

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, 92nd Congress) as amended,

Permit No. MO-0095575

Owner: Sikeston Board of Municipal Utilities
Address: P.O. Box 370, Sikeston, MO 63801

Continuing Authority: same as above
Address: same as above

Facility Name: Sikeston Power Station
Facility Address: 1551 West Wakefield, Sikeston, MO 63801

Legal Description: NW¼, SW¼, Sec. 23, T26N, R13E, Scott County
UTM Zone 15 Coordinates: Outfall #003 X= 800984, Y= 4087203

Receiving Stream: Richland Drainage Ditch #4
First Classified Stream and ID: Ditch #4 (P) WBID 3046 (AQL, LWW, WBC-B)
USGS Basin & Sub-watershed No.: Ash Slough Ditch 08020204-0604

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

FACILITY DESCRIPTION

Coal Fired Power Plant; SIC #4911; see page two.
Average net 235 MW power generation.

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 Sections 640.013, 621.250, and 644.051.6 of the Law.

March 1, 2015
Effective Date

Sara Parker Pauley, Director, Department of Natural Resources

December 31, 2017
Expiration Date

John Madras, Director, Water Protection Program

FACILITY DESCRIPTION (continued):

Outfall #001 – Eliminated.

The non-contact cooling water and cooling tower blowdown was routed to outfall #003 (10/2008).

Outfall #002 – Eliminated

This outfall was eliminated prior to the last permit cycle.

Outfall #003 – Coal Fired Power Plant; SIC #4911

A certified operator is not required.

This outfall delivers contributions from the process waste pond which incorporates bottom ash pond flow, fly ash pond flow, and coal and limestone pile runoff. The bottom ash pond receives boiler blowdown, cooling tower basin cleaning discharge, bottom ash handling wastewater, maintenance operations wastewater, and precipitation. The fly ash pond receives precipitation; fly ash is pneumatically conveyed.

Design flow 3.93 million gallons per day.

Actual flow average 2.71 million gallons per day.

SM1 – Upstream compliance monitoring point

Zone 15 UTM X = 800886 Y = 4087234

Ditch #4, sampling point on north side of W. Wakefield Ave. bridge

SM2 – Downstream compliance monitoring point

Zone 15 UTM X = 800909, Y = 4086795

Ditch #4, sampling point located on the north side of the small bridge next to the facility main building

Domestic wastewater and water from the scrubber is sent to the Sikeston WWTP, MO-0035009.

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

EFFLUENT PARAMETER(S)	UNITS	FINAL EFFLUENT LIMITATIONS			MONITORING REQUIREMENTS	
		DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MEASUREMENT FREQUENCY	SAMPLE TYPE
Flow	MGD	*		*	once/day	24 hr. total
Temperature (at SM2)	°F	90.0		90.0	once/week	grab
ΔT (Note 1)	°F	5.0		5.0	once/week	grab
pH – Units	SU	**			once/month	grab
Arsenic (total recoverable)	μg/L	*		*	once/month	grab
Boron (total recoverable)	μg/L	*		*	once/month	grab
Chlorine, Total Residual (Note 2)	μg/L	17 (130ML)		8 (130ML)	once/month	grab
Chlorine, Freely Available	μg/L	*		*	once/quarter ◇	grab
Copper (total recoverable)	μg/L	17.1		7.1	once/month	grab
Iron (total recoverable)	μg/L	1000		808	once/month	grab
Magnesium (total recoverable)	μg/L	*		*	once/month	grab
Manganese (total recoverable)	μg/L	*		*	once/month	grab
Molybdenum (total recoverable)	μg/L	*		*	once/month	grab
Nitrate (as N)	mg/L	*		*	once/month	grab
Oil & Grease	mg/L	*		*	once/month	grab
Selenium (total recoverable)	μg/L	*		*	once/month	grab
Sulfate (as SO ₄)	mg/L	*		*	once/month	grab
Total Suspended Solids	mg/L	50		30	once/month	grab
Zinc (total recoverable)	μg/L	*		*	once/month	grab
Nitrogen (total)	mg/L	*		*	once/quarter ◇	grab
Phosphorus (total)	mg/L	*		*	once/quarter ◇	grab
MONITORING REPORTS SHALL BE SUBMITTED <u>QUARTERLY</u> ; THE FIRST REPORT IS DUE <u>JULY 28, 2015</u> . THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.						
Acute Whole Effluent Toxicity (Note 3)	TU _a	*		*	once/year	grab
<u>WET TEST</u> REPORTS SHALL BE SUBMITTED <u>ANNUALLY</u> ; THE FIRST REPORT IS DUE <u>JULY 28, 2015</u> .						

* Monitoring Only

** pH: to be maintained between 6.5 and 9.0 standard units, not to be averaged

◇ Quarterly sampling—see table next page

(see additional notes, next page)

SM1		MONITORING REQUIREMENTS		
Upstream monitoring point SM1 shall be monitored by the permittee as specified below:				
PARAMETER(S)	UNITS	MONITORING REQUIREMENTS		
		MEASUREMENT FREQUENCY	SAMPLE TYPE	LOCATION
Temperature	°F	once/week	grab	Ditch #4, sampling point on north side of W. Wakefield Ave. bridge

SM2		MONITORING REQUIREMENTS		
Downstream monitoring point SM2 shall be monitored by the permittee as specified below:				
PARAMETER(S)	UNITS	MONITORING REQUIREMENTS		
		MEASUREMENT FREQUENCY	SAMPLE TYPE	LOCATION
Temperature	°F	once/week	grab	Ditch #4, sampling point located on the north side of the small bridge next to the facility main building

◇ Quarterly Minimum Sampling Requirements			
Quarter	Months	Effluent Parameters	Report is Due
First	January, February, March	Sample at least once during any month of the quarter	April 28 th
Second	April, May, June	Sample at least once during any month of the quarter	July 28 th
Third	July, August, September	Sample at least once during any month of the quarter	October 28 th
Fourth	October, November, December	Sample at least once during any month of the quarter	January 28 th

Note 1: Delta Temperature is the amount in °F that a facility is causing the receiving stream’s temperature to change at the end of the regulatory mixing zone. Change in temperature shall be calculated with the following equation:

$$\Delta T = |T_{\text{downstream}} - T_{\text{upstream}}|$$

Note 2: This permit contains a Total Residual Chlorine (TRC) limit.

- (a) This effluent limit is below the minimum quantification level (ML) of the most common and practical EPA approved CLTRC methods. The Department has determined the current acceptable ML for total residual chlorine to be 130 µg/L when using the DPD Colorimetric Method #4500 – CL G. from Standard Methods for the Examination of Waters and Wastewater. The permittee will conduct analyses in accordance with this method, or equivalent, and report actual analytical values. Measured values greater than or equal to the minimum quantification level of 130 µg/L will be considered violations of the permit and values less than the minimum quantification level of 130 µg/L will be considered to be in compliance with the permit limitation. The minimum quantification level does not authorize the discharge of chlorine in excess of the effluent limits stated in the permit.
- (b) If no chlorine was used in a given sampling period, an actual analysis is not necessary. Simply report as “0 µg/L” TRC.

Note 3: The Acute WET test shall be conducted once per year during every year of the permit cycle. See Special Condition #16 for additional requirements.

B. STANDARD CONDITIONS

In addition to specified conditions stated herein, this permit is subject to the attached PART I standard conditions dated AUGUST 1, 2014, and hereby incorporated as though fully set forth herein.

C. SPECIAL CONDITIONS

1. 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.
2. All outfalls and monitoring locations must be clearly marked in the field.
3. Water Quality Standards
 - (a) To the extent required by law, 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.
4. 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 by the Director in accordance with 40 CFR 122.44(f).
 - (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.
5. Report as no-discharge when a discharge does not occur during the reporting period.
6. Reporting of Non-Detects:
 - (a) An analysis conducted by the permittee or their contracted laboratory shall be conducted in such a way that the precision and accuracy of the analyzed result can be enumerated.
 - (b) The permittee shall not report a sample result as "Non-Detect" without also reporting the detection limit of the test. Reporting as "Non Detect" without also including the detection limit will be considered failure to report, which is a violation of this permit.
 - (c) The permittee shall provide the "Non-Detect" sample result using the less than sign and the minimum detection limit (e.g. <10).
 - (d) See Standard Conditions Part I, Section A, #4 regarding proper detection limits used for sample analysis.

C. SPECIAL CONDITIONS cont'd

7. It is a violation of the Missouri Clean Water Law to fail to pay fees associated with this permit (644.055 RSMo).
8. 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.
9. The permittee shall implement a Stormwater Pollution Prevention Plan (SWPPP). The SWPPP must be prepared and implemented 90 days after permit issuance. The SWPPP must be kept on-site and should not be sent to the department unless specifically requested. The SWPPP must be reviewed and updated, if needed, every five (5) years or as site conditions change. The permittee shall select, install, use, operate, and maintain the Best Management Practices prescribed in the SWPPP in accordance with the concepts and methods described in the following document: Developing Your Stormwater Pollution Prevention Plan, A Guide for Industrial Operators, (Document number EPA 833-B-09-002) published by the United States Environmental Protection Agency (USEPA) in February 2009.
The SWPPP must include the following:
 - a) A listing of specific Best Management Practices (BMPs) and a narrative explaining how BMPs will be implemented to control and minimize the amount of potential contaminants that may enter stormwater. The BMPs at the facility should be designed to meet this value during rainfall event up to the 10 year, 24 hour rain event.
 - b) The SWPPP must include a schedule for once per month site inspections and brief written reports. The inspection report must include weather information (daily precipitation values) for the entire period since last inspection, as well as observations and evaluations of BMP effectiveness. Deficiencies must be corrected within seven (7) days and the actions taken to correct the deficiencies shall be included with the written report, including photographs. Any corrective measure that necessitates major construction may also need a construction permit. Inspection reports must be kept on site with the SWPPP and maintained for a period of five (5) years. These must be made available to department personnel upon request.
 - c) A provision for designating an individual to be responsible for environmental matters.
 - d) A provision for providing training to all personnel involved in material handling and storage, and housekeeping of maintenance and cleaning areas. Proof of training shall be submitted on request of the department.
10. Permittee shall adhere to the following minimum Best Management Practices (BMPs):
 - a) Prevent the spillage or loss of fluids, oil, grease, fuel, etc. from vehicle maintenance, equipment cleaning, or warehouse activities and thereby prevent the contamination of storm water from these substances.
 - b) Provide collection facilities and arrange for proper disposal of waste products including but not limited to petroleum waste products, and solvents.
 - c) Store all paint, solvents, petroleum products and petroleum waste products (except fuels), and storage containers (such as drums, cans, or cartons) so that these materials are not exposed to storm water or provide other prescribed BMPs such as plastic lids and/or portable spill pans to prevent the commingling of storm water with container contents. Commingled water may not be discharged under this permit. Provide spill prevention control, and/or management sufficient to prevent any spills of these pollutants from entering waters of the state. Any containment system used to implement this requirement shall be constructed of materials compatible with the substances contained and shall also prevent the contamination of groundwater.
 - d) Provide good housekeeping practices on the site to keep trash from entry into waters of the state.
 - e) Provide sediment and erosion control sufficient to prevent or control sediment loss off of the property. This could include the use of straw bales, silt fences, or sediment basins, if needed, to comply with effluent limits.
 - f) Ensure that adequate provisions are provided to prevent surface water intrusion into the storage basin, to divert stormwater runoff around the storage basin, and to protect embankments from erosion.
11. The purpose of the SWPPP and the BMPs listed herein is the prevention of pollution of waters of the state. A deficiency of a BMP means it was not effective in preventing pollution [10 CSR 20-2.010(56)] of waters of the state, and corrective actions means the facility took steps to eliminate the deficiency.
12. Before releasing water that has accumulated in secondary containment [10 CSR 20-2.010(64)] areas it must be examined for hydrocarbon odor and presence of a sheen.
If the presence of hydrocarbons is indicated, this water must be either:
 - a) Treated using methods outlined in the facility's SPCC plan and then subsequently tested for Total Petroleum Hydrocarbons (TPH). The analytical method for testing TPH must comply with EPA approved testing methods listed in [40 CFR 136]. If the concentration for TPH exceeds 10 mg/L, the water shall be taken to a permitted WWTP for treatment. If the concentration for TPH is below 10 mg/L, the water may be released.
or
 - b) Sent in its entirety to and through an on-site oil water separator.

