

STATE OF MISSOURI  
**DEPARTMENT OF NATURAL RESOURCES**

MISSOURI CLEAN WATER COMMISSION



**MISSOURI STATE OPERATING PERMIT**

In compliance with the Missouri Clean Water Law, (Chapter 644 R.S. Mo. as amended, hereinafter, the Law), and the Federal Water Pollution Control Act (Public Law 92-500, 92<sup>nd</sup> Congress) as amended,

Permit No. MO-0003948

Owner: Associated Electric Cooperative, Inc.  
Address: P.O. Box 754, Springfield, MO 65801

Continuing Authority: Same as above  
Address: Same as above

Facility Name: AECI – Prairie Hill Mine  
Address: 4297 Highway F, Clifton Hill, MO 65244

Legal Description: SEE PAGES TWO & THREE  
Latitude/Longitude: SEE PAGES TWO & THREE

Receiving Stream: SEE PAGES TWO & THREE  
First Classified Stream and ID: SEE PAGES TWO & THREE  
USGS Basin & Sub-watershed No.: SEE PAGES TWO & THREE

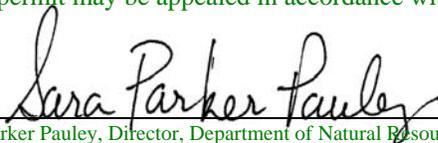
is authorized to discharge from the facility described herein, in accordance with the effluent limitations and monitoring requirements as set forth herein:

**FACILITY DESCRIPTION**

SEE PAGES TWO, THREE & FOUR

This permit authorizes only wastewater discharges under the Missouri Clean Water Law and the National Pollutant Discharge Elimination System; it does not apply to other regulated areas. This permit may be appealed in accordance with Section 644.051.6 of the Law.

June 30, 2010                      September 19, 2012  
Effective Date                      Modified

  
Sara Parker Pauley, Director, Department of Natural Resources

June 29, 2015  
Expiration Date

  
John Madros, Director, Water Protection Program

FACILITY DESCRIPTION (continued)

Outfall #001 – Eliminated. The lagoon was closed and the closure plan was approved May 4, 2012.

Outfall #002 – Eliminated.

Outfall #003 – Eliminated.

Outfall #007 – Surface mine reclamation / utility waste landfill / Firefighting Training Area – SIC #1221

Utility waste landfill receives coal combustion waste

The facility has internally designated this outfall as Outfall G007. Once the area served by this outfall becomes “Post Mining” the outfall will be internally designated as Outfall #V007.

Storm water runoff – sediment pond

Actual flow is dependent upon precipitation.

Legal Description: NE ¼, SW ¼, SE ¼, Sec. 35, T55N, R16W, Randolph County  
UTM Coordinates: X=528496.336, Y=4374524.255

Receiving Stream: Unnamed tributary to Middle Fork Little Chariton River (U)  
First Classified Stream and ID: Middle Fork Little Chariton River (P) (00691)  
USGS Basin & Sub-watershed No.: (10280203-020001)

Outfall #008 - Industrial Stormwater – SIC #1221

Heavy equipment parking, parts storage, oil & grease storage, topsoil storage, diesel fuel storage, and laydown yard

The facility has internally designated this outfall as Outfall SW004.

Storm water runoff – sediment pond

Actual flow is dependent upon precipitation.

Legal Description: SW ¼, NW ¼, NE ¼, Sec. 30, T55N, R15W, Randolph County  
UTM Coordinates: X=531487.639, Y=4376980.568

Receiving Stream: Unnamed tributary to Middle Fork Little Chariton River (U)  
First Classified Stream and ID: Middle Fork Little Chariton River (P) (00691)  
USGS Basin & Sub-watershed No.: (10280203-020001)

Outfall #015 – Eliminated.

Outfall #025 – Eliminated after it was released from the land reclamation requirements.

Outfall #026 – Eliminated after it was released from the land reclamation requirements.

Outfall #035 – Surface mine reclamation and utility waste landfill – SIC #1221

Utility waste landfill receives coal combustion waste and runoff from truck washing area

The facility has internally designated this outfall as Outfall G035. Once the area served by this outfall becomes “Post Mining” the outfall will be internally designated as Outfall #V035.

Storm water runoff – sediment pond

Actual flow is dependent upon precipitation.

Legal Description: NE ¼, NE ¼, NW ¼, Sec. 36, T55N, R16W, Randolph County  
UTM Coordinates: X=529754.8179, Y=4375718.978

Receiving Stream: Middle Fork Little Chariton River (P)  
First Classified Stream and ID: Middle Fork Little Chariton River (P) (00691)  
USGS Basin & Sub-watershed No.: (10280203-020001)

Outfall #039 – Surface mine reclamation – SIC #1221

The facility has internally designated this outfall as Outfall G039. Once the area served by this outfall becomes “Post Mining” the outfall will be internally designated as Outfall #V039.

Storm water runoff – sediment pond

FACILITY DESCRIPTION (continued)

Actual flow is dependent upon precipitation.

Legal Description: SW ¼, NE ¼, NE ¼, Sec. 31, T55N, R15W, Randolph County  
UTM Coordinates: X=531770.785, Y=4375455.701

Receiving Stream: Unnamed tributary to Muncas Creek (U)  
First Classified Stream and ID: Muncas Creek (C) (00693)  
USGS Basin & Sub-watershed No.: (10280203-020002)

Outfall #040 – Surface mine reclamation – SIC #1221

The facility has internally designated this outfall as Outfall G040. Once the area served by this outfall becomes “Post Mining” the outfall will be internally designated as Outfall #V040.

Storm water runoff – sediment pond  
Actual flow is dependent upon precipitation.

Legal Description: NE ¼, SE ¼, SE ¼, Sec. 30, T55N, R15W, Randolph County  
UTM Coordinates: X=532055.261, Y=4375940.886

Receiving Stream: Unnamed tributary to Muncas Creek (U)  
First Classified Stream and ID: Muncas Creek (C) (00693)  
USGS Basin & Sub-watershed No.: (10280203-020002)

Outfall #041 – Eliminated after it was released from the land reclamation requirements.

Outfall #065 – Surface mine reclamation – SIC #1221

The facility has internally designated this outfall as Outfall G065. Once the area served by this outfall becomes “Post Mining” the outfall will be internally designated as Outfall #V065.

Storm water runoff – sediment pond  
Actual flow is dependent upon precipitation.

