019, 020, 021, 026, 027, 028, 029, 030, 031 will have the following limitations;
pH - 6 Standard Units (SU) Monthly Average and 9 SU Daily Maximum
Total Suspended Solids - 35 mg/l Monthly Average and 70 mg/l Daily Maximum
Settleable Solids - 0.5 ml/l Daily Maximum
Total Iron - 3 mg/l Monthly Average and 6 mg/l Daily Maximum
Total Manganese - 2 mg/l Monthly Average and 4 mg/l Daily Maximum

Total Aluminum - 0.43 mg/l Monthly Average and 0.75 mg/l Daily Maximum
Report Only Parameters;
Flow, Specific Conductance, Sulfates, Dissolved Aluminum and Total Dissolved Solids.

Outlet 006 will have the following limitations;
pH - 6 Standard Units (SU) Monthly Average and 9 SU Daily Maximum
Total Suspended Solids - 35 mg/l Monthly Average and 70 mg/l Daily Maximum
Settleable Solids - 0.5 ml/l Daily Maximum
Total Iron - 1.42 mg/l Monthly Average and 2.46 mg/l Daily Maximum
Total Manganese - 2 mg/l Monthly Average and 4 mg/l Daily Maximum
Total Aluminum - Final Limits - 0.43 mg/l Monthly Average and 0.75 mg/l Daily Maximum
Report Only Parameters;
Flow, Specific Conductance, Hardness, Arsenic, Sulfates, Selenium, Thallium, Cadmium, Chromium, Copper, Lead, Nickel, Silver, Zinc, Antimony, Dissolved Aluminum and Total Dissolved Solids.

Outlets 011 and 017 will have the following limitations;
pH - 6 Standard Units (SU) Monthly Average and 9 SU Daily Maximum
Total Suspended Solids - 35 mg/l Monthly Average and 70 mg/l Daily Maximum
Settleable Solids - 0.5 ml/l Daily Maximum
Total Iron - 1.42 mg/l Monthly Average and 2.46 mg/l Daily Maximum
Total Manganese - 2 mg/l Monthly Average and 4 mg/l Daily Maximum
Total Aluminum - 0.43 mg/l Monthly Average and 0.75 mg/l Daily Maximum
Report Only Parameters;
Flow, Specific Conductance, Hardness, Sulfates, Dissolved Aluminum and Total Dissolved Solids.

Outlets 022 and 023 will have the following limitations;
pH - 6 Standard Units (SU) Monthly Average and 9 SU Daily Maximum
Total Suspended Solids - 35 mg/l Monthly Average and 70 mg/l Daily Maximum
Settleable Solids - 0.5 ml/l Daily Maximum
Total Iron - 3 mg/l Monthly Average and 6 mg/l Daily Maximum
Total Manganese - 2 mg/l Monthly Average and 4 mg/l Daily Maximum
Total Aluminum - 0.43 mg/l Monthly Average and 0.75 mg/l Daily Maximum
Report Only Parameters;
Flow, Specific Conductance, Hardness, Sulfates, Chromium, Dissolved Aluminum and Total Dissolved Solids.

Outlet 033 will have the following limitations;
pH - 6 Standard Units (SU) Monthly Average and 9 SU Daily Maximum
Total Suspended Solids - 35 mg/l Monthly Average and 70 mg/l Daily Maximum
Settleable Solids - 0.5 ml/l Daily Maximum
Total Iron - 3 mg/l Monthly Average and 6 mg/l Daily Maximum
Total Manganese - 2 mg/l Monthly Average and 4 mg/l Daily Maximum
Total Aluminum - 3 mg/l Monthly Average and 6 mg/l Daily Maximum
Report Only Parameters;
Flow, Specific Conductance, Sulfates, Dissolved Aluminum and Total Dissolved Solids.

Downstream Water Chemistry Monitoring Stations (DBR-2) in Ben Run, (DFC2) in Fish Creek, (DLF2) in Left Fork, (DMR-5) in Maggoty Run, (DNF) in North Fork and (GRD) in Graveyard Run are existing and will remain. Upstream Water Chemistry Monitoring Stations (UBR-1) in Ben Run, (UFC1) in Fish Creek, (ULF1) in Left Fork, (UMR-4) in Maggoty Run, (UNF) in North Fork and (GRU) in Graveyard Run are existing and will remain. These stations will continue to monitor the streams during and after mining.