C. SPECIAL CONDITIONS cont'd

13. Release of a hazardous substance must be reported to the department in accordance with 10 CSR 24-3.010. A record of each reportable spill shall be retained with the SWPPP and made available to the department upon request.
14. Neither free available chlorine nor total residual chlorine may be discharged from any unit for more than two hours in any one day and not more than one unit in any plant may discharge free available or total residual chlorine at any one time. [40 CFR 423.12(8)]
15. There shall be no discharge of polychlorinated biphenyl (PCB) compounds such as those commonly historically used for transformer fluid.
16. Acute Whole Effluent Toxicity (WET) tests shall be conducted as follows:

SUMMARY OF ACUTE WET TESTING FOR THIS PERMIT							
OUTFALL	AEC		Acute Toxic Unit (TU _a)		FREQUENCY	SAMPLE TYPE	MONTH
003	100%		*		once/year	grab	Any
DILUTION SERIES							
100%	50%	25%	12.5%	6.25%	(Control) 100% upstream, if available	(Control) 100% Lab Water, also called synthetic water	

* Monitoring requirement only.

(a) Freshwater Species and Test Methods

- (1) Species and short-term test methods for estimating the acute toxicity of NPDES effluents are found in the fifth edition of *Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms* (EPA/821/R-02/012, 2002; Table IA, 40 CFR Part 136). The permittee shall concurrently conduct 48-hour static non-renewal toxicity tests with the following vertebrate species:

✓ The fathead minnow, *Pimephales promelas* (Acute Toxicity Test Method 2000.0).

And the following invertebrate species:

✓ The daphnid, *Ceriodaphnia dubia* (Acute Toxicity Test Method 2002.0).

- (2) Chemical and physical analysis of an upstream control sample and effluent sample shall occur immediately upon being received by the laboratory, prior to any manipulation of the effluent sample beyond preservation methods consistent with federal guidelines for WET testing that are required to stabilize the sample during shipping. Where upstream receiving water is not available, synthetic laboratory control water may be used.
- (3) Test conditions must meet all test acceptability criteria required by the EPA Method used in the analysis.
- (4) Any and all chemical or physical analysis of the effluent sample performed in conjunction with the WET test shall be performed at the 100% Effluent concentration in addition to analysis performed upon any other effluent concentration.
- (5) Chemical analyses shall be performed and the results shall be recorded in the appropriate field of the report form. The parameters for chemical analysis must include all of the parameters listed on the table in SECTION A: EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS.

(b) Reporting of Acute Toxicity Monitoring Results

- (1) WET test results shall be submitted to the Southeast Regional Office, or by eDMR, with the permittee's Discharge Monitoring Reports annually by **July 28, 2015**. The submittal shall include:

(i) A full laboratory report for all toxicity testing.

(ii) Copies of chain-of-custody forms.

(iii) The WET form provided by the Department upon permit issuance. See fact sheet.

- (2) The report must include a quantification of acute toxic units (TU_a = 100/LC₅₀) reported according to the test methods manual chapter on report preparation and test review. The Lethal Concentration, 50 Percent (LC₅₀) is the toxic or effluent concentration that would cause death in 50 percent of the test organisms over a specified period of time.

(c) Permit Reopener for Acute Toxicity

In accordance with 40 CFR Parts 122 and 124, this permit may be modified to include effluent limitations or permit conditions to address acute toxicity in the effluent or receiving waterbody, as a result of the discharge; or to implement new, revised, or newly interpreted water quality standards applicable to acute toxicity.

C. SPECIAL CONDITIONS cont'd

17. The permittee shall complete a groundwater monitoring plan to be approved by the department upon permit renewal. The plan shall be submitted to the department a minimum of six months prior to permit expiration. The permittee shall implement an effective groundwater monitoring program designed to determine if the coal ash impoundment has an impact on groundwater quality during the next permit cycle. The monitoring system must be capable of comparing up-gradient to down-gradient water quality in the first continuous water-bearing zone beneath the impoundment. The monitoring system must be based upon a thorough hydrogeological characterization of the impoundment area that determines the appropriate hydrostratigraphic unit to monitor, its groundwater gradient(s) and any seasonal variations in its gradient(s). Any hydrogeological characterization conducted for the design of the groundwater monitoring program shall be approved by the department's Missouri Geological Survey and must be conducted under the guidance of a geologist registered in the State of Missouri. The design of the groundwater monitoring program shall be approved by the department prior to installation. The number of monitoring wells required for the groundwater monitoring program shall be based on site-specific hydrogeologic conditions and sufficient for effective monitoring. In the event the United States Environmental Protection Agency promulgates regulations that affect coal ash impoundments, the permit may be re-opened to incorporate regulatory changes.
 - a) In order to accomplish this, the permittee shall:
 - (1) By 6 months from the date of issuance of this permit submit a Site Characterization Workplan to the Central Office for approval. Permittee shall develop the Site Characterization Workplan in accordance with Guidance for Conducting a Detailed Hydrogeologic Site Characterization and Designing a Groundwater Monitoring Program issued by the Geological Survey Program, Environmental Geology Section, dated December 10, 2010.
 - (2) By 27 months from the date of issuance of this permit submit a Site Characterization Report detailing the findings from completion of the Site Characterization Workplan to the Central Office for verification of conclusions.
 - (3) By 30 months from the date of issuance of this permit submit a Groundwater Monitoring & Sampling Plan (GMSAP) to the Central Office for approval. Permittee shall develop the GMSAP in accordance with the guidelines contained in Guidance for Conducting a Detailed Hydrogeologic Site Characterization and Designing a Groundwater Monitoring Program. At that time the permit will be modified to include the monitoring well locations.
 - (4) The plans should be submitted to the central office Water Protection Program at P.O. Box 176, Jefferson City MO 65102-9920
 - b) In the event that the United States Environmental Protection Agency promulgates regulations that affect coal ash impoundments, this permit may be re-opened to incorporate regulatory changes.

MISSOURI DEPARTMENT OF NATURAL RESOURCES
FACT SHEET
FOR THE PURPOSE OF RENEWAL OF
MO-0095575
SIKESTON POWER PLANT

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 an industrial facility.

Part I. FACILITY INFORMATION

Facility Type: Industrial Facility SIC Code(s): 4911 Application Date: 08/16/2013 Expiration Date: 02/12/2014

FACILITY DESCRIPTION

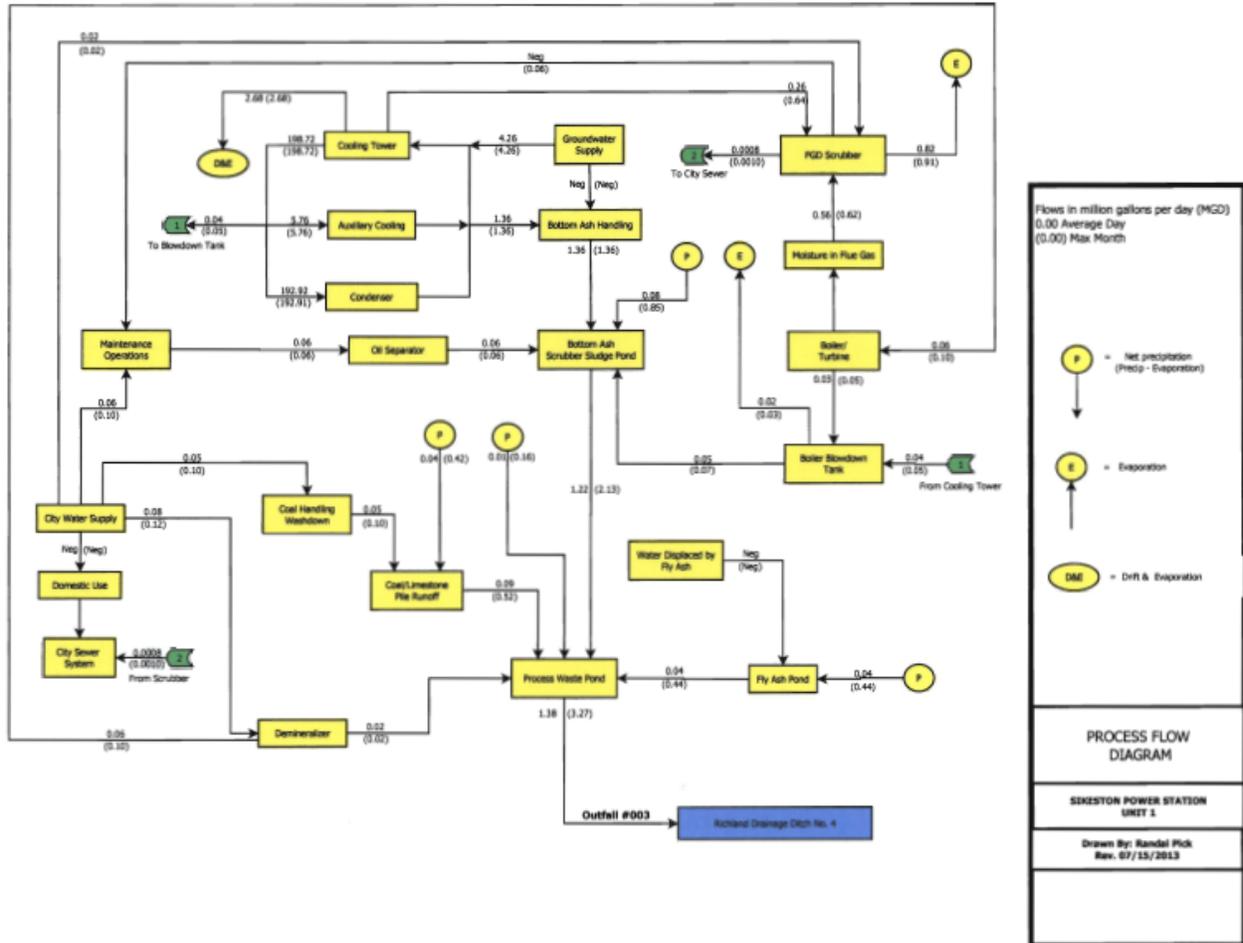
The Sikeston power plant is a coal fired power plant located on the west side of the city of Sikeston in Scott County. The facility produces approximately 235 megawatts net power. Cooling water is withdrawn from groundwater.



OUTFALL(S) TABLE

OUTFALL	DESIGN FLOW	TREATMENT LEVEL	EFFLUENT TYPE
#003	6.0915 CFS 3.93 MGD	evaporation and settling	process waste, ash ponds, fly & bottom ash handling water, precipitation, maintenance operations wastewater, coal pile runoff, limestone pile runoff, boiler blowdown, cooling tower basin cleaning wastewater

PROCESS WATER FLOW DIAGRAM



FACILITY PERFORMANCE HISTORY & COMMENTS

This facility was inspected in April of 2013. There were no deficiencies noted. A discharge monitoring report summary of violations was obtained for the last permit cycle and appears in the following table. The application stated outfall #003 discharged, among other things, fly ash handling wastewater. During a conference call 12/2/2014, Mr. Randy Pick stated the application was incorrect and the ash was pneumatically transported. During the same conference call, the facility explained the WET test which indicated a sample was retrieved from outfall #001 in October 2014. He indicated the sample was obtained from within the cooling system; there was no discharge from outfall #001.

Monitoring Period Ending	Parameter	Units	Limit	Reported Value
05/31/2014	Copper, total recoverable	µg/L	8.5	14
04/30/2014	Copper, total recoverable	µg/L	8.5	71
01/31/2014	Iron, total recoverable	µg/L	817	1360
12/31/2013	Iron, total recoverable	µg/L	817	915
12/31/2012	Iron, total recoverable	µg/L	817	853
12/31/2011	Iron, total recoverable	µg/L	817	836
01/31/2010	Iron, total recoverable	µg/L	817	1200
01/31/2010	Zinc (Zn), total recoverable	µg/L	82.3	90

Part II. RECEIVING STREAM INFORMATION

RECEIVING WATER BODY'S WATER QUALITY

The receiving stream, Ditch #4 does not have any biological, quantitative, or qualitative data available for review.