Legal Description: SW ¼, SW ¼, SW ¼, Sec. 25, T55N, R16W, Randolph County  
UTM Coordinates: X=529190.771, Y=4375889.469

Receiving Stream: Unnamed tributary to Middle Fork Little Chariton River (U)  
First Classified Stream and ID: Middle Fork Little Chariton River (P) (00691)  
USGS Basin & Sub-watershed No.: (10280203-020001)

<b>A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS</b>					PAGE NUMBER 4 of 9	
					PERMIT NUMBER MO-0003948	
The permittee is authorized to discharge from outfall(s) with serial number(s) as specified in the application for this permit. The final effluent limitations shall become effective upon issuance and remain in effect until expiration of the permit. Such discharges shall be controlled, limited and monitored by the permittee as specified below:						
OUTFALL NUMBER AND EFFLUENT PARAMETER(S)	UNITS	FINAL EFFLUENT LIMITATIONS			MONITORING REQUIREMENTS	
		DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MEASUREMENT FREQUENCY	SAMPLE TYPE
<u>Outfall #008</u>						
Flow	MGD	*		*	once/quarter***	24 hr. estimate
Total Suspended Solids	mg/L	100		50	once/quarter***	grab
pH – Units	SU	**		**	once/quarter***	grab
Oil & Grease	mg/L	15		10	once/quarter***	grab
MONITORING REPORTS SHALL BE SUBMITTED <u>QUARTERLY</u> ; THE FIRST REPORT IS DUE <u>OCTOBER 28, 2010</u> . THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.						

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS					PAGE NUMBER 5 of 9	
					PERMIT NUMBER MO-0003948	
The permittee is authorized to discharge from outfall(s) with serial number(s) as specified in the application for this permit. The final effluent limitations shall become effective upon issuance and remain in effect until expiration of the permit. Such discharges shall be controlled, limited and monitored by the permittee as specified below:						
OUTFALL NUMBER AND EFFLUENT PARAMETER(S)	UNITS	FINAL EFFLUENT LIMITATIONS			MONITORING REQUIREMENTS	
		DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MEASUREMENT TYPE	SAMPLE FREQUENCY
<u>Outfalls #007, #035, #039, #040, &amp; #065</u>						
Alkaline Drainage (Note 1), "active mining area"						
Flow	MGD	*		*	once/month	24 hr. estimate
Precipitation (Note 2)	inches	*		*	daily	measured
Iron, Total Recoverable	mg/L	7.0		3.5	once/month	grab
Total Suspended Solids	mg/L	70		35	once/month	grab
pH – Units	SU	**		**	once/month	grab
Alkaline Drainage (Note 1), "post mining area"						
Flow	MGD	*		*	once/month	24 hr. estimate
Precipitation (Note 2)	Inches	*		*	daily	measured
Iron, Total Recoverable	µg/L	*		*	once/quarter***	grab
Settleable Solids	mL/L/hr	0.5			once/month	grab
pH – Units	SU	**		**	once/month	grab
MONITORING REPORTS SHALL BE SUBMITTED <u>QUARTERLY</u> ; THE FIRST REPORT IS DUE <u>OCTOBER 28, 2010</u> . THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.						
<u>Outfalls #007, #035, #039, #040 &amp; #065 "active mining area" &amp; "post mining area"</u>						
Acidity (Note 4)	mg/L	*		*	once/year	grab
Alkalinity (Note 4)	mg/L	*		*	once/year	grab
MONITORING REPORTS SHALL BE SUBMITTED <u>ANNUALLY</u> ; THE FIRST REPORT IS DUE <u>OCTOBER 28, 2010</u> . THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.						

<b>A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS</b>					PAGE NUMBER 6 of 9	
					PERMIT NUMBER MO-0003948	
The permittee is authorized to discharge from outfall(s) with serial number(s) as specified in the application for this permit. The final effluent limitations shall become effective upon issuance and remain in effect until expiration of the permit. Such discharges shall be controlled, limited and monitored by the permittee as specified below:						
OUTFALL NUMBER AND EFFLUENT PARAMETER(S)	UNITS	FINAL EFFLUENT LIMITATIONS			MONITORING REQUIREMENTS	
		DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MEASUREMENT TYPE	SAMPLE FREQUENCY
Outfalls #007 – Firefighting Training School						
Total Petroleum Hydrocarbons	mg/L	*		*	once/quarter***	grab
Chemical Oxygen Demand	mg/L	*		*	once/quarter***	grab
MONITORING REPORTS SHALL BE SUBMITTED <u>QUARTERLY</u> ; THE FIRST REPORT IS DUE <u>OCTOBER 28, 2010</u> . THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.						
<u>Entire Permitted Area – (Note 3)</u>						
Ash buried or disposed	tons				once/year	estimate
MONITORING REPORTS SHALL BE SUBMITTED <u>ANNUALLY</u> ; THE FIRST REPORT IS DUE <u>JANUARY 28, 2011</u> . THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.						
<b>B. STANDARD CONDITIONS</b>						
IN ADDITION TO SPECIFIED CONDITIONS STATED HEREIN, THIS PERMIT IS SUBJECT TO THE ATTACHED <u>Parts I &amp; III</u> STANDARD CONDITIONS DATED <u>October 1, 1980 and August 15, 1994</u> , AND HEREBY INCORPORATED AS THOUGH FULLY SET FORTH HEREIN.						

**A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)**

\* Monitoring requirement only.

\*\* pH is measured in pH units and is not to be averaged. The pH is limited to the range of 6.5-9.0 pH units.

\*\*\* See table below for quarterly sampling

Sample discharge at least once for the months of:	Report is due:
January, February, March (1st Quarter)	April 28
April, May, June (2nd Quarter)	July 28
July, August, September (3rd Quarter)	October 28
October, November, December (4th Quarter)	January 28

Note 1 – The facility shall determine whether the outfall is an “Active Mining Area” or “Post Mining Area” and test and report the applicable parameter results listed in Table A. The facility shall also list on the Discharge Monitoring Reports if the outfall is an “Active Mining Area” or “Post Mining Area”. While landfilling of coal combustion waste is occurring, the associated outfalls shall be considered an “Active Mining Area”.

Note 2 – Precipitation shall be measured at the mine office.

Note 3 – A report must be submitted declaring the tonnage of ash that was buried or disposed of for the entire area covered by this permit for the previous calendar year.

Note 4 – Permittee shall monitor annually for acidity and alkalinity. Where chemical treatment is being used, the sampling shall take place prior to the chemical treatment. Sampling results shall be reported on the regular Discharge Monitoring Reports (DMR's).

C. SPECIAL CONDITIONS

1. Special Definitions

- (a) The term "active mining area" means the areas, on and beneath land, used or disturbed in activity related to the previous extraction, removal, or recovery of coal from its natural deposits.
- (b) The term "post mining area" means the surface area of a coal mine which has been returned to required contour and on which re-vegetation (specifically, seeding or planting) work has commenced.
- (c) The term "alkaline mine drainage" means 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.

2. Amendment to Standard Conditions:

Section A.1-B. is amended to read as follows: Monitoring results shall be recorded and reported on forms provided by the Department, postmarked no later than the 28th day of the month following the completed reporting period. Original signed copies of these and all other reports required herein, shall be submitted to the following address:

Department of Natural Resources  
Land Reclamation Program  
P.O. Box 176  
Jefferson City, MO 65102

Department of Natural Resources  
Northeast Regional Office  
1709 Prospect Drive  
Macon, MO 63552-2602

The monitoring reports shall be submitted to the Water Pollution Control Program and the Land Reclamation Program no later than the 28th day of the month following the completion of the reporting period.

