

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-0126713

Owner: The Empire District Electric Company/Westar Energy
Address: P.O. Box 127
Joplin, MO 64802-0127

Continuing Authority: Same as above
Address: Same as above

Facility Name: State Line Combined Cycle Power Plant
Facility Address: 2299 S. State Line Ave.
Joplin, MO 64804

Legal Description: See page 2
UTM Coordinates: See page 2

Receiving Stream: See page 2
First Classified Stream and ID: See page 2
USGS Basin & Sub-watershed No.: See page 2

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

FACILITY DESCRIPTION

See page 2

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

May 1, 2013
Effective Date

Sara Parker Pauley, Director, Department of Natural Resources

March 30, 2018
Expiration Date

John Madros, Director, Water Protection Program

FACILITY DESCRIPTION (continued):

Outfall #001 – Power Plant - SIC #4911

Discharge of the miscellaneous steam cycle drains, chemical waste pump, cooling tower blowdown, steam cycle blowdown & quench, Unit 2-3 transformer containment and CT drains, and stormwater runoff.

Legal Description: NE ¼, NW ¼, Sec 14, T27N, R34W Jasper County
UTM Coordinates: X= 356671, Y= 4103635
Receiving Stream: Tributary to Short Creek (U)
First Classified Stream and ID: Short Creek (P) (**Losing stream**) 303(d) in KS
USGS Basin & Sub-watershed No.: 11070207-0904
Design flow is 1.307 MGD
Average Flow: 0.218 MGD

Outfall #002 – Power Plant – SIC #4911

Discharge from southern collection basin from the oil water separators from Units 1 transformer containment & CT drains, Unit 2-1 transformer containment and CT drains, Unit 2-1 CT evaporative cooler, Unit 2-2 transformer containment & CT drains, and stormwater runoff.

Legal Description: NW ¼, SW ¼, Sec 14, T27N, R34W Jasper County
UTM Coordinates: X= 356482, Y= 4103154
Receiving Stream: Tributary to Short Creek (U)
First Classified Stream and ID: Short Creek (P) (**Losing stream**) 303(d) in KS
USGS Basin & Sub-watershed No.: 11070207-0904
Design flow is 7.077 MGD
Average Flow: 0.099 MGD

Outfall #003 – Power Plant – SIC #4911

Discharge from northern collection basin from stormwater runoff.
Legal Description: NW ¼, NW ¼, Sec 14, T27N, R34W Jasper County
UTM Coordinates: X=356308, Y= 4103641
Receiving Stream: Tributary to Short Creek (U)
First Classified Stream and ID: Short Creek (P) (**Losing stream**) 303(d) in KS
USGS Basin & Sub-watershed No.: 11070207-0904
Design flow is 8.455 MGD
Actual Flow: dependent upon precipitation

Outfall #004 – Power Plant SIC #4911

Discharge from Emergency Cooling Water Storage.
Legal Description: NW ¼, NW ¼, Sec 23, T27N, R34W Newton County
UTM Coordinates: X=356376, Y=4102283
Receiving Stream: Tributary to Short Creek (U)
First Classified Stream and ID: Short Creek (P) (**Losing stream**) 303(d) in KS
USGS Basin & Sub-watershed No.: 11070207-0904
Design Flow is 7.4 MGD

Downstream Stream Monitoring Point

In-stream monitoring for temperature at old Highway 66 Bridge in Kansas
Legal Description: NW ¼, SW ¼, Sec 14, T27N, R34W, Cherokee County, KS
UTM Coordinates: X=356284, Y= 4103126
Receiving Stream: Tributary to Short Creek (U)
First Classified Stream and ID: Short Creek (P) (**Losing stream**)
USGS Basin & Sub-watershed No.: 11070207-0904

Domestic waste goes to Galena, KS (KS0048135).