Narrative Water Quality Standard - According to the WVDEP's "Permitting Guidance for Surface Coal Mining Operations to Protect West Virginia's Narrative Water Quality Standards, 47 CSR 2, Sections 3.2.e and 3.2.i issued August 12, 2010 and revised May 11, 2012", if the outlet is primarily precipitation induced or the activities behind a particular non-precipitation induced outlet meet the definition of "substantially complete" the guidance does not apply. The company has included information in the application that indicates the following;
Outlet 010 was a primarily precipitation induced outlet and it has not discharge in the last 47 months, the structure that this outlet monitor was removed during the reclamation of the site. Therefore, this outlet is being deleted in this reissuance.
Outlet 032 would have been a primarily precipitation induced outlets, but the structure that it would monitor was not built and will not be built in the future.
The 5-North 6A Bleeder Air Shaft has been abandoned. Therefore, this outlet is being deleted in this reissuance.
Outlets 019 and 022 are primarily precipitation induced outlets. Outlets 019 has discharged 19 times out of 47 months and Outlet 022 have discharged 16 times out of 47 months. The discharge associated with these outlets appears to be correlated with rainfall activities. Outlets 021, 023 and 027 are primarily precipitation induced outlets and these outlets have not discharged in the last 47 months. Therefore, Outlets 005, 006, 019, 020, 021, 022, 023 and 027 are primarily precipitation induced outlets.
Outlets 005, 006 and 020 are operationally controlled outlets, meaning they have mechanical pumps associated with the outlet to pump water away and to other designed

areas including the Preparation Plant and Conner Run Impoundment. Thus, consistent and routine monitoring and maintenance is conducted at each of the outlets to ensure that the pump is working properly and does not discharge. Some outlets, such as Outlet 006 has an additional emergency pump that can pump up to 3-times the amount of the primary pumps if flows get too high. With the exception of Outlet 005, the only reason these outlets would discharge would be due to a mechanical issue associated with the pump, however it would only flow for a small duration and correction actions would be implemented immediately to get the pump working functionally to minimize the amount of discharge. Flow data from DMR's support the fact the Outlets 006 and 020 have not discharged in the past four years, and there is no reasonable potential for flow from the outlets in the future. The majority of any water associated with observed flow events at Outlet 005 is associated with surface run-off from coal conveying operations, or belt and wash down water. Under normal circumstances, and as a control measure, all surface runoff and wash down water from Outlet 005 is pumped into the thickener to be used as process water within the Preparation Plant. As an added control measure, the volume of water used on the belts in minimized to reduce slippage of the coal. In the past four years, Outlet 005 showed flow 14 out of the 48 months (29%). Outlet 006's contributing drainage area includes surface runoff and refuse disposal area underdrain discharge from the Conner Run Impoundment. The original refuse disposal area is near completion. Underdrains within the original refuse disposal area are in place and functioning. The current active refuse disposal area plans were approved with no requirements for underdrains, and no additional underdrains are proposed. Therefore, the placement of refuse is not expected to impact the quality or quantity of the non-precipitation induced discharge. To reduce infiltration into the course refuse, the material is being compacted and sloped to drain off the benches to minimized infiltration into the refuse material. All refuse is loaded into trucks at it is conveyed from the Preparation Plant. The trucks transport it to the refuse disposal where it is placed, compacted and graded to create positive drainage. Lifts are reclaimed upon completion to minimize water infiltration. No refuse is stockpiled and/or stored on site anywhere outside of the approved refuse disposal area. Outlet 020's contributing drainage area includes surface runoff from a clean coal conveyor and stockpile, as well as a parts storage area. Under normal conditions, all water that would normally discharge from Outlets 005 and 020 are pumped to the thickener to be used as process water, and a large amount of the process water is recycled. Preparation Plant operational water is pumped at a maximum rate 3,000 gpm, with the average pump rate being 2,300 to 2,400 gpm. Additionally, water is recycled from the Conner Run Impoundment for use as process water in the preparation plant. Water from the Conner Run Impoundment is pumped at a maximum rate of 2,500 gpm for operational use within the preparation plant. These control measures minimize the volume of water that has to be pumped to the Conner Run Impoundment.