- 3. All outfalls must be clearly marked in the field.
- 4. Report as no-discharge when a discharge does not occur during the report period.
- 5. Samples shall be representative of monitoring period discharges and if any discharge occurs during the monitoring period at least one sample per outfall must be collected and analyzed.
- 6. This permit may be reopened and modified, or alternatively revoked and reissued, to:
  - (a) Comply with any applicable effluent standard or limitation issued or approved under Sections 301(b)(2)(C) and (D), 304(b)(2), and 307(a) (2) of the Clean Water Act, if the effluent standard or limitation so issued or approved:
    - (1) contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or
    - (2) controls any pollutant not limited in the permit.
  - (b) Incorporate new or modified effluent limitations or other conditions, if the result of a waste load allocation study, toxicity test or other information indicates changes are necessary to assure compliance with Missouri's Water Quality Standards.
  - (c) Incorporate new or modified effluent limitations or other conditions if, as the result of a watershed analysis, a Total Maximum Daily Load (TMDL) limitation is developed for the receiving waters which are currently included in Missouri's list of waters of the state not fully achieving the state's water quality standards, also called the 303(d) list.

The permit as modified or reissued under this paragraph shall also contain any other requirements of the Clean Water Act then applicable.

7. Changes in Discharges of Toxic Substances

The permittee shall notify the Director as soon as it knows or has reason to believe:

- (a) That any activity has occurred or will occur which would result in the discharge of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":
  - (1) One hundred micrograms per liter (100 µg/L);
  - (2) Two hundred micrograms per liter (200 µg/L) for acrolein and acrylonitrile; five hundred micrograms per liter (500 µg/L) for 2,5 dinitrophenol and for 2-methyl-4, 6-dinitrophenol; and one milligram per liter (1 mg/L) for antimony;
  - (3) Five (5) times the maximum concentration value reported for the pollutant in the permit application;
  - (4) The level established in Part A of the permit by the Director.
- (b) That they have begun or expect to begin to use or manufacture as an intermediate or final product or byproduct any toxic pollutant, which was not reported in the permit application.

C. SPECIAL CONDITIONS (continued)

8. Water Quality Standards

- (a) Discharges to waters of the state shall not cause a violation of water quality standards rule under 10 CSR 20-7.031, including both specific and general criteria.
  - (b) General Criteria. The following general water quality criteria shall be applicable to all waters of the state at all times including mixing zones. No water contaminant, by itself or in combination with other substances, shall prevent the waters of the state from meeting the following conditions:
    - (1) Waters shall be free from substances in sufficient amounts to cause the formation of putrescent, unsightly or harmful bottom deposits or prevent full maintenance of beneficial uses;
    - (2) Waters shall be free from oil, scum and floating debris in sufficient amounts to be unsightly or prevent full maintenance of beneficial uses;
    - (3) Waters shall be free from substances in sufficient amounts to cause unsightly color or turbidity, offensive odor or prevent full maintenance of beneficial uses;
    - (4) Waters shall be free from substances or conditions in sufficient amounts to result in toxicity to human, animal or aquatic life;
    - (5) There shall be no significant human health hazard from incidental contact with the water;
    - (6) There shall be no acute toxicity to livestock or wildlife watering;
    - (7) Waters shall be free from physical, chemical or hydrologic changes that would impair the natural biological community;
    - (8) Waters shall be free from used tires, car bodies, appliances, demolition debris, used vehicles or equipment and solid waste as defined in Missouri's Solid Waste Law, section 260.200, RSMo, except as the use of such materials is specifically permitted pursuant to section 260.200-260.247.
9. The permittee shall comply with any applicable requirements listed in 10 CSR 20-8.
10. All fueling facilities present on the site shall adhere to applicable federal and state regulations concerning underground storage, above ground storage, and dispensers, including spill prevention, control and counter measures.
11. If fuel storage with secondary containment is provided onsite, the facility shall examine water that has accumulated in secondary containment areas for hydrocarbon odor and presence of sheen. If the presence of hydrocarbons is indicated it must be treated to meet all hydrocarbon parameters listed in Effluent Limitations and Monitoring Requirements before it is released or the water shall be removed and properly treated in accordance with applicable regulations.
12. Substances, regulated by federal law under the Resource Conservation and Recovery Act (RCRA) and Comprehensive Environmental Response, Compensation, and Liability Act (CERLA), that are transported, stored, or used for maintenance, cleaning or repair, shall be managed according to RCRA and CERLA.
13. Any pesticide discharge from any point source shall comply with the requirements of Federal Insecticide, Fungicide and Rodenticide Act, as amended (7 U.S.C. 136 et. seq.) and the use of such pesticides shall be in a manner consistent with its label.

#### GUIDELINES FOR DISCONTINUING SAMPLING OF OUTFALLS (DELETION OF OUTFALLS) AND ADDING OUTFALLS

In accordance with the GUIDELINES FOR DISCONTINUING SAMPLING OF OUTFALLS AND TERMINATING NPDES PERMITS dated August 17, 1994, the permittee shall submit a request to the Department of Natural Resources' Land Reclamation Program to discontinue sampling of outfall(s). Upon approval from the Land Reclamation Program, the permittee shall submit a permit modification application (Form A only) to the Department of Natural Resources' Northeast Regional Office to remove the outfall(s) from the permit. This section is in addition to the GUIDELINES FOR DISCONTINUING SAMPLING OF OUTFALLS AND TERMINATING NPDES PERMITS Section II, (1994). If the facility does not choose to remove the outfall from the permit, the facility shall report "No Discharge" when a discharge does not occur from the outfall.

The permittee shall submit a permit modification application to the Department of Natural Resources' Northeast Regional Office to add outfalls to the permit.

#### REPORTING OF EFFLUENT VIOLATIONS

If any of the sampling results from any of the outfalls show any violation of the permit discharge limitations, written notification shall be made to the Department of Natural Resources within five (5) days of notification of analytical results. Notification shall indicate the date(s) of sample collection, the analytical results, and permit number, and shall include a statement concerning the revisions or modifications in management practices that are being implemented to address the violation of the limitations that occurred.

After a violation has been reported, a sample of storm water runoff resulting from the next rainfall greater than 0.1 inches shall be collected at outfall(s) for which the violation occurred. Analytical results of this sample shall be submitted in writing to the Department of Natural Resources (this section supersedes Standard Conditions Part I, Section B: Noncompliance Notification).

#### RECORDS, RETENTION AND RECORDING

Monitoring reports shall be submitted within 28 days after the end of each quarter. All sampling data shall be maintained by the permittee for a period of five (5) years and shall be supplied to the Department of Natural Resources upon request (supersedes Standard Conditions Part I, Section A, #7 - Records Retention). A copy of all of the sampling data must be submitted with an application for reissuance of this permit.

#### PERMIT TRANSFER

This permit may be transferred to a new owner by submitting an "Application for Transfer of Operating Permit" signed by the seller and buyer of the facility, along with the appropriate modification fee.

#### PERMIT RENEWAL REQUIREMENTS

Unless this permit is terminated, the permittee shall submit an application for the renewal of this permit no later than six (6) months prior to the permit's expiration date. Failure to apply for renewal may result in termination of this permit and enforcement action to compel compliance with this condition and the Missouri Clean Water Law.