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.

As per Missouri's Stormwater Regulations [10 CSR 20.6.200(6)(B)2.], the department shall establish effluent limits as necessary to protect waters of the state. Effluent limitations for stormwater are established using best professional judgment based on the category and designated uses of the receiving stream.

- Missouri or Mississippi River:
- Lake or Reservoir:
- Losing:
- Metropolitan No-Discharge:
- Special Stream:
- Subsurface Water:
- All Other Waters:

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 streams beneficial water uses to be preserved are located in the following table in accordance with [10 CSR 20-7.031(3)].

RECEIVING STREAM(S) TABLE

OUTFALL	WATERBODY NAME	CLASS	WBID	DESIGNATED USES	DISTANCE TO CLASSIFIED SEGMENT	BASIN NAME AND 12-DIGIT HUC
#003	Ditch #4	P	3046	AQL, LWW, WBC-B	0.0 mi.	Ash Slough Ditch 08020204-0604

AQL= Protection of Warm Water Aquatic Life and Human Health-Fish Consumption; C= Streams may cease flow in dry periods; CDF= Cold Water Fishery; CLF= Cool Water Fishery; DWS= Drinking Water Supply; E= Ephemeral stream; GEN= General; GRW = Groundwater; HUC= Hydrologic Unit Code; IND= Industrial; IRR=Irrigation; LWW= Livestock & Wildlife Watering; P= Permanent; SCR= Secondary Contact Recreation; U= Unclassified; W= Wetland; WBC= Whole Body Contact Recreation; WBID= Water Body Identification Number

RECEIVING STREAM(S) LOW-FLOW VALUES: (CLASS P DEFAULTS)

OUTFALL	RECEIVING STREAM (U, C, P)	LOW-FLOW VALUES (CFS)		
		1Q10	7Q10	30Q10
#003	Ditch #4 (P)	0.1	0.1	1.0

MIXING CONSIDERATIONS TABLE: (CLASS P DEFAULTS)

MIXING ZONE (CFS) [10 CSR 20-7.031(5)(A)4.B.(II)(a)]			ZONE OF INITIAL DILUTION (CFS) [10 CSR 20-7.031(5)(A)4.B.(II)(b)]		
1Q10	7Q10	30Q10	1Q10	7Q10	30Q10
n/a	0.025	n/a	n/a	0.0025	n/a

RECEIVING STREAM MONITORING REQUIREMENTS

SITE	PARAMETER(S)	SAMPLING FREQUENCY	SAMPLE TYPE	LOCATION
SM1	Temperature (°F)	once/week	measurement	Ditch #4, sampling point on north side of W. Wakefield Ave. bridge (approximately 160 feet north of outfall #003)
SM2	Temperature (°F)	once/week	measurement	Ditch #4, sampling point located on the north side of the small bridge next to the facility main building (approximately ¼ mile south of outfall #003)

Part III. 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.

- ✓ Limitations in this operating permit for the reissuance of this permit conform to the anti-backsliding provisions of Section 402(o) of the Clean Water Act, and 40 CFR Part 122.44.
 - ✓ This permit changes WET test requirements for the facility from a pass/fail requirement to monitoring only for toxic units. This change reflects modifications to Missouri's Effluent Regulation found at 10 CSR 20-7.015. 40 CFR 122.44(d)(1)(ii) requires the department to establish effluent limitations that control all parameters which have the reasonable potential to cause or contribute to an excursion above any state water quality standard, including state narrative criteria. The previous permit imposed a pass/fail limitation without collecting sufficient data to make a reasonable potential determination. Furthermore, the method of reporting associated with the pass/fail limitation prevented the department from gathering the data necessary to make a finding of reasonable potential. Implementation of the toxic unit monitoring requirement will allow the department to implement numeric acute criteria in accordance with water quality standards established under §303 of the CWA.
 - ✓ Two parameters, Oil and Grease and zinc were statistically analyzed and determined to have no reasonable potential for pollution of the waters of the state therefore they received monitoring instead of limits. See appendix A.

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.

- ✓ Not applicable. While the facility has changed discharge points for several key effluent types (eliminated outfall #001 to transfer to outfall #003), the outfalls #001 and #003 flowed to the same stream

BIOSOLIDS & SEWAGE SLUDGE:

Biosolids are solid materials resulting from domestic wastewater treatment that meet federal and state criteria for beneficial uses (i.e. fertilizer). 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. Additional information regarding biosolids and sludge is located at the following web address:

<http://extension.missouri.edu/main/DisplayCategory.aspx?C=74>, items WQ422 through WQ449.

- ✓ Not applicable. This condition is not applicable to the permittee for this facility.

COAL COMBUSTION RESIDUALS (CCR):

Coal Combustion Residuals (CCR), often referred to as coal ash, is currently considered solid waste which are not hazardous wastes under an amendment to RCRA, the Resource Conservation and Recovery Act. Coal ash is residues from the combustion of coal in power plants and captured by pollution control technologies, like precipitators or scrubbers. Potential environmental concerns from coal ash pertain to pollution from impoundment and landfills leaching into ground water and structural failures of impoundments.

The US EPA is currently proposing the first-ever national rules to ensure the safe disposal and management of coal ash from coal-fired power plants under the nation's primary law for regulating solid waste, the RCRA. The EPA is putting forward two (2) proposals that reflect different approaches to managing the disposal of coal ash and both are to ensure the safe management of coal ash that is disposed in surface impoundments and/or landfills.

Both options will provide for the first time on a national basis that liners and ground water monitoring are in place at new landfills handling coal ash and impoundments in order to prevent leaching of contaminants to groundwater and resulting risks to human health. Under the **Subtitle C** proposal, EPA is adopting measures intended to phase out existing surface impoundments; under the **Subtitle D** proposal, existing impoundments would require they meet design standards or close after 5 years although new impoundments may be built. They will create strong incentives to close these impoundments and transition to safer landfills which store coal ash in dry form. Both proposals will ensure stronger oversight of the structural integrity of impoundments. Additionally, both options will require liners and groundwater monitoring, and corrective action if there is any contamination detected. For the Subtitle D Option, the corrective action requirements are not as extensive.

This operating permit will contain a special condition to address concerns regarding ash ponds at this facility and their potential to impact groundwater. Missouri Water Quality Standard 10 CSR 20-7.031(5)(A) states, "Water contaminants shall not cause or contribute to exceedances of Table A, groundwater limits in aquifers and caves..." The established special condition will allow the department to (1) determine if groundwater is being impacted from either the lined or unlined coal ash impoundments, (2) establish controls, limits, management strategies, and/or groundwater cleanup criteria.

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.

GROUNDWATER MONITORING:

Groundwater monitoring is part of a new directive to characterize and protect groundwater from coal combustion residual leachates in Missouri. Guidance for completing this monitoring can be found at 10 CSR 80-2.015 Appendix I and 10 CSR 80-11.010(11).

Appendix I (of §11) lists constituents of concern; the department asks the facility plan to sample for the constituents listed, in addition to molybdenum. A timeline is provided to the facility in special condition #17 of the permit. The permittee shall submit a Groundwater Monitoring & Sampling Plan (GMSAP) to the Central Office for approval. Permittee shall develop the GMSAP in accordance with the guidelines contained in Guidance for Conducting a Detailed Hydrogeologic Site Characterization and Designing a Groundwater Monitoring Program. At that time the permit will be modified during the renewal process to include the monitoring well locations. The facility shall, at a minimum, collect groundwater quality samples on a quarterly basis.

✓ At the next permit renewal, the permittee will have all elements of the GMSAP fully implemented. The facility shall, at a minimum, collect groundwater quality samples on a quarterly basis.

✓ Results shall be submitted electronically using forms provided by the department.

INDUSTRIAL SLUDGE:

Industrial sludge is solids, semi-solids, or liquid residue generated during the treatment of industrial process wastewater in a treatment works; including but not limited to, scum or solids removed in primary, secondary, or advanced wastewater treatment process; scum and solids filtered from water supplies and backwashed; and a material derived from industrial sludge.

✓ Not applicable. This condition is not applicable to the permittee for this facility.

REASONABLE POTENTIAL ANALYSIS (RPA):

Federal regulation [40 CFR Part 122.44(d)(1)(i)] requires effluent limitations for all pollutants that are or may be discharged at a level that will cause or have the reasonable potential to cause or contribute to an in-stream excursion above narrative or numeric water quality standard. In accordance with [40 CFR Part 122.44(d)(iii)] if the permit writer determines that any give pollutant has the reasonable potential to cause, or contribute to an in-stream excursion above the WQS, the permit must contain effluent limits for that pollutant.

- ✓ Applicable; A RPA was conducted on copper, iron, oil and grease, and zinc. Reasonable Potential Analysis is conducted as per (TSD, EPA/505/2-90-001 Section 3.3.2). A more detailed version including calculations of this RPA is available upon request.

Parameter	CMC*	RWC Acute*	CCC*	RWC Chronic*	n**	Range max/min	CV	MF	RP Yes/No
Copper (µg/L)	22.05	215.58	14.09	214.79	65	71, 1.4	2.190	3.038	yes
Iron (µg/L)	n/a	n/a	1000	2246.24	64	1360, 20	0.656	1.658	yes
Oil and Grease (mg/L)	n/a	n/a	10.00	6.80	66	6.3, 2.5	0.097	1.083	no
Zinc (µg/L)	180.32	168.18	180.32	167.56	65	90, 2	0.864	1.869	no

n/a: not applicable

n: number of samples

** If the number of samples is 10 or greater, then the CV value must be used in the WQBEL for the applicable constituent.

Coefficient of Variation (CV) = Standard Deviation of the sample set divided by the Mean of the same sample set.

RWC: Receiving Water Concentration; the concentration of a toxicant or the parameter toxicity in the receiving water after mixing (if applicable).

MF: Multiplying Factor; 99% Confidence Level and 99% Probability Basis

RP: Reasonable Potential; if an effluent is projected or calculated to cause an excursion above a water quality standard based on a number of factors including, as a minimum, the four factors listed in 40 CFR 122.44(d)(1)(ii).

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. This permit does not contain a SOC. However, the permittee has certain responsibilities that must be completed prior to permit renewal in three years. See permit special condition #17 and fact sheet sections on groundwater monitoring and coal combustion residuals.

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. In accordance with the EPA's *Developing Your Stormwater Pollution Prevention Plan, A Guide for Industrial Operators*, (Document number EPA 833-B-09-002) [published by the United States Environmental Protection Agency (USEPA) in February 2009], BMPs are measures or practices used to reduce the amount of pollution entering (regarding this operating permit) waters of the state. BMPs may take the form of a process, activity, or physical structure. Additionally in accordance with the Storm Water Management, a SWPPP is a series of steps and activities to (1) identify sources of pollution or contamination, and (2) select and carry out actions which prevent or control the pollution of storm water discharges.

- ✓ Applicable. A SWPPP shall be developed and implemented for each site and shall incorporate required practices identified by the Department with jurisdiction, incorporate erosion control practices specific to site conditions, and provide for maintenance and adherence to the plan.

SPILL REPORTING:

Per 10 CSR 24-3.010, any emergency involving a hazardous substance must be reported to the department's 24 hour Environmental Emergency Response hotline at (573) 634-2436 at the earliest practicable moment after discovery. The department may require the submittal of a written report detailing measures taken to clean up a spill. These reporting requirements apply whether or not the spill results in chemicals or materials leaving the permitted property or reaching waters of the state. This requirement is in addition to the Noncompliance Reporting requirement found in Standard Conditions Part I.

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.