Outlet 002 is associated with the Fish Creek Portal. The Fish Creek Portal was the original entry for the McElroy Mine, and was constructed in the early 1970's. Mining of the remaining coal reserves within the McElroy Mine could take approximately 25 years. Water is pumped from Fish Creek to a settling pond then to an above ground water tank with controlled gravity feed and utilized in the underground mining operations. Water that is not used in the mine overflows through a series of settling ponds and gravity discharges through Outlet 002 and back into Fish Creek. The overflow from Settling Pond 1 is minimized with the installation of level indicator in Settling Pond 1 which automatically shuts off pumps in Fish Creek as well as installation of a pump to recirculate water from the last settling pond back to Settling Pond 1. These measures thereby reduce the discharge from Outlet 002. The usage in the mine dictates the quantity of water that is withdrawn, however, a constant supply of must be kept available in the event of an emergency situation in the mine. The water is utilized for fire suppression, dust suppression underground and wash down water underground. This water is initially pumped from the mine to a settling pond for alkaline treatment (if required) and then discharges to the associated pond Outlet 002. The majority of discharge from Outlet 002 originates from Fish Creek, and returns to Fish Creek from overflow of the settling pond, therefore minimizing impact. All possible control measures to reduce the discharge have been implemented; therefore this activity meets the definition of substantially complete.

Outlets 011, 016, 017, 026, 028, 029, 030, 031 and 033 are associated with Portal Sites, Airshaft Sites and Bleeder Shaft Sites. All the construction has been completed at these sites and the areas are well vegetated and all surface runoff and groundwater is directed to the sediment structures. The groundwater is from natural springs rather than mine water. All possible control measures to reduce the discharge have been implemented; therefore the activities behind these outlets meet the definition of substantially complete.

The outlets in this application are either primarily precipitation induced outlets or the activities behind the outlets meet the definition of substantially complete. Development of either an Aquatic Ecosystem Protection Plan (AEPP) or an Adaptive Management Plan (AMP) would not be effective in reducing the operations impact on the aquatic ecosystem. The guidance is not applicable; therefore no WET or bio-monitoring is required.

SPECIAL SAMPLING CONDITION

This Special sampling condition is being added to the permit to verify the presumption

that discharges from on-bench outlets (Outlets 019, 021, 022, 023 and 027) which flow only in response to precipitation would not be expected to have reasonable potential to cause or contribute to a violation of the narrative water quality standards. The sampling is also intended to document relationship between discharges from on-bench outlets (primarily precipitation induced) and stream quality and to verify that discharges from these outlets only flow when streams have the greatest assimilative capacity. Sample site criteria are being specified to direct sampling to the outlet(s) which are most likely to discharge during any given sampling event in response to precipitation. The sample locations will change in response to the progress of mining.

REOPENER CLAUSE

A reopener clause has been added to this permit and is contained in Section D.7 (Reopener Clause) of this permit.

TABLE 2-IV-A, B and C ANALYSIS CONDITION

The permittee must perform Table 2-IV-A, B, C analyses upon first discharge of Outlets 005, 006, 016, 021, 026, 027, 028 and 031 contained in this permit. Representative outlets are acceptable for discharges which receive drainage from similar mining activities and are of the same outlet type. Two (2) copies of the Table 2-IV, A, B and C analyses and any additional potential pollutant analyses must be submitted to the regional office Permit Supervisor and Inspector Supervisor within 30 days of sampling.

4. Types of effluent limitations:

Technology Based Outlets (14): 002, 005, 016, 019, 020, 021, 022, 023, 026, 027, 028, 029, 030, 031

Water Quality Based Outlets (4): 006, 011, 017, 033

Best Professional Judgement Based Outlets (0):

Special Outlets (0):

Ammonia Outlets (0):

Sewage Outlets (6): 408, 409, 415, 416, 418, 419

Additional Comments: NONE

5. Special Conditions or other monitoring requirements:

Stream Monitoring: DBR-2, DFC2, DLF2, DMR-5, DNF, DUFC3, GRD, GRU, UBR-1, UFC1, ULF1, UMR-4, UNF

Groundwater Monitoring:

6. Does the application contain:

Valley fills/refuse?	N/A
In Ephemeral Streams?	N/A
In Intermittent/Perennial Streams?	N/A

PARAMETER OF CONCERN ASSESSMENT

Updated 8/8/2012

Company Name: McElroy Coal Company
Facility Name:
Stream Name:
Trout Stream ? ○ YES ◉ NO