#### TERMINATION

In order to terminate this permit, the permittee shall notify the department by submitting Form J, included with the State Operating Permit. The permittee shall complete Form J and mail it to the department at the address noted in the cover letter of this permit. Proper closure of any storage structure is required prior to permit termination. A closure plan shall be submitted to the department and approved prior to initiating closure activities.

#### DUTY OF COMPLIANCE

The permittee shall comply with all conditions of this permit. Any noncompliance with this permit constitutes a violation of Chapter 644, Missouri Clean Water Law, and 10 CSR 20-6. Noncompliance may result in enforcement action, termination of this authorization, or denial of the permittee's request for renewal. This permit authorizes only the activities described in this permit.

**MISSOURI DEPARTMENT OF NATURAL RESOURCES  
FACT SHEET  
FOR THE PURPOSE OF RENEWAL  
OF  
MO-0003948  
AECI – PRAIRIE HILL MINE**

The Federal Water Pollution Control Act ("Clean Water Act" Section 402 Public Law 92-500 as amended) established the National Pollution Discharge Elimination System (NPDES) permit program. This program regulates the discharge of pollutants from point sources into the waters of the United States, and the release of storm water from certain point sources. All such discharges are unlawful without a permit (Section 301 of the "Clean Water Act"). After a permit is obtained, a discharge not in compliance with all permit terms and conditions is unlawful. Missouri State Operating Permits (MSOPs) are issued by the Director of the Missouri Department of Natural Resources (department) under an approved program, operating in accordance with federal and state laws (Federal "Clean Water Act" and "Missouri Clean Water Law" Section 644 as amended). MSOPs are issued for a period of five (5) years unless otherwise specified.

As per [40 CFR Part 124.8(a)] and [10 CSR 20-6.020(1)2.] a Factsheet shall be prepared to give pertinent information regarding the applicable regulations, rationale for the development of effluent limitations and conditions, and the public participation process for the Missouri State Operating Permit (operating permit) listed below.

A Factsheet is not an enforceable part of an operating permit.

This Factsheet is for a Major , Minor , Industrial Facility ; Variance ;  
Master General Permit ; General Permit Covered Facility ; and/or permit with widespread public interest .

**Part I – Facility Information**

Facility Type: IND  
Facility SIC Code(s): 1221

**Facility Description:**

Former mine and reclamation activities stormwater runoff, utility waste landfills, heavy equipment parking, parts storage, oil & grease storage, topsoil storage, diesel fuel storage, and laydown yard, Aerated lagoon / polishing cell, Coal Preparation Plant

**Permit Modification:**

This modification is to eliminate outfalls # 001,025,026 & 041 from the facility description and remove the old schedule of compliance

Have any changes occurred at this facility or in the receiving water body that effects effluent limit derivation?

- No

Application Date: 07/14/2008  
Expiration Date: 01/08/2009  
Last Inspection: 06/09/2003 In Compliance ; Non-Compliance

**OUTFALL(S) TABLE:**

OUTFALL	DESIGN FLOW (gpd)	TREATMENT LEVEL	EFFLUENT TYPE	DISTANCE TO CLASSIFIED SEGMENT (MI)
#007	varies	Primary/BMP	Storm Water	~ 0.43
#008	varies	Primary/BMP	Storm Water	~ 0.72
#035	varies	Primary/BMP	Storm Water	~ 0.01
#039	varies	Primary/BMP	Storm Water	~ 2.09
#040	varies	Primary/BMP	Storm Water	~ 2.46
#065	varies	Primary/BMP	Storm Water	~ 0.28

### Comments:

Previous permits have allowed the facility to add and delete outfalls as needed without Department modification of the permit in accordance with the Department's Guidelines for Discontinuing Sampling of Outfalls and Terminating NPDES Permits dated August 17, 1994. However, it was determined that the facility was not allowed to add outfalls due to anti-degradation requirements and also due to the differing water quality requirements for receiving streams. In addition, data provided by the facility for outfalls was not being properly tracked by the Department's Water Quality Information System which provides water quality data to the EPA's PCS/ICIS databases. Therefore individual outfalls have been established for the outfalls provided by the facility on the permit application. If the facility wants to add additional outfalls to the permit, the facility must request a modification to the permit. This requirement supersedes the Guidelines for Discontinuing Sampling of Outfalls and Terminating NPDES Permits dated August 17, 1994. The previous permit contained alternate permit parameters and limits based on excessive precipitation events based on 40 CFR 434.63. The language in the previous permit that allowed the alternate effluent parameters and limits based 40 CFR 434.63 for excessive precipitation events was removed from the permit as stormwater runoff from those areas served by the outfalls is directed through sediment ponds prior to discharge, which provides primary treatment of those discharges. Outfall #003 is listed as eliminated as the package plant is no longer in service, and has been removed from the site.

During a February 4, 2010 meeting between the Department and AECI staff regarding the permit, AECI staff provided information to the Department regarding a 1965 agreement between the Missouri Department of Conservation and Associated Electric Cooperative (AECI) that requires AECI to discharge a minimum of five cubic feet per second (cfs) from the dam to the Middle Fork Little Chariton River when the lake is at Conservation pool. In addition, the facility provided information that the discharge from the AECI Thomas Hill Power Plant averages a minimum of eight cfs flow which discharges to the Middle Fork Little Chariton River above the outfalls for the AECI Prairie Hill Mine site. Using this information, the Middle Fork Chariton River has an approximate 7Q10 flow greater than five cfs.

Changes from first 10 day review for draft errors includes the following: removal of the labeling of former or closed from the outfall descriptions as the site is in the process of reclaiming the area, removal of Total Petroleum Hydrocarbons (TPH) from Outfall #008 as TPH is a constituent of the parameter Oil & Grease, changing all outfalls to Alkaline Mine Drainage as the site is not considered an acid or ferruginous mine drainage site according to the facility, removing the parameter of Manganese as this parameter only applies to acid or ferruginous mine drainage sites, removal of sulfate, sulfate + chlorides, Arsenic, Cobalt, Barium, Antimony, Zinc, Aluminum, Cadmium, Mercury, Chromium III, Selenium, Chromium VI, Thallium, Lead, Copper, Silver, Beryllium, Nickel, Radium 226 + Radium 228, Gross Alpha Particle Activity, Beta Particle & Photon Radioactivity, and Uranium as these parameters no longer are applicable due to the updated information provided regarding the 7Q10 of the receiving stream and the levels reported by the facility, changed the limitations for Iron as the Effluent Limitation Guidelines apply as there is no longer a reasonable potential to violate water quality standards due to the updated information provided regarding the 7Q10 of the receiving stream, removing Utility Landfill designation from Outfall #065 after receiving information from the facility that coal combustion wastes have never been placed in the area served by this outfall, removal of Note 6 as the site is not considered acid or ferruginous mine drainage site, removal of Special Definitions for acid or ferruginous mine drainage and coal refuse disposal site, Outfalls #025 and #026 are no longer coal prep plants and are now eliminated, changed the language of Special Condition #13 to allow the facility the option to treat petroleum contaminated water instead of only hauling the water to a permitted treatment facility. Outfall #001 was eliminated, the closure plan was approved on May 4, 2011. The lagoon was closed in accordance of the closure plan on October 28, 2011 and the old Schedule of Compliance was removed from the modified permit. Outfall # 041 was eliminated as the outfall was approved by the Department's Land Reclamation Program.. Monitoring data collected in the watershed showed that the effects of surface mining activity on downstream water quality were minimal. All mined lands have been reclaimed in Area 11 and monitoring point VO48 is no longer necessary.