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS					PAGE NUMBER 3 of 8	
					PERMIT NUMBER MO-0126713	
The permittee is authorized to discharge from outfall(s) with serial number(s) as specified in the application for this permit. The final effluent limitations shall become effective upon issuance and remain in effect until expiration of the permit. Such discharges shall be controlled, limited and monitored by the permittee as specified below:						
OUTFALL NUMBER AND EFFLUENT PARAMETER(S)	UNITS	FINAL EFFLUENT LIMITATIONS			MONITORING REQUIREMENTS	
		DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MEASUREMENT FREQUENCY	SAMPLE TYPE
<u>Outfall #001</u>						
Flow	MGD	*		*	daily	24 hr. estimate
Temperature	°F	*		*	daily	grab
Total Suspended Solids	mg/L	100		30	once/month	grab
Bromine and Total Residual Chlorine, Halogens (Note 1)	µg/L	19		11	once/month	grab
Oil & Grease	mg/L	15		10	once/month	grab
pH	SU	**		**	once/month	grab
Sulfate as SO ₄	mg/L	*		*	once/month	grab
Chloride as Cl	mg/L	*		*	once/month	grab
Total Hardness as CaCO ₃	mg/L	*		*	once/month	grab
MONITORING REPORTS SHALL BE SUBMITTED MONTHLY ; THE FIRST REPORT IS DUE JUNE 28, 2013 . THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.						
Whole Effluent Toxicity (WET) Test	% Survival		Special Condition #14		twice/permit cycle	24 hr. comp.***
MONITORING REPORTS SHALL BE SUBMITTED ON YEAR 1 AND 4 ; THE FIRST REPORT IS DUE JANUARY 28, 2014 (YEAR 1) AND JANUARY 28, 2018 (YEAR 4) .						

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		DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MEASUREMENT FREQUENCY	SAMPLE TYPE
<u>Outfalls #002 & #003</u>						
Flow	MGD	*		*	once/month	24 hr. estimate
Total Suspended Solids	mg/L	100		30	once/month	grab
Oil & Grease	mg/L	15		10	once/month	grab
pH – Units	SU	**		**	once/month	grab
MONITORING REPORTS SHALL BE SUBMITTED MONTHLY ; THE FIRST REPORT IS DUE JUNE 28, 2013 . THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.						

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS					PAGE NUMBER 4 of 8	
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		DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MEASUREMENT FREQUENCY	SAMPLE TYPE
<u>Downstream Monitoring Point- Old Highway 66 Bridge in Kansas</u> Temperature	°F	*		*	once/month	grab
MONITORING REPORTS SHALL BE SUBMITTED MONTHLY ; THE FIRST REPORT IS DUE JUNE 28, 2013 . THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.						

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		DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MEASUREMENT FREQUENCY	SAMPLE TYPE
<u>Outfall #004- Emergency discharge; See Special Condition #2.</u> Flow Total Suspended Solids Oil & Grease pH – Units	MGD mg/L mg/L SU	* 100 15 **		* 30 10 **	once/month once/month once/month once/month	24 hr. estimate grab grab grab
MONITORING REPORTS SHALL BE SUBMITTED MONTHLY ; THE FIRST REPORT IS DUE JUNE 28, 2013 . THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.						
B. STANDARD CONDITIONS						
IN ADDITION TO SPECIFIED CONDITIONS STATED HEREIN, THIS PERMIT IS SUBJECT TO THE ATTACHED PART I STANDARD CONDITIONS DATED <u>OCTOBER 1, 1980</u> , AND HEREBY INCORPORATED AS THOUGH FULLY SET FORTH HEREIN.						

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)

- * Monitoring requirement only.
- ** pH is measured in pH units and is not to be averaged. The pH is limited to the range of 6.5-9.0 pH units.
- *** A 24-hour composite sample is composed of 48 aliquots (subsamples) collected at 30 minute intervals by an automatic sampler.

Note 1 – This permit contains a “Bromine and Total Residual Chlorine, Halogens” limit. An analytical method (4500-Br⁻ and 4500-Cl) with at least a 0.13 mg/L detection limit for this analyte must be used. All analytical values below detection limit shall be assumed to be in compliance. The average monthly effluent values for “Bromine and Total Residual Chlorine, Halogens” will be determined by assuming that analytical results below the detection limit are equivalent to 0 mg/l when calculating the monthly average.

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. If discharge occurs in outfall #004, discharge must be sampled for the parameters established.
3. All outfalls must be clearly marked in the field.