- ✓ Applicable. Wasteload allocations were calculated where applicable using water quality criteria or water quality model results and the dilution equation below:

$$C = \frac{(Cs \times Qs) + (Ce \times Qe)}{(Qe + Qs)} \quad (\text{EPA/505/2-90-001, Section 4.5.5})$$

Where
C = downstream concentration
Cs = upstream concentration
Qs = upstream flow
Ce = effluent concentration
Qe = effluent flow

Chronic wasteload allocations were determined using applicable chronic water quality criteria (CCC: criteria continuous concentration) and stream volume of flow at the edge of the mixing zone (MZ). Acute wasteload allocations were determined using applicable water quality criteria (CMC: criteria maximum concentration) and stream volume of flow at the edge of the zone of initial dilution (ZID). Water quality based maximum daily and average monthly effluent limitations were calculated using methods and procedures outlined in USEPA’s “Technical Support Document For Water Quality-based Toxics Control” (EPA/505/2-90-001). In accordance with the TSD for water quality-based permitting, effluent quality is determined by the underlying distribution of daily values, which is determined by the Long Term Average (LTA) associated with a particular Wasteload Allocation (WLA) and by the Coefficient of Variation (CV) of the effluent concentrations. Increasing or decreasing the monitoring frequency does not affect this underlying distribution or treatment performance which should be, at a minimum, targeted to comply with the values dictated by the WLA. Therefore, it is recommended that the actual planned frequency of monitoring normally be used to determine the value of “n” for calculating the AML. However, in situations where monitoring frequency is once per month or less, a higher value for “n” must be assumed for AML derivation purposes. Thus, the statistical procedure being employed using an assumed number of samples is “n = 4” at a minimum.

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.

- ✓ Applicable. Under the federal Clean Water Act (CWA) §101(a)(3), requiring WET testing is reasonably appropriate for site-specific Missouri State Operating Permits for discharges to waters of the state issued under the National Pollutant Discharge Elimination System (NPDES). WET testing is also required by 40 CFR 122.44(d)(1). WET testing ensures that the provisions in the 10 CSR 20-6.010(8)(A)7. And the Water Quality Standards 10 CSR 20-7.031(4)(D),(F),(G),(I)2.A & B are being met. Under [10 CSR 20-6.010(8)(A)4], the Department may require other terms and conditions that it deems necessary to assure compliance with the Clean Water Act and related regulations of the Missouri Clean Water Commission. In addition the following MCWL apply: §§644.051.3 requires the Department to set permit conditions that comply with the MCWL and CWA; 644.051.4 specifically references toxicity as an item we must consider in writing permits (along with water quality-based effluent limits, pretreatment, etc...); and 644.051.5 is the basic authority to require testing conditions. WET testing will be required by all facilities meeting any of the following criteria:

- Facility is a designated Major.
- Facility continuously or routinely exceeds its design flow.
- Facility that exceeds its design population equivalent (PE) for BOD₅ whether or not its design flow is being exceeded.
- Facility (whether primarily domestic or industrial) that alters its production process throughout the year.
- Facility handles large quantities of toxic substances, or substances that are toxic in large amounts.
- Facility has Water Quality-Based Effluent Limitations for toxic substances (other than NH₃)
- Facility is a municipality with a Design Flow ≥ 22,500 gpd.
- Other – The facility has failed wet tests in the past.

- ✓ The form can be found at <http://www.dnr.mo.gov/forms/780-1899-f.pdf>

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 nor is there a TMDL for this stream.

316 (b); IMPINGEMENT AND ENTRAINMENT:

The facility is not subject to the new regulations of the Clean Water Act (316b) and 40 CFR Part 122.21(i) et seq. regarding impingement and entrainment of fish and shellfish as the facility withdraws all of its cooling water from groundwater.

Part IV. EFFLUENT LIMITS DETERMINATION

Outfall #003 – Main Facility Outfall

Effluent limitations derived and established in the Effluent Limitations Table are based on current operations of the facility. Future permit action due to facility modification may contain new operating permit terms and conditions that supersede the terms and conditions, including effluent limitations, of this operating permit.

✓ Many of the permit limitations which were previously applied to outfall #001 were transferred to outfall #003 because all flows were transferred to outfall #003 in roughly 2008.

EFFLUENT PARAMETER(S)	UNITS	BASIS FOR LIMITS	CURRENT LIMITATIONS		PREVIOUS LIMITATIONS	
			DAILY MAXIMUM	MONTHLY AVERAGE	MODIFIED	PREVIOUS LIMITATIONS
Flow	MGD	1	*			
Temperature (measured at SM1)	°F	1, 2	90	90		
ΔT (Note 1)	°F	1, 2	5	5	yes	moved
pH – Units	SU	1, 2	**			
Arsenic (total recoverable)	µg/L	2, 3, 9	*		yes	‡
Boron (total recoverable)	µg/L	2, 6, 9	*		yes	‡
Chlorine, Freely Available	µg/L	1, 9	*		yes	‡
Chlorine, Total Residual (Note 2)	µg/L	1, 3	17 (130ML)	8 (130ML)		
Copper (total recoverable)	µg/L	1, 2, 3	17.1	7.1	yes	17.1 D; 8.5 M
Iron (total recoverable)	µg/L	2, 3	1000	808	yes	1000 D; 817 M
Magnesium (total recoverable)	µg/L	9	*		yes	‡
Manganese (total recoverable)	µg/L	9	*		yes	‡
Molybdenum (total recoverable)	µg/L	6, 9	*		yes	†††
Nitrate (as N)	mg/L	9	*		yes	‡
Oil & Grease	mg/L	2	*		yes	20 D & 15 M
Selenium (total recoverable)	µg/L	2, 9	*		yes	‡
Sulfate (as SO ₄)	mg/L	2, 9	*		yes	‡
Total Suspended Solids	mg/L	1, 9	50	30	yes	100 D; 30 M
Zinc (total recoverable)	µg/L	2	*		yes	171.1 D; 82.3 M
Nitrogen (total)	mg/L	10	*		yes	‡
Phosphorus (total)	mg/L	10	*		yes	‡
WET test (acute)	TUa	8	*		yes	pass/fail

* - Monitoring requirement only

‡ - Parameter not established in previous state operating permit.

Basis for Limitations Codes:

- | | | |
|--|-----------------------------------|--|
| 1. State or Federal Regulation/Law | 5. Water Quality Model | 9. Pollutant of Concern for the Industry |
| 2. Water Quality Standard (includes RPA) | 6. Best Professional Judgment | 10. DNR established guidance |
| 3. Water Quality Based Effluent Limits | 7. TMDL or Permit in lieu of TMDL | |
| 4. Antidegradation Review/Policy | 8. WET Test Policy | |

OUTFALL #003 – DERIVATION AND DISCUSSION OF LIMITS:

Bromide/ Methyl Bromide

There are no water quality standards for bromide. The applicant provided one data point for bromide with their application; 3.03 mg/L = 3030 µg/L. There are, however, water quality standards for fish consumption for methyl bromide; 4000µg/L, and drinking water standards 48 µg/L. Methyl bromide is a volatile organic compound formed primarily when chlorination is used. However, the facility also tested for methyl bromide with their permit application renewal; the analytical results were below detection limit. The facility will not be required to test for either constituent.

Chlorine, Freely Available (FAC)

The industry categorical effluent limitations for this parameter are found at 40 CFR 423.12(8). Since the facility has not been monitoring for this parameter, monitoring is established in this operating permit to determine if reasonable potential for pollution to waters of the state exist.

Chlorine, Total Residual (TRC)

Warm-water Protection of Aquatic Life CCC = 10 µg/L, CMC = 19 µg/L [10 CSR 20-7.031, Table A].

Background TRC = 0.0 µg/L.

Chronic WLA: $C_e = [(6.0915 + 0.025)10 - (0.025 * 0.0)]/6.0915$ $C_e = 10.04 \mu\text{g/L}$

Acute WLA: $C_e = [(6.0915 + 0.0025)19 - (0.0025* 0.0)]/6.0915$ $C_e = 19.007 \mu\text{g/L}$

$LTA_c = 10.04 (0.527) = 5.291$ $LTA_c = 5.3 \mu\text{g/L}$ [0.6, 99th Percentile]

$LTA_a = 19.007 (0.321) = 6.1012$ $LTA_a = 6.1 \mu\text{g/L}$ [0.6, 99th Percentile]

MDL = 5.3 (3.11) = **17 µg/L** [0.6, 99th Percentile]

AML = 5.3 (1.55) = **8 µg/L** [0.6, 95th Percentile, n = 4]

Standard compliance language for TRC, including the minimum level (ML) explanation, is included in the permit on page four. In the previous permit, the Effluent Limitations Table stated the facility would be sampling for freely available chlorine on outfall #001, however, in the previous permit's fact sheet, the calculations were based on the values for total residual chlorine. No data exists for this parameter so a CV is presumed to be 0.6. In the previous permit cycle, effluent limitations of 0.017 mg/L daily and 0.008 mg/L monthly were given; this permit cycle reflects the appropriate numerical limitations using the more appropriate units of µg/L. No schedule of compliance was given because the effluent limits are indeed the same.

Fecal Coliform

The applicant provided one data point for fecal coliform bacteria; 12,800 cfu/100 mL. The permit writer used best professional judgment to not include this parameter in the monitoring for this facility because the domestic sewage is conveyed to the city of Sikeston. Additionally, natural sources (bird excrement) are most likely the source of the bacteria. This factor cannot be controlled by the permittee. Additionally, the facility has completed a detailed site investigation (DSI) for a utility waste landfill and is working to define future actions regarding the disposal of ash.

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.

Fluoride

The applicant provided one data point for fluoride; 0.542 mg/L. Missouri groundwater, drinking water, and livestock watering quality standards are 4 mg/L. Because the effluent concentration is not expected to converge with the water quality standards, the facility does not need to monitor for this pollutant.

Nitrate

The applicant provided one data point for nitrate; 235 µg/L. The Missouri drinking water and groundwater standard for this pollutant is 10 mg/L. Monitoring is established for this parameter because 1) this pollutant is a constituent of concern in the coal fired steam electric power generating point source category and 2) at this time it is unknown how nitrate infiltrates into the groundwater.

Oil & Grease

Conventional pollutant, in accordance with 10 CSR 20-7.031 Table A effluent limitation for protection of aquatic life; 10 mg/L daily maximum. The previous permit allowed for categorical O&G effluent limitations of 20 mg/L per day and 15 mg/L per month. 40 CFR 122.44(b)(1) and 40 CFR 122.44(d) require the permit contain the most stringent requirement for a parameter. The facility has consistently met permit limits below the 10 mg/L conventional pollutant standard and a reasonable potential analysis was performed on the data. No reasonable potential exists for water quality degradation therefore the facility will go to monitoring only.

pH

6.0-9.0 SU. Technology based limits [10 CSR 20-7.015] are protective of the water quality standard [10 CSR 20-7.031(4)(E)], due to the buffering capacity of the mixing zone. The parameter limits were retained from the previous permit.

Sulfate

The applicant provided one data point for sulfate; 435 mg/L. Sulfate is a pollutant of concern both for aquatic life and within the power generating point source category. Monitoring will be instituted for this parameter.

Temperature

In accordance with 10 CSR 20-7.031(5)(D), water contaminant sources shall not cause or contribute to stream temperature in excess of ninety degrees Fahrenheit (90 °F) or thirty-two and two-ninths degrees Celsius (32 2/9 °C). In order to reduce confusion and duplicative monitoring or reporting requirements, the permit will only require that temperature be monitored and reported in degrees Fahrenheit. It is not necessary to report in both Celsius and Fahrenheit.

ΔT

The change in temperature between the receiving stream and the effluent shall not be greater than five degrees Fahrenheit per 10 CSR 20-7.031(5)(D). An upstream monitoring point is necessary to calculate delta (Δ) T which is the change in stream temperature caused by the effluent. Maximum ΔT is 5 degrees Fahrenheit. The ΔT will be reported with the DMR for outfall #003. The applicant indicated in an email dated 11/13/2014 the facility could meet the 5 °F temperature increase maximum without mixing considerations although mixing considerations are allowed for temperature; instead, the downstream monitoring point was retained but moved to ¼ mile downstream of the outfall. This is consistent with other permits which do not measure stream volume. The issue was the equation which required measuring receiving stream flow; the facility has not installed (and does not plan to install) a stream flow measuring device.