### **Part IIA – Operator Certification Requirements**

As per [10 CSR 20-6.010(8) Terms and Conditions of a Permit], permittee's shall operate and maintain facilities to comply with the Missouri Clean Water Law and applicable permit conditions and regulations. Operators or supervisors of operations at regulated wastewater treatment facilities shall be certified in accordance with [10 CSR 20-9.020(2)] and any other applicable state law or regulation.

Not Applicable ; This facility is not required to have a certified operator.

### **Part IIB– Operational Monitoring**

As per [10 CSR 20-9.010(4)), the facility is not required to conduct operational monitoring.

### **Part III – Receiving Stream Information**

**APPLICABLE DESIGNATIONS OF WATERS OF THE STATE:**

As per Missouri’s Effluent Regulations [10 CSR 20-7.015], the waters of the state are divided into the below listed seven (7) categories. Each category lists effluent limitations for specific parameters, which are presented in each outfall’s Effluent Limitation Table and further discussed in the Derivation & Discussion of Limits section.

- Missouri or Mississippi River [10 CSR 20-7.015(2)]:
- Lake or Reservoir [10 CSR 20-7.015(3)]:
- Losing [10 CSR 20-7.015(4)]:
- Metropolitan No-Discharge [10 CSR 20-7.015(5)]:
- Special Stream [10 CSR 20-7.015(6)]:
- Subsurface Water [10 CSR 20-7.015(7)]:
- All Other Waters [10 CSR 20-7.015(8)]:

10 CSR 20-7.031 Missouri Water Quality Standards, the department defines the Clean Water Commission water quality objectives in terms of "water uses to be maintained and the criteria to protect those uses." The receiving stream and/or 1<sup>st</sup> classified receiving stream’s beneficial water uses to be maintained are located in the Receiving Stream Table located below in accordance with [10 CSR 20-7.031(3)].

**RECEIVING STREAM(S) TABLE:**

WATERBODY NAME	CLASS	WBID	DESIGNATED USES*	8-DIGIT HUC	EDU**
Unnamed tributary to Middle Fork Little Chariton River	U	NA	General Criteria	10280203	Central Plains/ Grand/ Chariton
Middle Fork Little Chariton River	P	00691	LWW, AQL, DWS, WBC-B***		
Unnamed tributary to Muncas Creek	U	NA	General Criteria		
Muncas Creek	C	00639	AQL, LWW, WBC-B***		

\* - Irrigation (IRR), Livestock & Wildlife Watering (LWW), Protection of Warm Water Aquatic Life and Human Health-Fish Consumption (AQL), Cool Water Fishery(CLF), Cold Water Fishery (CDF), Whole Body Contact Recreation (WBC), Secondary Contact Recreation (SCR), Drinking Water Supply (DWS), Industrial (IND), Groundwater (GRW).

\*\* - Ecological Drainage Unit

\*\*\* - UAA has not been conducted.

### **Part IV – Rationale and Derivation of Effluent Limitations & Permit Conditions**

**ALTERNATIVE EVALUATIONS FOR NEW FACILITIES:**

As per [10 CSR 20-7.015(4)(A)], discharges to losing streams shall be permitted only after other alternatives including land application, discharges to a gaining stream and connection to a regional wastewater treatment facility have been evaluated and determined to be unacceptable for environmental and/or economic reasons.

Not Applicable ;

The facility does not discharge to a Losing Stream as defined by [10 CSR 20-2.010(36)] & [10 CSR 20-7.031(1)(N)], or is an existing facility.

**ANTI-BACKSLIDING:**

A provision in the Federal Regulations [CWA §303(d)(4); CWA §402(c); 40 CFR Part 122.44(I)] that requires a reissued permit to be as stringent as the previous permit with some exceptions.

- All limits in this operating permit are at least as protective as those previously established; therefore, backsliding does not apply.

**ANTIDEGRADATION:**

In accordance with Missouri’s Water Quality Standard [10 CSR 20-7.031(2)], the department is to document by means of Antidegradation Review that the use of a water body’s available assimilative capacity is justified. Degradation is justified by documenting the socio-economic importance of a discharging activity after determining the necessity of the discharge.

- Renewal no degradation proposed and no further review necessary.

**AREA-WIDE WASTE TREATMENT MANAGEMENT & CONTINUING AUTHORITY:**

As per [10 CSR 20-6.010(3)(B)], ...An applicant may utilize a lower preference continuing authority by submitting, as part of the application, a statement waiving preferential status from each existing higher preference authority, providing the waiver does not conflict with any area-wide management plan approved under section 208 of the Federal Clean Water Act or any other regional sewage service and treatment plan approved for higher preference authority by the department.

**BIO-SOLIDS, SLUDGE, & SEWAGE SLUDGE:**

Bio-solids are solid materials resulting from wastewater treatment that meet federal and state criteria for beneficial uses (i.e. fertilizer). Sludge is any solid, semi-solid, or liquid waste generated from a municipal, commercial, or industrial wastewater treatment plant, water supply treatment plant, or air pollution control facility or any other such waste having similar characteristics and effect. Sewage sludge is solids, semi-solids, or liquid residue generated during the treatment of domestic sewage in a treatment works; including but not limited to, domestic septage; scum or solids removed in primary, secondary, or advanced wastewater treatment process; and a material derived from sewage sludge. Sewage sludge does not include ash generated during the firing of sewage sludge in a sewage sludge incinerator or grit and screening generated during preliminary treatment of domestic sewage in a treatment works.

Applicable (renewal and modifications to existing operating permits) ;

This facility has been approved to land apply as per Permit Standard Conditions III and a department approved bio-solids management plan.

**COMPLIANCE AND ENFORCEMENT:**

Enforcement is the action taken by the Water Protection Program (WPP) to bring an entity into compliance with the Missouri Clean Water Law, its implementing regulations, and/or any terms and conditions of an operating permit. The primary purpose of the enforcement activity in the WPP is to resolve violations and return the entity to compliance.

Not Applicable ;

The permittee/facility is not currently under Water Protection Program enforcement action.

**PRETREATMENT PROGRAM:**

The reduction of the amount of pollutants, the elimination of pollutants, or the alteration of the nature of pollutant properties in wastewater prior to or in lieu of discharging or otherwise introducing such pollutants into a Publicly Owned Treatment Works [40 CFR Part 403.3(q)].

Not Applicable ;

The permittee, at this time, is not required to have a Pretreatment Program or does not have an approved pretreatment program.