4. Water Quality Standards

- (a) Discharges to waters of the state shall not cause a violation of water quality standards rule under 10 CSR 20-7.031, including both specific and general criteria.
- (b) General Criteria. The following general water quality criteria shall be applicable to all waters of the state at all times including mixing zones. No water contaminant, by itself or in combination with other substances, shall prevent the waters of the state from meeting the following conditions:
 - (1) Waters shall be free from substances in sufficient amounts to cause the formation of putrescent, unsightly or harmful bottom deposits or prevent full maintenance of beneficial uses;
 - (2) Waters shall be free from oil, scum and floating debris in sufficient amounts to be unsightly or prevent full maintenance of beneficial uses;
 - (3) Waters shall be free from substances in sufficient amounts to cause unsightly color or turbidity, offensive odor or prevent full maintenance of beneficial uses;
 - (4) Waters shall be free from substances or conditions in sufficient amounts to result in toxicity to human, animal or aquatic life;
 - (5) There shall be no significant human health hazard from incidental contact with the water;
 - (6) There shall be no acute toxicity to livestock or wildlife watering;
 - (7) Waters shall be free from physical, chemical or hydrologic changes that would impair the natural biological community;
 - (8) Waters shall be free from used tires, car bodies, appliances, demolition debris, used vehicles or equipment and solid waste as defined in Missouri's Solid Waste Law, section 260.200, RSMo, except as the use of such materials is specifically permitted pursuant to section 260.200-260.247.

5. Changes in Discharges of Toxic Substances

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

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

6. Report as no-discharge when a discharge does not occur during the report period.
7. It is a violation of the Missouri Clean Water Law to fail to pay fees associated with this permit (644.055 RSMo).

C. SPECIAL CONDITIONS cont.

8. There shall be no discharge of polychlorinated biphenyl compounds such as those commonly used for transformer fluid.
9. Any sludge that is removed from the cooling water basin shall be analyzed for TCLP. The Department shall be provided a copy of the results along with a disposal plan for review and approval.
10. The Department must be notified any time wastewater (other than domestic) is hauled offsite for treatment or disposal.
11. Using the analytical methods in 40 CFR Part 136, there shall be no detectable amount of the 126 Priority Pollutants contained in chemicals added for cooling tower maintenance as listed in Appendix A to Part 423 [40 CFR 423.15(j)(1)], except as allowed in the regulation for Total Chromium (0.2 mg/L) and Zinc (1.0 mg/L).
12. The permittee shall develop and implement a Storm Water Pollution Prevention Plan (SWPPP). Since the facility already has an SPCC and a Facility Response Plan, which provides for a procedure to observe and document the presents of any oil prior to draining the fuel oil secondary containment, the facility shall either prepare a stand along SWPPP plan or incorporate the requirements of an SWPPP plan into its existing plans. The SWPPP must be prepared within 30 days and implemented within 180 days of permit issuance. The SWPPP must be kept on-site and should not be sent to DNR 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 storm water. Minimum BMPs are listed in SPECIAL CONDITIONS #13 below.
 - (b) The SWPPP must include a schedule for twice per month site inspections and brief written reports. The inspections must include observation and evaluation 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 DNR 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 DNR.
13. Permittee shall adhere to the following minimum Best Management Practices:
 - (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 BMP's 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.

C. SPECIAL CONDITIONS cont.

14. Whole Effluent Toxicity (WET) Test shall be conducted as follows:

SUMMARY OF ACUTE WET TESTING FOR THIS PERMIT				
OUTFALL	AEC	FREQUENCY	SAMPLE TYPE	MONTH
001	100%	Twice/permit cycle (Test in years 1 and 5)	24-hr. composite***	Any

*** A 24-hour composite sample is composed of 48 aliquots (subsamples) collected at 30 minute intervals by an automatic sampler.