Total Suspended Solids (TSS)

Categorical effluent limitations for TSS for steam electric power generating point source category are found in 40 CFR Part 423. Outfall #003 drains wastewater and precipitation from coal pile runoff which sets the maximum concentration of TSS for any time at 50 milligrams per liter (mg/L). Because the outfall also drains fly and bottom ash transport water, the average of daily measurements for thirty consecutive days shall not exceed 30 mg/L. With these categorical limitations in mind, the daily maximum is set at 50 mg/L and the monthly average is set at 30 mg/L. The permit limits for the daily maximum were decreased from the previous permit (100 mg/L) but no schedule of compliance is given because the facility has proven they can already meet the new limits.

Metals

Effluent limitations for total recoverable metals were developed using methods and procedures outlined in the “Technical Support Document For Water Quality-based Toxic Controls” (EPA/505/2-90-001) and “The Metals Translator: Guidance for Calculating a Total Recoverable Permit Limit from a Dissolved Criterion” (EPA 823-B-96-007). General warm-water fishery criteria apply and a water hardness of 162 mg/L is used in the conversion below.

Due to the absence of contemporaneous effluent and instream data for total recoverable metals, dissolved metals, hardness, and total suspended solids with which to calculate metals translators, partitioning between the dissolved and absorbed phases was assumed to be minimal (Section 5.7.3, EPA/505/2-90-001). Freshwater criteria conversion factors for dissolved metals were used as the metals translator as recommended in guidance (Section 1.3, 1.5.3, and Table 1, EPA 823-B-96-007). If concurrent site-specific data for total recoverable metals, dissolved metals, hardness, and total suspended solids are provided to the Department, partitioning evaluations may be considered and site-specific translators developed. Conversion factors for Cd and Pb are hardness dependent. Values calculated using equation found in Section 1.3 of EPA 823-B-96-007 and hardness = 162 mg/L. NA = not applicable.

METAL	CONVERSION FACTORS	
	ACUTE	CHRONIC
Aluminum	NA	NA
Arsenic	1	1
Copper	0.960	0.960
Iron	NA	NA
Selenium	NA	NA
Zinc	0.980	0.980

Aluminum, total recoverable

The applicant provided one data point for aluminum in the application; 31 µg/L. The Missouri water quality standard for protection of aquatic life for aluminum is 750 µg/L. Because the data point does not approach the water quality standard, the facility will not be required to monitor for this parameter.

Arsenic, total recoverable

The applicant provided one data point for arsenic in the application; 20 µg/L. The Missouri water quality standard for protection of aquatic life is 20µg/L. The permittee will be required to monitor for this parameter.

Barium, total recoverable

The applicant provided one data point for barium in the application; 540 µg/L. The Missouri drinking water and groundwater quality standard is 2000 µg/L. Because the data point does not approach the water quality standard, the facility will not be required to monitor for this parameter.

Boron, total recoverable

The applicant provided one data point for boron in the application; 1.6 mg/L = 1600 µg/L. The Missouri irrigation and groundwater quality standards are 2000 µg/L. Because the effluent monitoring and the water quality standards are approaching similarity, and the steam electric power generating point source category has observed this metal in fly ash transport water and impoundment leachate. Further data collection is needed to determine if this may become a pollutant of concern so the facility will be required to monitor for this parameter.

Chromium III, total recoverable

While this parameter was included in the previous permit for outfall #001, analytical testing for the permit renewal showed no presence therefore it was not included in this permit for outfall #003.

Chromium VI, dissolved

While this parameter was included in the previous permit for outfall #001, analytical testing for the permit renewal showed no presence therefore it was not included in this permit for outfall #003.

Cobalt, total recoverable

The permittee provided one data point for cobalt; 32 µg/L. Ditch #4 water body use of livestock watering allow for 1000 µg/L of cobalt. It is the permit writer's best professional judgment that cobalt need not be monitored as effluent concentrations are not likely to reach levels approaching the water quality standard.

Copper, total recoverable

Protection of aquatic life acute criteria = hardness dependent = $e^{((0.9422*\ln(162))-1.7003)} * 0.960 = 21.1663$

Protection of aquatic life chronic criteria = hardness dependent = $e^{((0.8545*\ln(162))-1.702)} * 0.960 = 13.5248$

Convert to total recoverable

Acute $21.1663 \div 0.960 = 22.048$

Chronic $13.5248 \div 0.960 = 14.0883$

Acute WLA $C_e = [(6.0915 + 0.0025)22.048 - (0.025 * 0.0)]/6.0915 = 22.06$

Chronic WLA $C_e = [(6.0915 + 0.025)14.0883 - (0.025 * 0.0)]/6.0915 = 14.15$

LTAa = $22.06 * 0.110 = 2.432$ (more protective)

[Acute Multiplier = CV = 0.110, 99th Percentile]

LTAc = $14.15 * 0.188 = 2.66$

[Chronic Multiplier = CV = 0.188, 99th Percentile]

AML = $2.432 * 2.90 = 7.0528 = 7.1 \mu\text{g/L}$

MDL = $2.432 * 9.07 = 22.058 = 22.1 \mu\text{g/L}$

The previous permit applied a limit of **17.1 µg/L** for the MDL and will be retained to comply with the anti-backsliding provisions in Section 402(o) of the Clean Water Act, and 40 CFR Part 122.44. The permittee can meet the more stringent limit. The previous permit had 8.5 µg/L for the AML. This permit will introduce the above calculated limit. No SOC is provided since the facility has been meeting this new limit throughout the last permit cycle (except for one data point).

Iron, total recoverable

Protection of Aquatic Life Chronic Criteria = 1000 µg/L, Acute Criteria = n/a

Chronic WLA: $C_e = [(6.0915 + 0.025)1000 - (0.025 * 0.0)]/6.0915$

$C_e = 1004.10 \mu\text{g/L}$

LTA_c = $1004.10 (0.5005) = 502.552$

[Chronic Multiplier = CV = 0.656, 99th Percentile]

AML = $(502.552)(1.6073) = 807.751 = 808 \mu\text{g/L}$

Calculations of the MDL for this data set equaled 1689 µg/L; this would violate water quality standards hence the Missouri water quality standard of **1000 µg/L** is applied for the maximum daily limit.

The previous permit indicated 817 µg/L for the monthly limit. Calculations using the current data lowered the limit to **808 µg/L**. A schedule of compliance is not given because the facility has typically been able to meet the limit.

Magnesium, total recoverable

The applicant provided one data point for magnesium; 36.4 mg/L (36,400 µg/L). While there are no Missouri water quality standards for this parameter, the steam electric power generating point source category has observed this metal in fly ash transport water and impoundment leachate. Further data collection is needed to determine if this may become a pollutant of concern.

Manganese, total recoverable

The applicant provided one data point for manganese; 168 µg/L. While there are no surface water quality standards for this parameter, the groundwater standard is 50 µg/L. It is important to monitor the effluent for this parameter because at this time it is unknown in what manner or with what magnitude manganese infiltrates into the groundwater from ash ponds.

Molybdenum, total recoverable

The applicant provided one data point for molybdenum; 45 µg/L. While there are no surface water quality standards for this parameter, this metal is a constituent of concern in the coal fired steam electric power generating point source category. The EPA has published a health advisory for this element. Monitoring for this metal is instituted.

Selenium, total recoverable

The applicant provided one data point for selenium; 17µg/L. The Missouri water quality standard for protection of aquatic life is 5 µg/L. The facility must begin to monitor for this pollutant.

Zinc, total recoverable

A reasonable potential analysis of this parameter showed no reasonable potential existed to degrade waters of the state. Monitoring only for this metal is instituted.

Nitrogen-total

This parameter is established for all facilities releasing greater than 100,000 gallons of effluent per day. Sampling shall be completed quarterly.

Phosphorous-total

This parameter is established for all facilities releasing greater than 100,000 gallons of effluent per day. Sampling shall be completed quarterly.

Acute WET Test

Monitoring requirement only. Monitoring is required to determine if reasonable potential exists for this facility's discharge to exceed water quality standards.

Acute and/or Chronic Allowable Effluent Concentrations (AECs) for facilities that discharge to unclassified, Class C, Class P (with default Mixing Considerations), or Lakes [10 CSR 20-7.031(4)(A)4.B.(IV)(b)] are 100%, 50%, 25%, 12.5%, & 6.25%.

Acute AEC% = $\left(\frac{\text{design flow}_{\text{cfs}} + \text{ZID}_{7\text{Q}10}}{\text{design flow}_{\text{cfs}}} \right)^{-1} \times 100 = \text{##\%} \rightarrow (6.0915 + 0.0025)(6.0615)^{-1} \times 100 = 100.536\%$

However, when using an LC₅₀ as the test endpoint, the acute toxicity test has an upper sensitivity level of 100% effluent, or 1.0 TUa. If less than 50% of the test organisms die at 100% effluent, the true LC₅₀ value for the effluent cannot be measured, effectively acting as a detection limit. Therefore, when the allowable effluent concentration is 100%, a limit of 1.0 TUa will apply. This test shall be completed annually.

MINIMUM SAMPLING AND REPORTING FREQUENCY REQUIREMENTS FOR OUTFALL #003

PARAMETER	SAMPLING FREQUENCY	REPORTING FREQUENCY
Flow (MGD)	daily	once per quarter
Temperature	weekly	once per quarter
ΔT	calculation	once per quarter
pH – Units	once per month	once per quarter
Arsenic (total recoverable)	once per month	once per quarter
Boron (total recoverable)	once per month	once per quarter
Chlorine, Freely available	once per quarter	once per quarter
Chlorine, Total Residual	once per month	once per quarter
Copper (total recoverable)	once per month	once per quarter
Iron (total recoverable)	once per month	once per quarter
Magnesium (total recoverable)	once per month	once per quarter
Manganese (total recoverable)	once per month	once per quarter
Molybdenum (total recoverable)	once per month	once per quarter
Nitrate (as N)	once per month	once per quarter
Oil & Grease	once per month	once per quarter
Selenium (total recoverable)	once per month	once per quarter
Sulfate (as SO ₄)	once per month	once per quarter
Total Suspended Solids	once per month	once per quarter
Zinc	once per month	once per quarter
Nitrogen (total)	once per quarter	once per quarter
Phosphorus (total)	once per quarter	once per quarter
Acute Whole Effluent Toxicity	once per year	once per year

Upstream Sampling Point SM1

Temperature

In accordance with 10 CSR 20-7.031(5)(D), water contaminant sources shall not cause stream temperature to be in excess of ninety degrees Fahrenheit (90 °F) or thirty-two and two-ninths degrees Celsius (32 2/9 °C). In order to reduce confusion and duplicative monitoring or reporting requirements, the permit will only require that temperature be monitored and reported in degrees Fahrenheit. It is not necessary to report in both Celsius and Fahrenheit. An upstream monitoring point is necessary to calculate delta (Δ) T which is the change in stream temperature caused by the effluent. Maximum Δ T is 5 degrees Fahrenheit. The facility will calculate the difference between the temperature readings for SM1 and SM2 and report the absolute value with the DMR for outfall #003.

MINIMUM SAMPLING AND REPORTING FREQUENCY REQUIREMENTS FOR SM1

PARAMETER	SAMPLING FREQUENCY	REPORTING FREQUENCY
Temperature	once/week	report with outfall #003 once per quarter

Downstream Sampling Point SM2

Temperature

In accordance with 10 CSR 20-7.031(5)(D), water contaminant sources shall not cause stream temperature to be in excess of ninety degrees Fahrenheit (90 °F) or thirty-two and two-ninths degrees Celsius (32 2/9 °C). In order to reduce confusion and duplicative monitoring or reporting requirements, the permit will only require that temperature be monitored and reported in degrees Fahrenheit. It is not necessary to report in both Celsius and Fahrenheit. A downstream monitoring point is necessary to 1) measure the temperature of the effluent at the edge of the mixing zone, and 2) calculate delta (Δ) T which is the change in stream temperature caused by the effluent. Maximum Δ T is 5 degrees Fahrenheit. The temperature will be reported with the DMR for outfall #003. The facility will calculate the difference between the temperature readings for SM1 and SM2 and report the absolute value with the DMR for outfall #003.