**FLOW BASED PERMITTING:**

A standard mass-balance equation cannot be calculated for storm water from this facility because the flow from the facility and flow in the receiving stream cannot be determined for conditions on any given day. The amount of storm water discharged from the facility will vary based on previous rainfall, soil saturation, humidity, detention time, BMPs, surface permeability, etc. Flow in the receiving stream will vary based on similar climactic conditions, size of watershed, amount of surfaces with reduced permeability (houses, parking lots, and the like) in the watershed, hydrogeology, topography, etc.

It is due to the items stated above that staff drafting this fact sheet are unable to perform statistical Reasonable Potential Analysis and calculate Wasteload Allocations via a mass-balance equation for effluent limit determination. However, staff may use their best professional judgment in determining if a facility has a potential to violate Missouri's Water Quality Standards. Effluent limitations are based on actual criteria that are subjected to Long Term Averages and then converted into Maximum Daily Limits or Average Monthly Limits.

**REMOVAL EFFICIENCY:**

Removal efficiency is a method by which the Federal Regulations define Secondary Treatment and Equivalent to Secondary Treatment, which applies to Biochemical Oxygen Demand 5-day (BOD<sub>5</sub>) and Total Suspended Solids (TSS) for Publicly Owned Treatment Works (POTWs)/municipals. Please see the United States Environmental Protection Agency's (EPA) website for interpretation of percent removal requirements for National Pollutant Discharge Elimination System Permit Application Requirements for Publicly Owned Treatment Works and Other Treatment Works Treating Domestic Sewage @ [www.epa.gov/fedrgstr/EPA-WATER/1999/August/Day-04/w18866.htm](http://www.epa.gov/fedrgstr/EPA-WATER/1999/August/Day-04/w18866.htm).

Not Applicable ;

Influent monitoring is not being required to determine percent removal.

**SANITARY SEWER OVERFLOWS (SSOs), BYPASSES, INFLOW & INFILTRATION (I&I) – PREVENTION/REDUCTION:**

Sanitary Sewer Systems (SSSs) are municipal wastewater collection system that convey domestic, commercial, and industrial wastewater, and limited amounts of infiltrated groundwater and storm water (i.e. I&I), to a POTW. SSSs are not designed to collect large amounts of storm water runoff from precipitation events.

Not Applicable ;

This facility is not required to develop or implement a program for maintenance and repair of the collection system; however, it is a violation of Missouri State Environmental Laws and Regulations to allow untreated wastewater to discharge to waters of the state.

**SCHEDULE OF COMPLIANCE (SOC):**

A schedule of remedial measures included in a permit, including an enforceable sequence of interim requirements (actions, operations, or milestone events) leading to compliance with the Missouri Clean Water Law, its implementing regulations, and/or the terms and conditions of an operating permit.

Not Applicable ;

**STORM WATER POLLUTION PREVENTION PLAN (SWPPP):**

In accordance with 40 CFR 122.44(k) *Best Management Practices (BMPs)* to control or abate the discharge of pollutants when: (1) Authorized under section 304(e) of the Clean Water Act (CWA) for the control of toxic pollutants and hazardous substances from ancillary industrial activities; (2) Authorized under section 402(p) of the CWA for the control of storm water discharges; (3) Numeric effluent limitations are infeasible; or (4) the practices are reasonably necessary to achieve effluent limitations and standards or to carry out the purposes and intent of the CWA.

Not Applicable ;

At this time, the permittee is not required to develop and implement a SWPPP as the facility has stormwater runoff retention basins for treatment.

**VARIANCE:**

As per the Missouri Clean Water Law § 644.061.4, variances shall be granted for such period of time and under such terms and conditions as shall be specified by the commission in its order. The variance may be extended by affirmative action of the commission. In no event shall the variance be granted for a period of time greater than is reasonably necessary for complying with the Missouri Clean Water Law §§644.006 to 644.141 or any standard, rule or regulation promulgated pursuant to Missouri Clean Water Law §§644.006 to 644.141.

Not Applicable ;

This operating permit is not drafted under premises of a petition for variance.

**WASTELOAD ALLOCATIONS (WLA) FOR LIMITS:**

As per [10 CSR 20-2.010(78)], the amount of pollutant each discharger is allowed by the department to release into a given stream after the department has determined total amount of pollutant that may be discharged into that stream without endangering its water quality.

Not Applicable ;

Wasteload allocations were not calculated

**WLA MODELING:**

There are two general types of effluent limitations, technology-based effluent limits (TBELs) and water quality based effluent limits (WQBELs). If TBELs do not provide adequate protection for the receiving waters, then WQBEL must be used.

Not Applicable ;

A WLA study was either not submitted or determined not applicable by department staff.

**WATER QUALITY STANDARDS:**

Per [10 CSR 20-7.031(3)], General Criteria shall be applicable to all waters of the state at all times including mixing zones. Additionally, [40 CFR 122.44(d)(1)] directs the department to establish in each NPDES permit to include conditions to achieve water quality established under Section 303 of the Clean Water Act, including State narrative criteria for water quality.

**WHOLE EFFLUENT TOXICITY (WET) TEST:**

A WET test is a quantifiable method of determining if a discharge from a facility may be causing toxicity to aquatic life by itself, in combination with or through synergistic responses when mixed with receiving stream water.

Not Applicable ;

At this time, the permittee is not required to conduct WET test for this facility.

**303(d) LIST & TOTAL MAXIMUM DAILY LOAD (TMDL):**

Section 303(d) of the federal Clean Water Act requires that each state identify waters that are not meeting water quality standards and for which adequate water pollution controls have not been required. Water quality standards protect such beneficial uses of water as whole body contact (such as swimming), maintaining fish and other aquatic life, and providing drinking water for people, livestock

and wildlife. The 303(d) list helps state and federal agencies keep track of waters that are impaired but not addressed by normal water pollution control programs. A TMDL is a calculation of the maximum amount of a given pollutant that a body of water can absorb before its water quality is affected. If a water body is determined to be impaired as listed on the 303(d) list, then a watershed management plan will be developed that shall include the TMDL calculation

Not Applicable ;

This facility does not discharge to a 303(d) listed stream.

## **Part V – Effluent Limits Determination**

### **Outfall #008**

#### **EFFLUENT LIMITATIONS TABLE:**

PARAMETER	UNIT	BASIS FOR LIMITS	DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MODIFIED	PREVIOUS PERMIT LIMITATIONS
Flow	MGD	1	*		*	No	S
Total Suspended Solids	mg/L	1/4	100		50	YES	100/
pH	SU	1/4	6.5 - 9		6.5 - 9	YES	6 - 9
Oil & Grease	°C	1/5	15		10	YES	**
MONITORING FREQUENCY	Please see Minimum Sampling and Reporting Frequency Requirements in the Derivation and Discussion Section below.						

\* - Monitoring requirement only.

\*\*\* - Parameter not previously established in previous state operating permit.