NPDES No: WV0020834
Outlet No.: 002

Discharges Within 5 Miles of a Drinking Water Intake ? ○ YES ◉ NO

Parameters of Concern Most Commonly Reported in NPDES (e.g., Tables 2-IV A,B,C)	Applicable Water Quality Standards (mg/l or value)	All Concentrations Must Be Reported in mg/l Unless Another Unit Specifically Applies				Does the analysis exceed the State's applicable Water Quality Standard?
		Analysis Reported	Analytical Method Used	Reported MDL Used	Was a Proper MDL Used?	
Hardness	NA	97	2340 C		NA	NA
Temperature ©	NA	14.3			NA	NA
pH	6 - 9 s.u.	8.11	4500 H+B		NA	No
Aluminum (Dissolved)	0.75	0.025	200.7	0.025	Acceptable	No
Ammonia	5.163122407					
Antimony	0.014	0.000126	200.8	0.000126	Acceptable	No
Arsenic	0.01	0.005	200.8	0.005	Acceptable	No
Barium	1					
Beryllium***	0.0000077	0.0000176	200.8	0.0000154	Acceptable	No
Cadmium	0.000264584	0.000121	200.8	0.000121	Acceptable	No
Chloride	230	23.8	4500 Cl B	5	Acceptable	No
Total Chromium*	0.011	0.005	200.7	0.005	Acceptable	No
Copper	0.009089233	0.000174	200.8	0.000174	Acceptable	No
Cyanide	0.005	0.005	4500 Cn E	0.005	Acceptable	No
Iron	1.5	0.51				No
Lead	0.003060588	0.000042	200.8	0.000042	Acceptable	No
Manganese	NA	0.065	200.7	0.025	Acceptable	No
Total Mercury**	0.000012	0.00000081	1631 E	0.0000005	Acceptable	No
Nickel	0.050836037	0.005	200.7	0.005	Acceptable	No
Nitrate (as Nitrate-N)	10					
Nitrite (as Nitrite-N)	1					
Selenium	0.005	0.005	200.7	0.005	Acceptable	No
Silver	0.003591259	0.000254	200.8	0.000254	Acceptable	No
Thallium	0.0017	0.00005	200.8	0.00005	Acceptable	No
Total Residual Chlorine	0.011					
Zinc	0.116763744	0.02	200.7	0.02	Acceptable	No

Enter the Water Analysis with the Approved EPA Method and Lab MDL used for each analysis performed.
Enter a number for the analysis. Do not use symbols (< >) or notations (ND)

* Total Chromium must comply with the State's dissolved criteria for Hexavalent & Trivalent Chromium
** Total Mercury must be analyzed using an EPA approved method which is capable of detecting the State's criteria for Methyl Mercury (i.e., EPA 1631 E)
*** Beryllium analysis must be performed using EPA approved methods as specified in DWWM's 8/31/2011 Guidance Memo (i.e., EPA 200.8 or 200.9)

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PARAMETER OF CONCERN ASSESSMENT

Updated 8/8/2012

Company Name: McElroy Coal Company

Facility Name:

Stream Name:

NPDES No: WV0020834

Outlet No.: 017

This outlet represents 011, 019, 020, 029, 030 and 033

Trout Stream ? ○ YES ◉ NO

Discharges Within 5 Miles of a Drinking Water Intake ? ○ YES ◉ NO

Parameters of Concern Most Commonly Reported in NPDES (e.g., Tables 2-IV A,B,C)	Applicable Water Quality Standards (mg/l or value)	All Concentrations Must Be Reported in mg/l Unless Another Unit Specifically Applies				Does the analysis exceed the State's applicable Water Quality Standard?
		Analysis Reported	Analytical Method Used	Reported MDL Used	Was a Proper MDL Used?	
Hardness	NA	191	2340 C	10	NA	NA
Temperature ©	NA	10.8			NA	NA
pH	6 - 9 s.u.	7.98			NA	No
Aluminum (Dissolved)	0.75	0.01	200.7	0.01	Acceptable	No
Ammonia	6.260950667					
Antimony	0.014	0.000126	200.8	0.000126	Acceptable	No
Arsenic	0.01	0.005	200.7	0.005	Acceptable	No
Barium	1					
Beryllium***	0.0000077	0.0000154	200.8	0.0000154	Acceptable	No
Cadmium	0.000437101	0.000121	200.8	0.000121	Acceptable	No
Chloride	230	10.6	4500 Cl B	5	Acceptable	No
Total Chromium*	0.011	0.005	200.7	0.005	Acceptable	No
Copper	0.016217123	0.01	200.7	0.01	Acceptable	No
Cyanide	0.005	0.005	4500 CN E	0.005	Acceptable	No
Iron	1.5	0.14	200.7	0.01	Acceptable	No
Lead	0.007251034	0.005	200.7	0.005	Acceptable	No
Manganese	NA	0.17	200.7	0.01	Acceptable	No
Total Mercury**	0.000012	0.00000295	1631 E	0.0000005	Acceptable	No
Nickel	0.090181411	0.005	200.7	0.005	Acceptable	No
Nitrate (as Nitrate-N)	10					
Nitrite (as Nitrite-N)	1					
Selenium	0.005	0.005	200.7	0.005	Acceptable	No
Silver	0.011517992	0.01	200.7	0.01	Acceptable	No
Thallium	0.0017	0.00005	200.8	0.00005	Acceptable	No
Total Residual Chlorine	0.011					
Zinc	0.207317467	0.02	200.7	0.02	Acceptable	No