Dilution Series							
AEC%	100% effluent	50% effluent	25% effluent	12.5% effluent	6.25% effluent	(Control) 100% upstream, if available	(Control) 100% Lab Water, also called synthetic water

(a) Test Schedule and Follow-Up Requirements

- (1) Perform a MULTIPLE-dilution acute WET test in the months and at the frequency specified above. For tests which are successfully passed, submit test results using the Department's WET test report form #MO-780-1899 along with complete copies of the test reports as received from the laboratory, including copies of chain-of-custody forms within 30 calendar days of availability to the WATER PROTECTION PROGRAM, P.O. Box 176, Jefferson City, MO 65102. If the effluent passes the test, do not repeat the test until the next test period.
 - (a) Chemical and physical analysis of the upstream control 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.
 - (b) 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.
 - (c) All chemical analyses included in the Missouri Department of Natural Resources WET test report form #MO-780-1899 shall be performed and results shall be recorded in the appropriate field of the report form.
- (2) The WET test will be considered a failure if mortality observed in effluent concentrations equal to or less than the AEC is significantly different (at the 95% confidence level; $p = 0.05$) than that observed in the upstream receiving-water control sample. Where upstream receiving water is not available, synthetic laboratory control water may be used.
- (3) All failing test results along with complete copies of the test reports as received from the laboratory, INCLUDING THOSE TESTS CONDUCTED UNDER CONDITION (3) BELOW, shall be reported to the WATER PROTECTION PROGRAM, P.O. Box 176, Jefferson City, MO 65102 within 14 calendar days of the availability of the results.
- (4) If the effluent fails the test for BOTH test species, a multiple dilution test shall be performed for BOTH test species within 30 calendar days and biweekly thereafter (for storm water, tests shall be performed on the next and subsequent storm water discharges as they occur, but not less than 7 days apart) until one of the following conditions are met: Note: Written request regarding single species multiple dilution accelerated testing will be address by THE WATER PROTECTION PROGRAM on a case by case basis.
 - (i) THREE CONSECUTIVE MULTIPLE-DILUTION TESTS PASS. No further tests need to be performed until next regularly scheduled test period.
 - (ii) A TOTAL OF THREE MULTIPLE-DILUTION TESTS FAIL.
- (5) Follow-up tests do not negate an initial failed test.
- (6) The permittee shall submit a summary of all test results for the test series along with complete copies of the test reports as received from the laboratory to the WATER PROTECTION PROGRAM, P.O. Box 176, Jefferson City, MO 65102 within 14 calendar days of the third failed test.
- (7) Additionally, the following shall apply upon failure of the third follow up MULTIPLE DILUTION test The permittee should contact THE WATER PROTECTION PROGRAM within 14 calendar days from availability of the test results to ascertain as to whether a TIE or TRE is appropriate. If the permittee does not contact THE WATER PROTECTION PROGRAM upon the third follow up test failure, a toxicity identification evaluation (TIE) or toxicity reduction evaluation (TRE) is automatically triggered. The permittee shall submit a plan for conducting a TIE or TRE to the WATER PROTECTION PROGRAM within 60 calendar days of the date of the automatic trigger or DNR's direction to perform either a TIE or TRE. This plan must be approved by DNR before the TIE or TRE is begun. A schedule for completing the TIE or TRE shall be established in the plan approval.

C. SPECIAL CONDITIONS cont.

- (8) Upon DNR's approval, the TIE/TRE schedule may be modified if toxicity is intermittent during the TIE/TRE investigations. A revised WET test schedule may be established by DNR for this period.
- (9) If a previously completed TIE has clearly identified the cause of toxicity, additional TIEs will not be required as long as effluent characteristics remain essentially unchanged and the permittee is proceeding according to a DNR approved schedule to complete a TRE and reduce toxicity. Regularly scheduled WET testing as required in the permit, without the follow-up requirements, will be required during this period.
- (10) When WET test sampling is required to run over one DMR period, each DMR report shall contain a copy of the Department's WET test report form that was generated during the reporting period.
- (11) Submit a concise summary in tabular format of all WET test results with the annual report.

(b) Test Conditions

- (1) Test Type: Acute Static non-renewal
- (2) All tests, including repeat tests for previous failures, shall include both test species listed below unless approved by the department on a case by case basis.
- (3) Test species: Ceriodaphnia dubia and Pimephales promelas (fathead minnow). Organisms used in WET testing shall come from cultures reared for the purpose of conducting toxicity tests and cultured in a manner consistent with the most current USEPA guidelines. All test animals shall be cultured as described in the most current edition of Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms.
- (4) Test period: 48 hours at the "Allowable Effluent Concentration" (AEC) specified above.
- (5) Upstream receiving stream water shall be used as dilution water. If upstream water is unavailable or if mortality in the upstream water exceeds 10%, "reconstituted" water will be used as dilution water. Procedures for generating reconstituted water will be supplied by the MDNR upon request.
- (6) Tests will be run with 100% receiving-stream water (if available), collected upstream of the outfall at a point beyond any influence of the effluent, and reconstituted water.
- (7) If reconstituted-water control mortality for a test species exceeds 10%, the entire test will be rerun.
- (8) If upstream control mortality exceeds 10%, the entire test will be rerun using reconstituted water as the dilutant.
- (9) Whole-effluent-toxicity test shall be consistent with the most current edition of Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms

15. Before releasing water that has accumulated in fuel oil secondary containment areas it must be examined for hydrocarbon odor and presence of sheen. When the presence of hydrocarbons is indicated, and at a minimum of once/quarter, this water must be tested for Total Petroleum Hydrocarbons (TPH). The suggested analytical method for testing TPH is non-Halogenated Organic by Gas Chromatography method 8015 (also known as OA1 and OA2). However, if the permittee so desires to use other approved testing methods (i.e. EPA 1664), they may do so. If the concentration for TPH exceeds 10 mg/L, the water shall be taken to a WWTP for treatment, treated on site, or be taken to a contract hauler.

A summary of fuel oil secondary containment sampling shall be submitted quarterly in accordance with the following table:

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 28th
Third	July, August, September	Sample at least once during any month of the quarter	October 28th
Fourth	October, November, December	Sample at least once during any month of the quarter	January 28th

Appendix A to 40 CFR, Part 423--126 Priority Pollutants

001 Acenaphthene	067 Butyl benzyl phthalate
002 Acrolein	068 Di-N-Butyl Phthalate
003 Acrylonitrile	069 Di-n-octyl phthalate
004 Benzene	070 Diethyl Phthalate
005 Benzidine	071 Dimethyl phthalate
006 Carbon tetrachloride (tetrachloromethane)	072 1,2-benzanthracene (benzo(a)anthracene)
007 Chlorobenzene	073 Benzo(a)pyrene (3,4-benzo-pyrene)
008 1,2,4-trichlorobenzene	074 3,4-Benzofluoranthene (benzo(b)fluoranthene)
009 Hexachlorobenzene	075 11,12-benzofluoranthene (benzo(b)fluoranthene)
010 1,2-dichloroethane	076 Chrysene
011 1,1,1-trichloroethane	077 Acenaphthylene
012 Hexachloroethane	078 Anthracene
013 1,1-dichloroethane	079 1,12-benzoperylene (benzo(ghi)perylene)
014 1,1,2-trichloroethane	080 Fluorene
015 1,1,2,2-tetrachloroethane	081 Phenanthrene
016 Chloroethane	082 1,2,5,6-dibenzanthracene (dibenzo(h)anthracene)
018 Bis(2-chloroethyl) ether	083 Indeno (,1,2,3-cd) pyrene(2,3-o-pheynylene pyrene)
019 2-chloroethyl vinyl ether (mixed)	084 Pyrene
020 2-chloronaphthalene	085 Tetrachloroethylene
021 2,4, 6-trichlorophenol	086 Toluene
022 Parachlorometa cresol	087 Trichloroethylene
023 Chloroform (trichloromethane)	088 Vinyl chloride (chloroethylene)
024 2-chlorophenol	089 Aldrin
025 1,2-dichlorobenzene	090 Dieldrin
026 1,3-dichlorobenzene	091 Chlordane (technical mixture and metabolites)
027 1,4-dichlorobenzene	092 4,4-DDT
028 3,3-dichlorobenzidine	093 4,4-DDE (p,p-DDX)
029 1,1-dichloroethylene	094 4,4-DDD (p,p-TDE)
030 1,2-trans-dichloroethylene	095 Alpha-endosulfan
031 2,4-dichlorophenol	096 Beta-endosulfan
032 1,2-dichloropropane	097 Endosulfan sulfate
033 1,2-dichloropropylene(1,3-dichloropropene)	098 Endrin
034 2,4-dimethylphenol	099 Endrin aldehyde
035 2,4-dinitrotoluene	100 Heptachlor
036 2,6-dinitrotoluene	101 Heptachlor epoxide (BHC-hexachlorocyclohexane)
037 1,2-diphenylhydrazine	102 Alpha-BHC
038 Ethylbenzene	103 Beta-BHC
039 Fluoranthene	104 Gamma-BHC (lindane)
040 4-chlorophenyl phenyl ether	105 Delta-BHC (PCB-polychlorinated biphenyls)
041 4-bromophenyl phenyl ether	106 PCB-1242 (Arochlor 1242)
042 Bis(2-chloroisopropyl) ether	107 PCB-1254 (Arochlor 1254)
043 Bis(2-chloroethoxy) methane	108 PCB-1221 (Arochlor 1221)
044 Methylene chloride (dichloromethane)	109 PCB-1232 (Arochlor 1232)
045 Methyl chloride (dichloromethane)	110 PCB-1248 (Arochlor 1248)
046 Methyl bromide (bromomethane)	111 PCB-1260 (Arochlor 1260)
047 Bromoform (tribromomethane)	112 PCB-1016 (Arochlor 1016)
048 Dichlorobromomethane	113 Toxaphene
051 Chlorodibromomethane	114 Antimony
052 Hexachlorobutadiene	115 Arsenic
053 Hexachloromyclopentadiene	116 Asbestos
054 Isophorone	117 Beryllium
055 Naphthalene	118 Cadmium
056 Nitrobenzene	119 Chromium
057 2-nitrophenol	120 Copper
058 4-nitrophenol	121 Cyanide, Total
059 2,4-dinitrophenol	122 Lead
060 4,6-dinitro-o-cresol	123 Mercury
061 N-nitrosodimethylamine	124 Nickel
062 N-nitrosodiphenylamine	125 Selenium
063 N-nitrosodi-n-propylamin	126 Silver
064 Pentachlorophenol	127 Thallium
065 Phenol	128 Zinc
066 Bis(2-ethylhexyl) phthalate	129 2,3,7,8-tetrachloro-dibenzo-p-dioxin (TCDD)