#### Basis for Limitations Codes:

- |  |                                    |
|--|------------------------------------|
| 1. State or Federal Regulation/Law       | 7. Antidegradation Policy          |
| 2. Water Quality Standard (includes RPA) | 8. Water Quality Model             |
| 3. Water Quality Based Effluent Limits   | 9. Best Professional Judgment      |
| 4. Lagoon Policy                         | 10. TMDL or Permit in lieu of TMDL |
| 5. Ammonia Policy                        | 11. WET Test Policy                |
| 6. Dissolved Oxygen Policy               | 12. Antidegradation Review         |

#### **OUTFALL #008 – DERIVATION AND DISCUSSION OF LIMITS:**

- **Flow.** In accordance with [40 CFR Part 122.44(i)(1)(ii)] the volume of effluent discharged from each outfall is needed to assure compliance with permitted effluent limitations. If the permittee is unable to obtain effluent flow, then it is the responsibility of the permittee to inform the department, which may require the submittal of an operating permit modification.
- **Total Suspended Solids (TSS).** Effluent limitations of 100 mg/L as a Daily Maximum and 50 mg/L as a Monthly Average are applicable to this facility and are consistent with other storm water permits.
- **pH.** Effluent limitation range is from 6.5 to 9.0 Standard pH Units (SU), as per [10 CSR 20-7.031(4)(E)]. pH is not to be averaged.
- **Oil & Grease.** Conventional pollutant, effluent limitation for protection of aquatic life; 10 mg/L Monthly Average, 15 mg/L Daily Maximum are applicable to this facility.
- **Minimum Sampling and Reporting Frequency Requirements.**

PARAMETER	SAMPLING FREQUENCY	REPORTING FREQUENCY
FLOW	ONCE/MONTH	ONCE/MONTH
BOD <sub>5</sub>	ONCE/MONTH	ONCE/MONTH
TSS	ONCE/MONTH	ONCE/MONTH
pH	ONCE/MONTH	ONCE/MONTH
TEMPERATURE	ONCE/MONTH	ONCE/MONTH
AMMONIA AS N	ONCE/MONTH	ONCE/MONTH
FECAL COLIFORM	ONCE/MONTH	ONCE/MONTH

**Outfalls #007, #035, #039, #040 & #065 – “Active Mining”**

**EFFLUENT LIMITATIONS TABLE:**

PARAMETER	UNIT	BASIS FOR LIMITS	DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MODIFIED	PREVIOUS PERMIT LIMITATIONS
Flow	MGD	1	*		*	No	S
Precipitation	inches	9	*		*	No	S
Total Suspended Solids	mg/L	1	70		35	No	S
Acidity	mg/L	9	*		*	No	S
Alkalinity	mg/L	9	*		*	No	S
pH	SU	1	6.5 - 9		6.5 - 9	YES	6 - 9
Iron, TR	µg/L	1	7.0		3.5	No	S
Total Petroleum Hydrocarbons (Outfall #007 only)	mg/L	9	*		*	Yes	**
Chemical Oxygen Demand (Outfall #007 only)	mg/L	9	*		*	Yes	**
MONITORING FREQUENCY	Please see Minimum Sampling and Reporting Frequency Requirements in the Derivation and Discussion Section below.						

\* - Monitoring requirement only.

\*\* - Parameter not previously established in previous state operating permit.

Note 6 – This limit only applies to Acid or Ferruginous Mine Drainage outfalls.

S – Same as previous operating permit

**Basis for Limitations Codes:**

- |  |                                    |
|--|------------------------------------|
| 1. State or Federal Regulation/Law       | 7. Antidegradation Policy          |
| 2. Water Quality Standard (includes RPA) | 8. Water Quality Model             |
| 3. Water Quality Based Effluent Limits   | 9. Best Professional Judgment      |
| 4. Lagoon Policy                         | 10. TMDL or Permit in lieu of TMDL |
| 5. Ammonia Policy                        | 11. WET Test Policy                |
| 6. Dissolved Oxygen Policy               | 12. Antidegradation Review         |

**Outfalls #007, #035, #039, #040, & #065 – “Active Mining” – DERIVATION AND DISCUSSION OF LIMITS:**

- **Flow.** In accordance with [40 CFR Part 122.44(i)(1)(ii)] the volume of effluent discharged from each outfall is needed to assure compliance with permitted effluent limitations. If the permittee is unable to obtain effluent flow, then it is the responsibility of the permittee to inform the department, which may require the submittal of an operating permit modification.
- **Precipitation.** Monitoring only requirement. Precipitation data obtained from DMRs is used to aid in the determination of this facilities specific runoff coefficient and theoretical loading in the watershed.
- **pH.** Effluent limitation range is from 6.5 to 9.0 Standard pH Units (SU), as per [10 CSR 20-7.031(4)(E)]. pH is not to be averaged
- **Total Suspended Solids (TSS).** Effluent limitations from the previous state operating permit have been reassessed and verified that they are still protective of the receiving stream’s Water Quality. Therefore, effluent limitations have been retained from previous state operating permit, please see the **APPLICABLE DESIGNATION OF WATERS OF THE STATE** sub-section of the **Receiving Stream Information.**
- **Iron, Total Recoverable.** Effluent limitations from the previous state operating permit have been reassessed and verified that they are still protective of the receiving stream’s Water Quality. Therefore, effluent limitations have been retained from previous state operating permit, please see the **APPLICABLE DESIGNATION OF WATERS OF THE STATE** sub-section of the **Receiving Stream Information.**
- **Acidity.** Monitoring only requirement.
- **Alkalinity.** Monitoring only requirement.
- **Total Petroleum Hydrocarbons.** Outfall #007 only – Monitoring requirement only. The firefighting training was previously associated with Outfall #025, but is now associated with Outfall #007 as the site was relocated. The total petroleum hydrocarbon pollutant is introduced through the fire fighting training school activities.

- **Chemical Oxygen Demand.** Outfall #007 only – Monitoring requirement only. The firefighting training was previously associated with Outfall #025, but is now associated with Outfall #007 as the site was relocated. The fire fighting training school activities may have the potential to introduce a chemical oxygen demand.
- **Minimum Sampling and Reporting Frequency Requirements.**

PARAMETER	SAMPLING FREQUENCY	REPORTING FREQUENCY
FLOW	ONCE/MONTH	ONCE/QUARTER
PRECIPITATION	ONCE/DAY	ONCE/QUARTER
TSS	ONCE/MONTH	ONCE/QUARTER
ACIDITY	ONCE/YEAR	ONCE/YEAR
ALKALINITY	ONCE/YEAR	ONCE/YEAR
pH	ONCE/MONTH	ONCE/QUARTER
IRON, TR	ONCE/MONTH	ONCE/QUARTER
TOTAL PETROLEUM HYDROCARBONS	ONCE/QUARTER	ONCE/QUARTER
CHEMICAL OXYGEN DEMAND	ONCE/QUARTER	ONCE/QUARTER

**Outfalls #007, #035, #039, #040 & #065 – “Post Mining”**

**EFFLUENT LIMITATIONS TABLE:**

PARAMETER	UNIT	BASIS FOR LIMITS	DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MODIFIED	PREVIOUS PERMIT LIMITATIONS
Flow	MGD	1	*		*	No	S
Precipitation	inches	9	*		*	No	S
Settleable Solids	mL/L/hr	1	0.5			No	S
Acidity	mg/L	9	*		*	YES	**
Alkalinity	mg/L	9	*		*	YES	**
pH	SU	1	6.5 - 9		6.5 - 9	YES	6 - 9
Iron, TR	µg/L	9	*		*	YES	**
Total Petroleum Hydrocarbons (Outfall #007 only)	mg/L	9	*		*	YES	**
Chemical Oxygen Demand (Outfall #007 only)	mg/L	9	*		*	Yes	**
MONITORING FREQUENCY	Please see Minimum Sampling and Reporting Frequency Requirements in the Derivation and Discussion Section below.						