Enter the Water Analysis with the Approved EPA Method and Lab MDL used for each analysis performed.

Enter a number for the analysis. Do not use symbols (< >) or notations (ND)

* Total Chromium must comply with the State's dissolved criteria for Hexavalent & Trivalent Chromium

** Total Mercury must be analyzed using an EPA approved method which is capable of detecting the State's criteria for Methyl Mercury (i.e., EPA 1631 E)

*** Beryllium analysis must be performed using EPA approved methods as specified in DWWM's 8/31/2011 Guidance Memo (i.e., EPA 200.8 or 200.9)

2014-00657201433

PARAMETER OF CONCERN ASSESSMENT

Updated 8/8/2012

Company Name: McElroy Coal Company

Facility Name:

Stream Name:

Trout Stream ? ○ YES ◉ NO

NPDES No: WV0020834

Outlet No.: 022

This outlet represents 023

Discharges Within 5 Miles of a Drinking Water Intake ? ○ YES ◉ NO

Parameters of Concern Most Commonly Reported in NPDES (e.g., Tables 2-IV A,B,C)	Applicable Water Quality Standards (mg/l or value)	All Concentrations Must Be Reported in mg/l Unless Another Unit Specifically Applies				Does the analysis exceed the State's applicable Water Quality Standard?
		Analysis Reported	Analytical Method Used	Reported MDL Used	Was a Proper MDL Used?	
Hardness	NA	509	2340 C		NA	NA
Temperature ©	NA	23.6			NA	NA
pH	6 - 9 s.u.	7.89			NA	No
Aluminum (Dissolved)	0.75	0.01	200.7	0.01	Acceptable	No
Ammonia	3.947004007					
Antimony	0.014	0.000288	200.8	0.000126	Acceptable	No
Arsenic	0.01	0.002	200.7	0.002	Acceptable	No
Barium	1					
Beryllium***	0.0000077	0.0000154	200.8	0.0000154	Acceptable	No
Cadmium	0.000892885	0.000242	200.8	0.000242	Acceptable	No
Chloride	230	2.8	4500 Cl B	2.8	Acceptable	No
Total Chromium*	0.011	0.025	200.7	0.005	Acceptable	Yes
Copper	0.030499383	0.01	200.7	0.01	Acceptable	No
Cyanide	0.005	0.005	4500 CN E	0.005	Acceptable	No
Iron	1.5	0.1	200.7	0.01	Acceptable	No
Lead	0.018580904	0.01	200.7	0.01	Acceptable	No
Manganese	NA	0.01	200.7	0.01	Acceptable	No
Total Mercury**	0.000012	0.0000009	1631 E	0.0000005	Acceptable	No
Nickel	0.168540994	0.005	200.7	0.005	Acceptable	No
Nitrate (as Nitrate-N)	10					
Nitrite (as Nitrite-N)	1					
Selenium	0.005	0.00264	200.7	0.005	Acceptable	No
Silver	0.062166147	0.005	200.7	0.005	Acceptable	No
Thallium	0.0017	0.0001	200.8	0.0001	Acceptable	No
Total Residual Chlorine	0.011					
Zinc	0.387830315	0.007	200.7	0.005	Acceptable	No

Enter the Water Analysis with the Approved EPA Method and Lab MDL used for each analysis performed.

Enter a number for the analysis. Do not use symbols (< >) or notations (ND)

* Total Chromium must comply with the State's dissolved criteria for Hexavalent & Trivalent Chromium

** Total Mercury must be analyzed using an EPA approved method which is capable of detecting the State's criteria for Methyl Mercury (i.e., EPA 1631 E)

*** Beryllium analysis must be performed using EPA approved methods as specified in DWWM's 8/31/2011 Guidance Memo (i.e., EPA 200.8 or 200.9)

2014-00657201433