Missouri Department of Natural Resources
FACT SHEET
FOR THE PURPOSE OF RENEWAL
OF
MO-0126713
STATE LINE COMBINED CYCLE 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: IND
Facility SIC Code(s): 4911

Facility Description:

The Empire District Electric Company (Empire District), State Line Combined Cycle Power Plant is an electrical power generating facility engaged in the generation of electricity for distribution and sale. The combined cycle consists of three (3) electrical generating units- two combustion turbines (TS's) (Units 2-1, 2-2) and one steam turbine (Unit 2-3). Additionally, the facility has one (1) simple cycle combustion turbine (Unit 1). The combined cycle portion of the facility is jointly owned by Empire District and Westar Energy, Inc., and is operated by Empire District. The simple-cycle portion of the facility is owned and operated by Empire District. The combined cycle turbines use natural gas as their primary fuel. The simple-cycle combustion turbine may use distillate fuel oil (No. 1, No. 2, or Jet A). Total plant output is a nominal six hundred (600) megawatts. Discharge is to classified sections of Short Creek that are located in Kansas. The distance from outfalls to Short Creek is 1.75 miles.

“The facility has a fuel oil (jet A) storage capacity of approximately 1,470,000 gallons (2-735,000 gallon tanks). These tanks and the secondary containment system were installed in 1995. The tanks are located within a lined secondary containment, sized to contain the fuel contained in both tanks. This containment is operated with a closed drain valve to allow any rain water to be inspected prior to being drained. Additionally, when rain water is actually drained the outflow is further processed through an oil water separator prior to it being routed to a site runoff containment pond which in turn discharges as outfall 002, with is currently monitored for oil & grease.

The site currently has in place both a Spill Control and Counter measure (SPCC) Plan and a Facility Response Plan. Both plans are reviewed periodically.”

Since Outfall #001—cooling tower blowdown—only discharges 2.0 cfs, temperature limits are not deemed necessary, as discharge is to an unclassified ditch and on to a classified stream (Short Creek) in Kansas. This permit adds a Downstream Monitoring Point in Kansas. If downstream monitoring indicates a problem with temperature, the issue will be revisited with the company.