MINIMUM SAMPLING AND REPORTING FREQUENCY REQUIREMENTS FOR SM2

PARAMETER	SAMPLING FREQUENCY	REPORTING FREQUENCY
Temperature	once/week	report with outfall #003 once per quarter

SAMPLING FREQUENCY JUSTIFICATION FOR ALL PERMITTED FEATURES

- ✓ Sampling and Reporting Frequency was generally retained from previous permit.
- ✓ Stream flow, stream temperature, and effluent temperature were increased from monthly to weekly for industry consistency. Most power plants in Missouri monitor for temperature and temperature change daily.
- ✓ WET Testing schedules and intervals are established in accordance with the Department's Permit Manual; Section 5.2 *Effluent Limits / WET Testing for Compliance Bio-monitoring*. The facility has a design flow > 1 MGD therefore WET testing shall be scheduled at no less than once per year.

SAMPLING TYPE JUSTIFICATION

- ✓ Grab sampling type for all parameters was retained from the previous permit.

Part V. 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.

PERMIT SYNCHRONIZATION:

The Department of Natural Resources is currently undergoing a synchronization process for operating permits. Permits are normally issued on a five-year term, but to achieve synchronization many permits will need to be issued for less than the full five years allowed by regulation. The intent is that all permits within a watershed will move through the Watershed Based Management (WBM) cycle together will all expire in the same fiscal year. This will allow further streamlining by placing multiple permits within a smaller geographic area on public notice simultaneously, thereby reducing repeated administrative efforts. This will also allow the department to explore a watershed based permitting effort at some point in the future. Renewal applications must continue to be submitted within 180 days of expiration, however, in instances where effluent data from the previous renewal is less than three years old, that data may be re-submitted to meet the requirements of the renewal application. If the permit provides a schedule of compliance for meeting new water quality based effluent limits beyond the expiration date of the permit, the time remaining in the schedule of compliance will be allotted in the renewed permit. **This permit will expire at the end of the fourth quarter of 2017 to attain permit synchronization in six years; synchronization for 4th quarter 2020.** While a three year permit is atypical, this permit contains requirements which shall be completed in three years upon renewal.

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 was from 12/11/2014 to 01/12/2015. No responses were received.
- ✓ A typo was corrected which changed Part VI of the fact sheet to Part V of the fact sheet. There were only five parts total.

DATE OF FACT SHEET: NOVEMBER 2014

COMPLETED BY:

Pam Hackler, Environmental Specialist IV
Missouri Department of Natural Resources
Water Protection Program
Operating Permits Section - Industrial Unit
573-526-3386
pam.hackler@dnr.mo.gov



STANDARD CONDITIONS FOR NPDES PERMITS
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MISSOURI CLEAN WATER COMMISSION
REVISED
AUGUST 1, 2014

These Standard Conditions incorporate permit conditions as required by 40 CFR 122.41 or other applicable state statutes or regulations. These minimum conditions apply unless superseded by requirements specified in the permit.

Part I – General Conditions

Section A – Sampling, Monitoring, and Recording

1. **Sampling Requirements.**
 - a. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.
 - b. All samples shall be taken at the outfall(s) or Missouri Department of Natural Resources (Department) approved sampling location(s), and unless specified, before the effluent joins or is diluted by any other body of water or substance.
2. **Monitoring Requirements.**
 - a. Records of monitoring information shall include:
 - i. The date, exact place, and time of sampling or measurements;
 - ii. The individual(s) who performed the sampling or measurements;
 - iii. The date(s) analyses were performed;
 - iv. The individual(s) who performed the analyses;
 - v. The analytical techniques or methods used; and
 - vi. The results of such analyses.
 - b. If the permittee monitors any pollutant more frequently than required by the permit at the location specified in the permit using test procedures approved under 40 CFR Part 136, or another method required for an industry-specific waste stream under 40 CFR subchapters N or O, the results of such monitoring shall be included in the calculation and reported to the Department with the discharge monitoring report data (DMR) submitted to the Department pursuant to Section B, paragraph 7.
3. **Sample and Monitoring Calculations.** Calculations for all sample and monitoring results which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified in the permit.
4. **Test Procedures.** The analytical and sampling methods used shall conform to the reference methods listed in 10 CSR 20-7.015 unless alternates are approved by the Department. The facility shall use sufficiently sensitive analytical methods for detecting, identifying, and measuring the concentrations of pollutants. The facility shall ensure that the selected methods are able to quantify the presence of pollutants in a given discharge at concentrations that are low enough to determine compliance with Water Quality Standards in 10 CSR 20-7.031 or effluent limitations unless provisions in the permit allow for other alternatives. A method is “sufficiently sensitive” when; 1) the method minimum level is at or below the level of the applicable water quality criterion for the pollutant or, 2) the method minimum level is above the applicable water quality criterion, but the amount of pollutant in a facility’s discharge is high enough that the method detects and quantifies the level of pollutant in the discharge, or 3) the method has the lowest minimum level of the analytical methods approved under 10 CSR 20-7.015. These methods are also required for parameters that are listed as monitoring only, as the data collected may be used to determine if limitations need to be established. A permittee is responsible for working with their contractors to ensure that the analysis performed is sufficiently sensitive.
5. **Record Retention.** Except for records of monitoring information required by the permit related to the permittee’s sewage sludge use and disposal activities, which shall be retained for a period of at least five (5) years (or longer as required by 40 CFR part 503), the permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by the permit, and records of all data used to complete the application for the permit, for a period of at least three (3) years from the date of the sample, measurement, report or application. This period may be extended by request of the Department at any time.

6. **Illegal Activities.**
 - a. The Federal Clean Water Act provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under the permit shall, upon conviction, be punished by a fine of not more than \$10,000, or by imprisonment for not more than two (2) years, or both. If a conviction of a person is for a violation committed after a first conviction of such person under this paragraph, punishment is a fine of not more than \$20,000 per day of violation, or by imprisonment of not more than four (4) years, or both.
 - b. The Missouri Clean Water Law provides that any person or who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained pursuant to sections 644.006 to 644.141 shall, upon conviction, be punished by a fine of not more than \$10,000, or by imprisonment for not more than six (6) months, or by both. Second and successive convictions for violation under this paragraph by any person shall be punished by a fine of not more than \$50,000 per day of violation, or by imprisonment for not more than two (2) years, or both.

Section B – Reporting Requirements

1. **Planned Changes.**
 - a. The permittee shall give notice to the Department as soon as possible of any planned physical alterations or additions to the permitted facility when:
 - i. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in 40 CFR 122.29(b); or
 - ii. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations in the permit, nor to notification requirements under 40 CFR 122.42(a)(1);
 - iii. The alteration or addition results in a significant change in the permittee’s sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan;
 - iv. Any facility expansions, production increases, or process modifications which will result in a new or substantially different discharge or sludge characteristics must be reported to the Department 60 days before the facility or process modification begins. Notification may be accomplished by application for a new permit. If the discharge does not violate effluent limitations specified in the permit, the facility is to submit a notice to the Department of the changed discharge at least 30 days before such changes. The Department may require a construction permit and/or permit modification as a result of the proposed changes at the facility.
2. **Non-compliance Reporting.**
 - a. The permittee shall report any noncompliance which may endanger health or the environment. Relevant information shall be provided orally or via the current electronic method approved by the Department, within 24 hours from the time the permittee becomes aware of the circumstances, and shall be reported to the appropriate Regional Office during normal business hours or the Environmental Emergency Response hotline at 573-634-2436 outside of normal business hours. A written submission shall also be provided within five (5) business 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 exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.



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- b. The following shall be included as information which must be reported within 24 hours under this paragraph.
 - i. Any unanticipated bypass which exceeds any effluent limitation in the permit.
 - ii. Any upset which exceeds any effluent limitation in the permit.
 - iii. Violation of a maximum daily discharge limitation for any of the pollutants listed by the Department in the permit required to be reported within 24 hours.
 - c. The Department may waive the written report on a case-by-case basis for reports under paragraph 2. b. of this section if the oral report has been received within 24 hours.
3. **Anticipated Noncompliance.** The permittee shall give advance notice to the Department of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements. The notice shall be submitted to the Department 60 days prior to such changes or activity.
 4. **Compliance Schedules.** Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of the permit shall be submitted no later than 14 days following each schedule date. The report shall provide an explanation for the instance of noncompliance and a proposed schedule or anticipated date, for achieving compliance with the compliance schedule requirement.
 5. **Other Noncompliance.** The permittee shall report all instances of noncompliance not reported under paragraphs 2, 3, and 6 of this section, at the time monitoring reports are submitted. The reports shall contain the information listed in paragraph 2. a. of this section.
 6. **Other Information.** Where the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Department, it shall promptly submit such facts or information.
 7. **Discharge Monitoring Reports.**
 - a. Monitoring results shall be reported at the intervals specified in the permit.
 - b. Monitoring results must be reported to the Department via the current method approved by the Department, unless the permittee has been granted a waiver from using the method. If the permittee has been granted a waiver, the permittee must use forms provided by the Department.
 - c. Monitoring results shall be reported to the Department no later than the 28th day of the month following the end of the reporting period.
- b. Notice.
 - i. Anticipated bypass. If the permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible at least 10 days before the date of the bypass.
 - ii. Unanticipated bypass. The permittee shall submit notice of an unanticipated bypass as required in Section B – Reporting Requirements, paragraph 5 (24-hour notice).
 - c. Prohibition of bypass.
 - i. Bypass is prohibited, and the Department may take enforcement action against a permittee for bypass, unless:
 1. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
 2. There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and
 3. The permittee submitted notices as required under paragraph 2. b. of this section.
 - ii. The Department may approve an anticipated bypass, after considering its adverse effects, if the Department determines that it will meet the three (3) conditions listed above in paragraph 2. c. i. of this section.
3. **Upset Requirements.**
 - a. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology based permit effluent limitations if the requirements of paragraph 3. b. of this section are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.
 - b. Conditions necessary for a demonstration of upset. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:
 - i. An upset occurred and that the permittee can identify the cause(s) of the upset;
 - ii. The permitted facility was at the time being properly operated; and
 - iii. The permittee submitted notice of the upset as required in Section B – Reporting Requirements, paragraph 2. b. ii. (24-hour notice).
 - iv. The permittee complied with any remedial measures required under Section D – Administrative Requirements, paragraph 4.
 - c. Burden of proof. In any enforcement proceeding, the permittee seeking to establish the occurrence of an upset has the burden of proof.

Section C – Bypass/Upset Requirements

1. **Definitions.**
 - a. *Bypass*: the intentional diversion of waste streams from any portion of a treatment facility, except in the case of blending.
 - b. *Severe Property Damage*: substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.
 - c. *Upset*: an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.
2. **Bypass Requirements.**
 - a. Bypass not exceeding limitations. The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of paragraphs 2. b. and 2. c. of this section.