\* - Monitoring requirement only.

\*\* - Parameter not previously established in previous state operating permit.

Note 6 – This limit only applies to Acid or Ferruginous Mine Drainage outfalls.

**Basis for Limitations Codes:**

- |  |                                    |
|--|------------------------------------|
| 7. State or Federal Regulation/Law       | 7. Antidegradation Policy          |
| 8. Water Quality Standard (includes RPA) | 8. Water Quality Model             |
| 9. Water Quality Based Effluent Limits   | 9. Best Professional Judgment      |
| 10. Lagoon Policy                        | 10. TMDL or Permit in lieu of TMDL |
| 11. Ammonia Policy                       | 11. WET Test Policy                |
| 12. Dissolved Oxygen Policy              | 12. Antidegradation Review         |

**Outfalls #007, #035, #039, #040 & #065 – “Post Mining” – DERIVATION AND DISCUSSION OF LIMITS:**

- **Flow.** In accordance with [40 CFR Part 122.44(i)(1)(ii)] the volume of effluent discharged from each outfall is needed to assure compliance with permitted effluent limitations. If the permittee is unable to obtain effluent flow, then it is the responsibility of the permittee to inform the department, which may require the submittal of an operating permit modification.
- **Precipitation.** Monitoring only requirement. Precipitation data obtained from DMRs is used to aid in the determination of this facilities specific runoff coefficient and theoretical loading in the watershed.

- **pH.** Effluent limitation range is from 6.5 to 9.0 Standard pH Units (SU), as per [10 CSR 20-7.031(4)(E)]. pH is not to be averaged
- **Settleable Solids.** Effluent limitations from the previous state operating permit have been reassessed and verified that they are still protective of the receiving stream's Water Quality.
- **Iron, Total Recoverable.** Monitoring only requirement.
- **Acidity.** Monitoring only requirement.
- **Alkalinity.** Monitoring only requirement.
- **Total Petroleum Hydrocarbons.** Outfall #007 only – Monitoring requirement only. The firefighting training was previously associated with Outfall #025, but is now associated with Outfall #007 as the site was relocated. The total petroleum hydrocarbon pollutant is introduced through the fire fighting training school activities.
- **Chemical Oxygen Demand.** Outfall #007 only – Monitoring requirement only. The firefighting training was previously associated with Outfall #025, but is now associated with Outfall #007 as the site was relocated. The fire fighting training school activities may have the potential to introduce a chemical oxygen demand.
- **Minimum Sampling and Reporting Frequency Requirements.**

PARAMETER	SAMPLING FREQUENCY	REPORTING FREQUENCY
FLOW	ONCE/MONTH	ONCE/QUARTER
PRECIPITATION	ONCE/DAY	ONCE/QUARTER
SETTLEABLE SOLIDS	ONCE/MONTH	ONCE/QUARTER
ACIDITY	ONCE/QUARTER	ONCE/QUARTER
ALKALINITY	ONCE/QUARTER	ONCE/QUARTER
PH	ONCE/MONTH	ONCE/QUARTER
IRON, TR	ONCE/QUARTER	ONCE/QUARTER
TOTAL PETROLEUM HYDROCARBONS	ONCE/QUARTER	ONCE/QUARTER
CHEMICAL OXYGEN DEMAND	ONCE/QUARTER	ONCE/QUARTER

#### **Entire Permitted Area**

- **Ash Buried or Disposed.** This reporting requirement is retained from the previous permit.

#### **PART VI: Finding of Affordability**

Pursuant to Section 644.145, RSMo., the Department is required to determine whether a permit or decision is affordable and makes a finding of affordability for certain permitting and enforcement decisions. This requirement applies to discharges from combined or separate sanitary sewer systems or publically-owned treatment works.

Not Applicable;

The Department is not required to determine findings of affordability because the facility is not a **combined or separate sanitary sewer system for a publically-owned treatment works.**

## **Part VI – Administrative Requirements**

On the basis of preliminary staff review and the application of applicable standards and regulations, the Department, as administrative agent for the Missouri Clean Water Commission, proposes to issue a permit(s) subject to certain effluent limitations, schedules, and special conditions contained herein and within the operating permit. The proposed determinations are tentative pending public comment.

### **PUBLIC NOTICE:**

The department shall give public notice that a draft permit has been prepared and its issuance is pending. Additionally, public notice will be issued if a public hearing is to be held because of a significant degree of interest in and water quality concerns related to a draft permit. No public notice is required when a request for a permit modification or termination is denied; however, the requester and permittee must be notified of the denial in writing.

The department must issue public notice of a pending operating permit or of a new or reissued statewide general permit. The public comment period is the length of time not less than 30 days following the date of the public notice which interested persons may submit written comments about the proposed permit.

For persons wanting to submit comments regarding this proposed operating permit, then please refer to the Public Notice page located at the front of this draft operating permit. The Public Notice page gives direction on how and where to submit appropriate comments.

- The Public Notice period for this operating permit is tentatively schedule to begin on (DATE) or is in process.

- The Public Notice period for this operating permit was from (DATE) to (DATE). Responses to the Public Notice of this operating permit warrant the modification of effluent limits and/or the terms and conditions of this permit. (Please explain). (Also if applicable – Due to the major modifications of this permit, this operating permit is to be placed on Public Notice again, which is tentatively scheduled to begin on (DATE) or is in process.

- The Public Notice period for this operating permit was from (DATE) to (DATE). No responses received or responses to the Public Notice of this operating permit do not warrant the modification of effluent limits and/or the terms and conditions of this permit.

This permit will not be public noticed because it is only a modification to remove outfalls#001,025,026 &041.

**DATE OF FACT SHEET:** APRIL 23, 2010

Submitted by

Brant Farris, Environmental Specialist  
Northeast Regional Office  
(660) 385-8000  
[brant.farris@dnr.mo.gov](mailto:brant.farris@dnr.mo.gov)

Reviewed by

Lantz Tipton, Environmental Specialist  
Northeast Regional Office  
(660) 385-8000  
[lantz.tipton@dnr.mo.gov](mailto:lantz.tipton@dnr.mo.gov)

\_\_\_\_\_  
Brant Farris

\_\_\_\_\_  
Date

\_\_\_\_\_  
Lantz Tipton

\_\_\_\_\_  
Date

This permit was modified on May 29, 2012

By

Thabit. H. Hamoud  
Missouri Department of Natural Resources  
Water Protection Section  
7545 S. Lindbergh, Suite 210, St. Louis, Missouri 63125  
(314) 416-2453  
[thabit.hamoud@dnr.mo.gov](mailto:thabit.hamoud@dnr.mo.gov)