State Line Combined Cycle Power Plant uses Sodium Bromide as the biocide for Outfall 001. The analyte name “Bromine, Total Residual Chlorine, Halogens” is different than the more common “Total Residual Chlorine” (TRC). The analytic method is the same as for TRC; however, the method also detects Bromine as if it was Chlorine.

The facility has seven wells in the property. The facility’s cooling water comes from deep wells and from Missouri American Water. For potable uses, the facility uses city water. Sanitary wastes are sent to and treated by the City of Galena, KS POTW.

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

- No.

Application Date: 12/07/11
Expiration Date: 05/10/11

OUTFALL(S) TABLE:

OUTFALL	DESIGN FLOW (CFS)	TREATMENT LEVEL	EFFLUENT TYPE	DISTANCE TO CLASSIFIED SEGMENT (MI)
#001	2.03	BMP/Primary	Industrial	1.75
#002	10.97	BMP/Primary	Industrial	2.75
#003	13.11	BMP	Stormwater	1.75
#004	11.47	BMP	Industrial	2.75

Receiving Water Body's Water Quality & Facility Performance History:

There seems to be no impairment reported on this segment of the receiving body of water. However, there is a Water Quality Impairment: Metals (Lead, Zinc, Copper, and Cadmium) for Spring River Watershed, including Shoal Creek, Short Creek, Shawnee Creek, Turkey Creek and Center Creek. (http://www.kdheks.gov/tmdl/download/spring_metals.pdf)

Comments:

The previous permit had this condition:

Instead of monitoring, compliance with the limitations for the 126 priority pollutants may be determined by engineering calculations which demonstrate that the regulated pollutants are **not detectable** in the final discharge of Outfall #001 by the analytical methods in 40 CFR Part 136. This is allowed in Part 40 CFR 423.15(J)(3). Empire submitted evidence dated April 19, 2002 and July 5, 2002, and reaffirmed in a letter dated December 20, 2006, that 126 Priority Pollutants are not present in outfall #001. Therefore, monitoring for 126 Priority Pollutants was waived for the 2007-2012 permit cycle. For the next permit cycle, permittee must provide new analytical data with their application.

The current renewal application incorporated analytical results of the 126 Priority Pollutants analyzed. Majority of the pollutants tested were non-detect. However, these pollutants were detected:

056 Nitrobenzene 52%
065 Phenol 23% (Phenol-d6 (S))

In addition to the above pollutants, the table below shows the parameters with detection. However, based on Best Professional Judgment (BPJ), for consistency in permitting it was decided that pollutants having concentrations of at least 50% of the water quality criteria, these pollutants will have either monitoring requirements or numeric limitations. Aluminum, Barium, Boron, Iron, and Manganese are well below half of the criteria; thus, no monitoring is required. However, sulfate's criterion cannot be determined at this time until we have chloride and hardness data, so these three parameters will have monitoring requirement. No specific activity at the facility can be attributed to having fecal coliform in the discharge, thus will not be monitored.

PARAMETERS	WATER QUALITY CRITERIA	RESULTS	DATE ANALYZED
Aluminum	750 µg/L (AQL)	203 µg/L	11/29/2012
Barium	2000 µg/L (GRW/DWS)	240 µg/L	11/29/2012
Boron	2,000 µg/L (IRR/GRW)	165 µg/L	11/29/2012
Iron	1000 µg/L (AQL)	396 µg/L	11/29/2012
Magnesium	-	26,100 µg/L	11/29/2012
Manganese	50 µg/L (GRW)	10 µg/L	11/29/2012
Chloride	230 mg/L (AQL)	104 mg/L	12/1/2012
Sulfate	Chloride and water hardness dependent	515 mg/L	12/1/2012
Fecal Coliform	126 CFU/100 mL (E. coli)	280 CFU/100 mL	11/29/2012

LIMITATIONS EXCEEDANCES

The facility's 5-year discharge monitoring report (DMR) from 5/10/07 to 5/10/12 showed the following limitations exceedance:

TEMPERATURE for OUTFALL #001		
Date	Monthly Value in °F	Daily Value in °F
8/31/11	91	91
7/31/11	91	91
8/31/10	91	91
7/31/10	96	96
10/31/08	-	92
8/31/08	-	94
9/30/07	-	91
The facility has a cooling tower installed. Exceedance may be due to the ambient temperature of the stream.		

pH for OUTFALL #002		
Date	Monthly (6.5-9.0 SU)	Daily (6.5-9.0 SU)
1/31/12	9.64	9.64
12/31/11	9.15	9.15

Total Suspended Solids for OUTFALL #003		
Date	Monthly Average (Limit: 30 mg/L)	Daily Max (100 mg/L)
5/31/09	38.08 mg/L	-
During the permit cycle, 77% of the time this outfall had "NO DISCHARGE".		