Section D – Administrative Requirements

1. **Duty to Comply.** The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Missouri Clean Water Law and Federal Clean Water Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application.
 - a. The permittee shall comply with effluent standards or prohibitions established under section 307(a) of the Federal Clean Water Act for toxic pollutants and with standards for sewage sludge use or disposal established under section 405(d) of the CWA within the time provided in the regulations that establish these standards or prohibitions or standards for sewage sludge use or disposal, even if the permit has not yet been modified to incorporate the requirement.
 - b. The Federal Clean Water Act provides that any person who violates section 301, 302, 306, 307, 308, 318 or 405 of the Act, or any permit condition or limitation implementing any such sections in a permit issued under section 402, or any requirement imposed in a pretreatment program approved under sections 402(a)(3) or 402(b)(8) of the Act, is subject to a civil penalty not to exceed \$25,000 per day for each violation. The Federal Clean Water Act provides that any person who negligently violates sections 301, 302, 306, 307, 308, 318, or 405 of the Act, or any condition or limitation implementing any of such sections in a permit issued under section 402 of the Act, or any requirement



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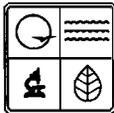
- imposed in a pretreatment program approved under section 402(a)(3) or 402(b)(8) of the Act, is subject to criminal penalties of \$2,500 to \$25,000 per day of violation, or imprisonment of not more than one (1) year, or both. In the case of a second or subsequent conviction for a negligent violation, a person shall be subject to criminal penalties of not more than \$50,000 per day of violation, or by imprisonment of not more than two (2) years, or both. Any person who knowingly violates such sections, or such conditions or limitations is subject to criminal penalties of \$5,000 to \$50,000 per day of violation, or imprisonment for not more than three (3) years, or both. In the case of a second or subsequent conviction for a knowing violation, a person shall be subject to criminal penalties of not more than \$100,000 per day of violation, or imprisonment of not more than six (6) years, or both. Any person who knowingly violates section 301, 302, 303, 306, 307, 308, 318 or 405 of the Act, or any permit condition or limitation implementing any of such sections in a permit issued under section 402 of the Act, and who knows at that time that he thereby places another person in imminent danger of death or serious bodily injury, shall, upon conviction, be subject to a fine of not more than \$250,000 or imprisonment of not more than 15 years, or both. In the case of a second or subsequent conviction for a knowing endangerment violation, a person shall be subject to a fine of not more than \$500,000 or by imprisonment of not more than 30 years, or both. An organization, as defined in section 309(c)(3)(B)(iii) of the CWA, shall, upon conviction of violating the imminent danger provision, be subject to a fine of not more than \$1,000,000 and can be fined up to \$2,000,000 for second or subsequent convictions.
- c. Any person may be assessed an administrative penalty by the EPA Director for violating section 301, 302, 306, 307, 308, 318 or 405 of this Act, or any permit condition or limitation implementing any of such sections in a permit issued under section 402 of this Act. Administrative penalties for Class I violations are not to exceed \$10,000 per violation, with the maximum amount of any Class I penalty assessed not to exceed \$25,000. Penalties for Class II violations are not to exceed \$10,000 per day for each day during which the violation continues, with the maximum amount of any Class II penalty not to exceed \$125,000.
- d. It is unlawful for any person to cause or permit any discharge of water contaminants from any water contaminant or point source located in Missouri in violation of sections 644.006 to 644.141 of the Missouri Clean Water Law, or any standard, rule or regulation promulgated by the commission. In the event the commission or the director determines that any provision of sections 644.006 to 644.141 of the Missouri Clean Water Law or standard, rules, limitations or regulations promulgated pursuant thereto, or permits issued by, or any final abatement order, other order, or determination made by the commission or the director, or any filing requirement pursuant to sections 644.006 to 644.141 of the Missouri Clean Water Law or any other provision which this state is required to enforce pursuant to any federal water pollution control act, is being, was, or is in imminent danger of being violated, the commission or director may cause to have instituted a civil action in any court of competent jurisdiction for the injunctive relief to prevent any such violation or further violation or for the assessment of a penalty not to exceed \$10,000 per day for each day, or part thereof, the violation occurred and continues to occur, or both, as the court deems proper. Any person who willfully or negligently commits any violation in this paragraph shall, upon conviction, be punished by a fine of not less than \$2,500 nor more than \$25,000 per day of violation, or by imprisonment for not more than one year, or both. Second and successive convictions for violation of the same provision of this paragraph by any person shall be punished by a fine of not more than \$50,000 per day of violation, or by imprisonment for not more than two (2) years, or both.
2. **Duty to Reapply.**
- a. If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and obtain a new permit.
- b. A permittee with a currently effective site-specific permit shall submit an application for renewal at least 180 days before the expiration date of the existing permit, unless permission for a later date has been granted by the Department. (The Department shall not grant permission for applications to be submitted later than the expiration date of the existing permit.)
- c. A permittee with currently effective general permit shall submit an application for renewal at least 30 days before the existing permit expires, unless the permittee has been notified by the Department that an earlier application must be made. The Department may grant permission for a later submission date. (The Department shall not grant permission for applications to be submitted later than the expiration date of the existing permit.)
3. **Need to Halt or Reduce Activity Not a Defense.** It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
4. **Duty to Mitigate.** The permittee shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.
5. **Proper Operation and Maintenance.** The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of the permit.
6. **Permit Actions.**
- a. Subject to compliance with statutory requirements of the Law and Regulations and applicable Court Order, this permit may be modified, suspended, or revoked in whole or in part during its term for cause including, but not limited to, the following:
- i. Violations of any terms or conditions of this permit or the law;
- ii. Having obtained this permit by misrepresentation or failure to disclose fully any relevant facts;
- iii. A change in any circumstances or conditions that requires either a temporary or permanent reduction or elimination of the authorized discharge; or
- iv. Any reason set forth in the Law or Regulations.
- b. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.
7. **Permit Transfer.**
- a. Subject to 10 CSR 20-6.010, an operating permit may be transferred upon submission to the Department of an application to transfer signed by the existing owner and the new owner, unless prohibited by the terms of the permit. Until such time the permit is officially transferred, the original permittee remains responsible for complying with the terms and conditions of the existing permit.
- b. The Department may require modification or revocation and reissuance of the permit to change the name of the permittee and incorporate such other requirements as may be necessary under the Missouri Clean Water Law or the Federal Clean Water Act.
- c. The Department, within 30 days of receipt of the application, shall notify the new permittee of its intent to revoke or reissue or transfer the permit.
8. **Toxic Pollutants.** The permittee shall comply with effluent standards or prohibitions established under section 307(a) of the Federal Clean Water Act for toxic pollutants and with standards for sewage sludge use or disposal established under section 405(d) of the Federal Clean Water Act within the time provided in the regulations that establish these standards or prohibitions or standards for sewage sludge use or disposal, even if the permit has not yet been modified to incorporate the requirement.
9. **Property Rights.** This permit does not convey any property rights of any sort, or any exclusive privilege.



STANDARD CONDITIONS FOR NPDES PERMITS
ISSUED BY
THE MISSOURI DEPARTMENT OF NATURAL RESOURCES
MISSOURI CLEAN WATER COMMISSION
REVISED
AUGUST 1, 2014

10. **Duty to Provide Information.** The permittee shall furnish to the Department, within a reasonable time, any information which the Department may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. The permittee shall also furnish to the Department upon request, copies of records required to be kept by this permit.
11. **Inspection and Entry.** The permittee shall allow the Department, or an authorized representative (including an authorized contractor acting as a representative of the Department), upon presentation of credentials and other documents as may be required by law, to:
 - a. Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of the permit;
 - b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
 - c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
 - d. Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Federal Clean Water Act or Missouri Clean Water Law, any substances or parameters at any location.
12. **Closure of Treatment Facilities.**
 - a. Persons who cease operation or plan to cease operation of waste, wastewater, and sludge handling and treatment facilities shall close the facilities in accordance with a closure plan approved by the Department.
 - b. Operating Permits under 10 CSR 20-6.010 or under 10 CSR 20-6.015 are required until all waste, wastewater, and sludges have been disposed of in accordance with the closure plan approved by the Department and any disturbed areas have been properly stabilized. Disturbed areas will be considered stabilized when perennial vegetation, pavement, or structures using permanent materials cover all areas that have been disturbed. Vegetative cover, if used, shall be at least 70% plant density over 100% of the disturbed area.
13. **Signatory Requirement.**
 - a. All permit applications, reports required by the permit, or information requested by the Department shall be signed and certified. (See 40 CFR 122.22 and 10 CSR 20-6.010)
 - b. The Federal Clean Water Act provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or non-compliance shall, upon conviction, be punished by a fine of not more than \$10,000 per violation, or by imprisonment for not more than six (6) months per violation, or by both.
 - c. The Missouri Clean Water Law provides that any person who knowingly makes any false statement, representation or certification in any application, record, report, plan, or other document filed or required to be maintained pursuant to sections 644.006 to 644.141 shall, upon conviction, be punished by a fine of not more than ten thousand dollars, or by imprisonment for not more than six months, or by both.
14. **Severability.** The provisions of the permit are severable, and if any provision of the permit, or the application of any provision of the permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of the permit, shall not be affected thereby.

AP 116165 C 196



MISSOURI DEPARTMENT OF NATURAL RESOURCES
WATER PROTECTION PROGRAM, WATER POLLUTION CONTROL BRANCH
FORM A - APPLICATION FOR CONSTRUCTION OR OPERATING PERMIT
UNDER MISSOURI CLEAN WATER LAW

FOR AGENCY USE ONLY	
CHECK NUMBER	
DATE RECEIVED	FEE SUBMITTED
8/16/13	EXB

Note ▶ PLEASE READ THE ACCOMPANYING INSTRUCTIONS BEFORE COMPLETING THIS FORM.

1. This application is for:

- An operating permit and antidegradation review public notice
- A construction permit following an appropriate operating permit and antidegradation review public notice
- A construction permit and concurrent operating permit and antidegradation review public notice
- A construction permit (submitted before Aug. 30, 2008 or antidegradation review is not required)
- An operating permit for a new or unpermitted facility Construction Permit # _____
- An operating permit renewal: permit # MO- 0095575 Expiration Date 2/12/2014
- An operating permit modification: permit # MO- _____ Reason: _____

1.1 Is the appropriate fee included with the application? (See instructions for appropriate fee) YES NO

2. FACILITY

NAME		TELEPHONE WITH AREA CODE	
Sikeston Power Station		(573) 471-5000	
ADDRESS (PHYSICAL)		FAX (573) 471-5003	
1551 West Wakefield		STATE	ZIP CODE
		MO	63801
CITY			
Sikeston			

3. OWNER

NAME		E-MAIL ADDRESS		TELEPHONE WITH AREA CODE	
Sikeston Board of Municipal Utilities				(573) 471-3328	
ADDRESS (MAILING)				FAX (573) 471-7288	
P.O. Box 370		STATE	ZIP CODE		
		MO	63801		
CITY					
Sikeston					

3.1 Request review of draft permit prior to public notice? YES NO

4. CONTINUING AUTHORITY

NAME		TELEPHONE WITH AREA CODE	
Sikeston Board of Municipal Utilities		(573) 471-3328	
ADDRESS (MAILING)		FAX (573) 471-7288	
P.O. Box 370		STATE	ZIP CODE
		MO	63801
CITY			
Sikeston			

5. OPERATOR

NAME		CERTIFICATE NUMBER		TELEPHONE WITH AREA CODE	
ADDRESS (MAILING)				FAX	
CITY	STATE		ZIP CODE		

6. FACILITY CONTACT

NAME		TITLE		TELEPHONE WITH AREA CODE	
Steve Turnbow		Lab Supervisor		(573) 475-3127	
				FAX (573) 471-5003	

7. ADDITIONAL FACILITY INFORMATION

7.1 Legal Description of Outfalls. (Attach additional sheets if necessary.)

001 _____ 1/4 _____ 1/4 Sec _____ T _____ R _____ County _____
 UTM Coordinates Easting (X): _____ Northing (Y): _____
For Universal Transverse Mercator (UTM), Zone 15 North referenced to North American Datum 1983 (NAD83)

002 _____ 1/4 _____ 1/4 Sec _____ T _____ R _____ County _____
 UTM Coordinates Easting (X): _____ Northing (Y): _____

003 NW 1/4 SW 1/4 Sec 23 T 26N R 13E Scott County
 UTM Coordinates Easting (X): _____ Northing (Y): _____

004 _____ 1/4 _____ 1/4 Sec _____ T _____ R _____ County _____
 UTM Coordinates Easting (X): _____ Northing (Y): _____

7.2 Primary Standard Industrial Classification (SIC) and Facility North American Industrial Classification System (NAICS) Codes.

001 - SIC _____ and NAICS _____ 002 - SIC _____ and NAICS _____
 003 - SIC 4911 and NAICS 22112 004 - SIC _____ and NAICS _____

8. ADDITIONAL FORMS AND MAPS NECESSARY TO COMPLETE THIS APPLICATION
 (Complete all forms that are applicable.)

- A. Is your facility a manufacturing, commercial, mining or silviculture waste treatment facility? YES NO
 If yes, complete Form C (unless storm water only, then complete U.S. Environmental Protection Agency Form 2F per Item C below).
- B. Is your facility considered a "Primary Industry" under EPA guidelines: YES NO
 If yes, complete Forms C and D.
- C. Is application for storm water discharges only? YES NO
 If yes, complete EPA Form 2F.
- D. Attach a map showing all outfalls and the receiving stream at 1" = 2,000' scale.
- E. Is wastewater land applied? If yes, complete Form I. YES NO
- F. Is sludge, biosolids, ash or residuals generated, treated, stored or land applied? YES NO
 If yes, complete Form R.

9. DOWNSTREAM LANDOWNER(S) Attach additional sheets as necessary. See Instructions.
 (PLEASE SHOW LOCATION ON MAP. SEE 8.D ABOVE).

NAME
 John Hux (Hux Farm Agency)

ADDRESS	CITY	STATE	ZIP CODE
303 S. Kingshighway St.	Sikeston	MO	63801

10. I certify that I am familiar with the information contained in the application, that to the best of my knowledge and belief such information is true, complete and accurate, and if granted this permit, I agree to abide by the Missouri Clean Water Law and all rules, regulations, orders and decisions, subject to any legitimate appeal available to applicant under the Missouri Clean Water Law to the Missouri Clean Water Commission.

NAME AND OFFICIAL TITLE (TYPE OR PRINT)	TELEPHONE WITH AREA CODE
Randal W Pick, Results Engineer/DR	(573) 475-3119

SIGNATURE	DATE SIGNED
	8/12/2013

MO 780-1479 (01-09)

BEFORE MAILING, PLEASE ENSURE ALL SECTIONS ARE COMPLETED AND ADDITIONAL FORMS, IF APPLICABLE, ARE INCLUDED.

Submittal of an incomplete application may result in the application being returned.

HAVE YOU INCLUDED:

- Appropriate Fees?
- Map at 1" = 2000' scale?
- Signature?
- Form C, if applicable?
- Form D, if applicable?
- Form 2F, if applicable?
- Form I (Irrigation), if applicable?
- Form R (Sludge), if applicable?

Sikeston Power Station

Richland Drainage
Ditch #4

Outfall #003

M. M. Ketterfield Ave

Process Waste
Pond

Coal Pile

Fly Ash Pond

Coal Pile
Runoff
Pond

FGD Scrubber

Boiler

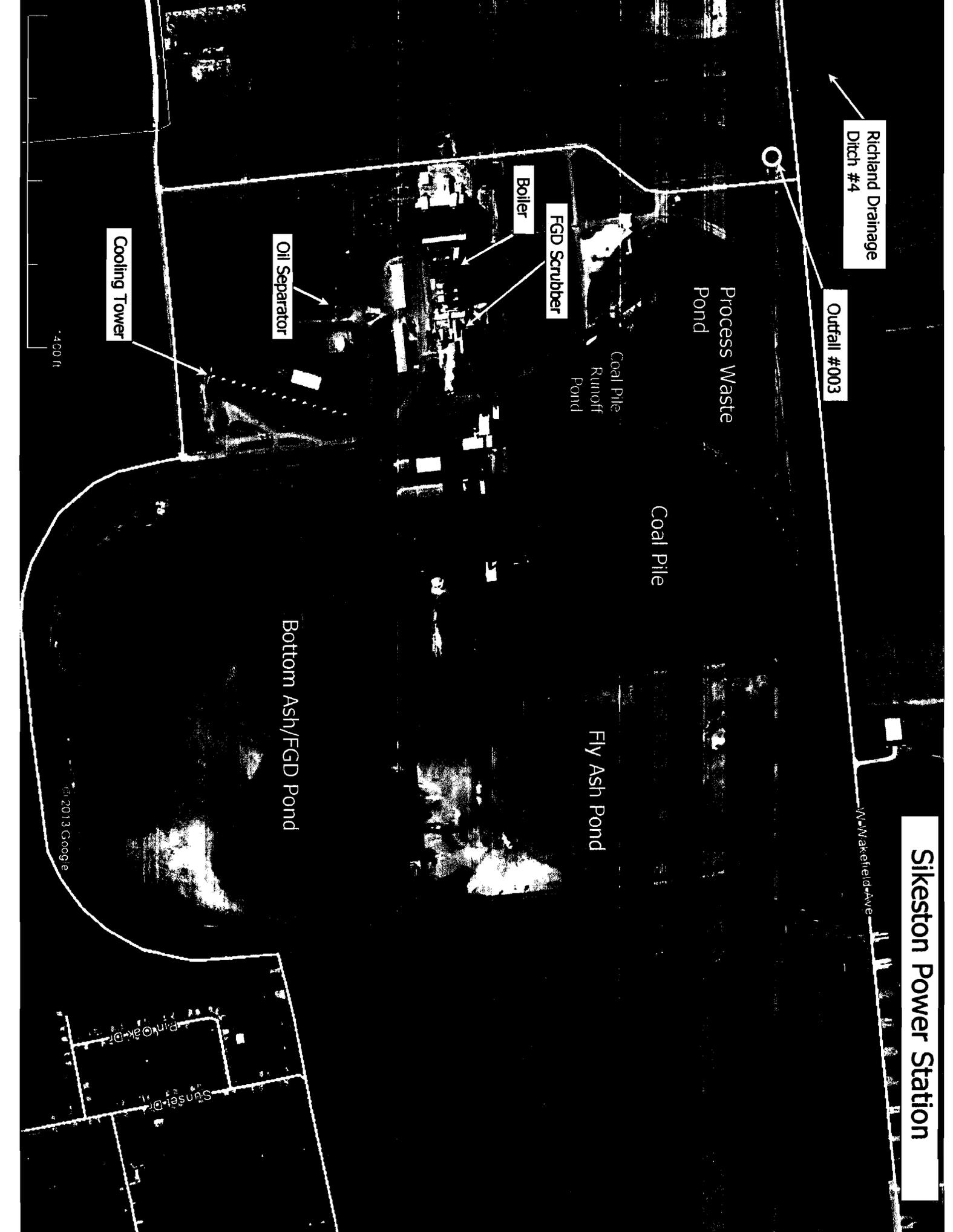
Oil Separator

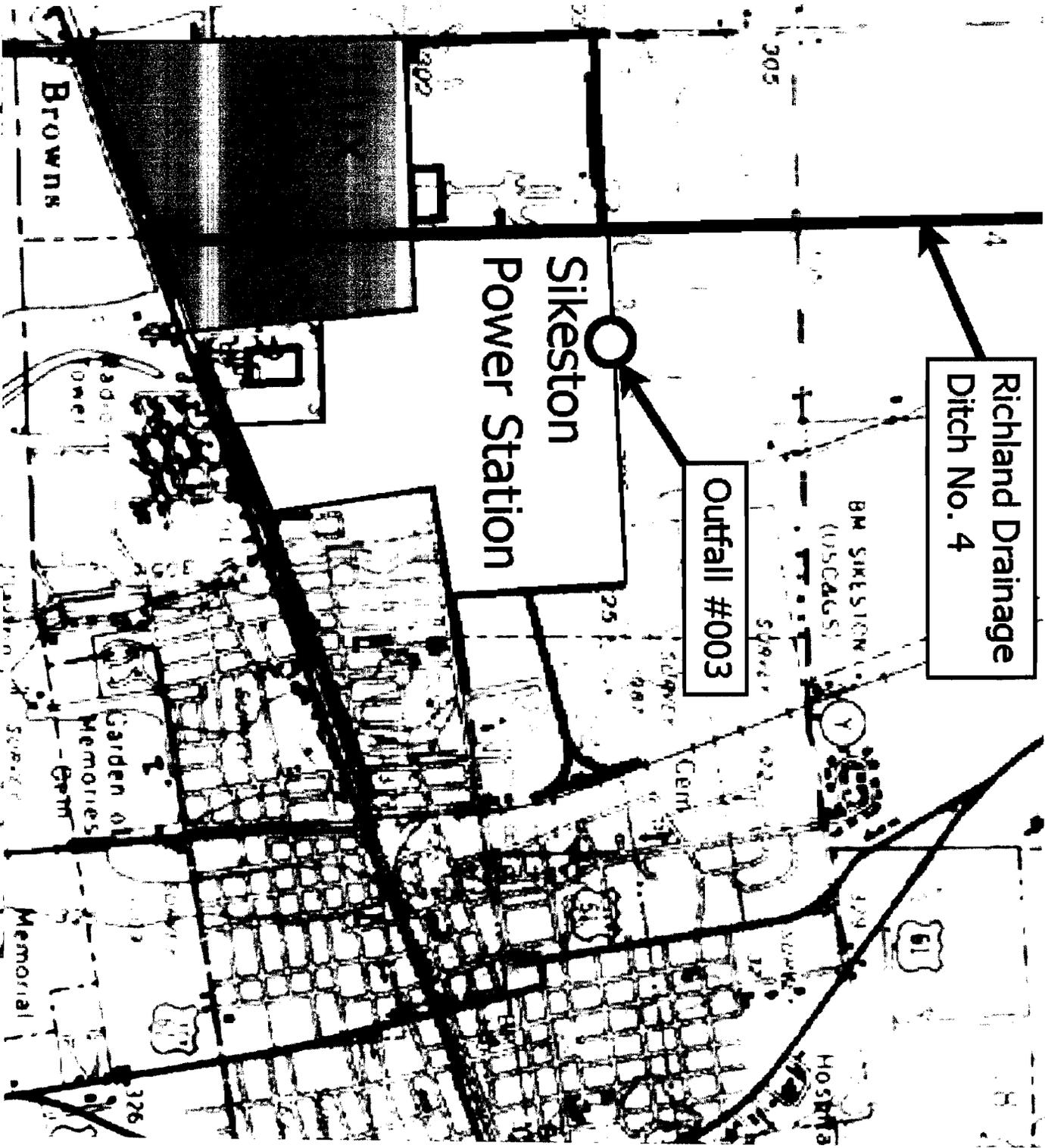
Bottom Ash/FGD Pond

Cooling Tower

400 ft

© 2013 Google





Board of Municipal Utilities

107 East Malone Avenue
P.O. Box 370
Sikeston, Mo. 63801
Phone: (573)-471-3328
Fax: (573)-471-7288
Webpage: www.sikestonbmu.org



Sikeston Power Station

1551 W. Wakefield Road
P.O. Box 370
Sikeston, Mo 63801
Phone: (573)-471-5000
Fax: (573)-471-5003

Edward Throop, General Manager

Rick Landers, Plant Manager

August 12, 2013

Mr. Chris Wieberg, Chief
Operating Permits Section
Water Protection Program
Missouri Department of Natural Resources
1101 Riverside Drive
Jefferson City, MO 65101

RE: NPDES Permit #MO-0095575 Renewal

Dear Mr. Wieberg,

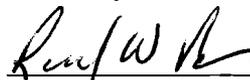
Enclosed is the renewal application for our NPDES Permit # MO-0095575.

This submission consists of the following:

- 1) "FORM A – APPLICATION FOR CONSTRUCTION OR OPERATING PERMIT UNDER MISSOURI CLEAN WATER LAW" with site map and 1:24000 scale US Geological Survey map showing the locations of our outfall, the receiving stream and downstream landowners.
- 2) "FORM C – APPLICATION FOR DISCHARGE PERMIT – MANUFACTURING, COMMERCIAL, MINING, SILVICULTURE OPERATIONS, PROCESS AND STORMWATER" including a process flow diagram.
- 3) "FORM D – APPLICATION FOR DISCHARGE PERMIT – PRIMARY INDUSTRIES"

Please contact Steve Turnbow (ph: 573-475-3127, email: sbow@sbmu.net) or myself (ph: 573-475-3119, email: rpick@sbmu.net) if there are any questions.

Sincerely,



Randal W. Pick
Results Engineer/DR

RECEIVED

AUG 16 2013

WATER PROTECTION PROGRAM