Total Suspended Solids for OUTFALL #004		
During the permit cycle, 98% of the time this outfall had "NO DISCHARGE"		
During the permit cycle, 2% of the time this outfall had "NO RECEIPT OF DMR"		

In-Stream Monitoring		
100% DMR Submission		

STATE LINE COMBINED CYCLE POWER PLANT OUTFALLS' 10-YEAR PARAMETER HISTORY:

Outfalls	2001-2006	2007-2012	O -Omitted A -Added
Outfall 001	Total Residual Chlorine	Bromine/Chloride	
	Flow	Flow	
	Total Ammonia	--	Total Ammonia (O)
	Oil & Grease	Oil & Grease	
	pH	pH	
	Temperature	Temperature	
	Total Suspended Solids	Total Suspended Solids	
	WET Test C/P	--	WET Test C/P (O)
Outfall 002	126 Priority Pollutants	--	126 Priority Pollutants (O)
	Flow	Flow	
	Oil & Grease	Oil & Grease	
	pH	pH	
	Temperature	--	Temperature (O)
	Total Suspended Solids	Total Suspended Solids	
	Flow	Flow	

Outfall 003	Oil & Grease	Oil & Grease	
	pH	pH	
	Temperature	--	Temperature (O)
	Total Suspended Solids	Total Suspended Solids	
Outfall 004		Flow	2007-2012 (A)
		Oil & Grease	
		pH	
		Total Suspended Solids	
In-Stream Monitoring		Temperature	2007-2012 (A)

The facility's expanded testing showed fecal coliform concentrations. But there appears to be no activity in the facility that could be attributed to the presence of bacteria in the tests other than possible bird feces in the adjoining fields that may be carried in the stormwater; therefore, E. coli limits are not established in the permit.

Part II – Operator Certification Requirements

As per [10 CSR 20-6.010(8) Terms and Conditions of a Permit], permittees shall operate and maintain facilities to comply with the Missouri Clean Water Law and applicable permit conditions and regulations. Operators or supervisors of operations at regulated wastewater treatment facilities shall be certified in accordance with [10 CSR 20-9.020(2)] and any other applicable state law or regulation. As per [10 CSR 20-9.020(2)(A)], requirements for operation by certified personnel shall apply to all wastewater treatment systems, if applicable, as listed below:

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

Part III – Receiving Stream Information

APPLICABLE DESIGNATIONS OF WATERS OF THE STATE:

As per Missouri's Effluent Regulations [10 CSR 20-7.015], the waters of the state are divided into 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.

Losing [10 CSR 20-7.015(4)]:
 All Other Waters [10 CSR 20-7.015(8)]:

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

RECEIVING STREAM(S) TABLE:

WATERBODY NAME	CLASS	WBID	DESIGNATED USES*	12-DIGIT HUC**
Unnamed Tributary to Short Creek	U	n/a	General Criteria	11070207-0904
Short Creek	P	GP	***	

* - Irrigation (IRR), Livestock & Wildlife Watering (LWW), Protection of Warm Water Aquatic Life and Human Health-Fish Consumption (AQL), Cool Water Fishery (CLF), Cold Water Fishery (CDF), Whole Body Contact Recreation (WBC), Secondary Contact Recreation (SCR), Drinking Water Supply (DWS), Industrial (IND), Groundwater (GRW).
 ** - Ecological Drainage Unit
 ***- General Purpose. Designated uses are Aquatic Life Expected (AQ-E) and Secondary Recreation not open for public accessibility (CR-b). [Kansas Surface Water Register, February 12, 2009; http://www.kdheks.gov/befs/download/Current_Kansas_Surface_Register.pdf]

RECEIVING STREAM(S) LOW-FLOW VALUES TABLE:

RECEIVING STREAM (U, C, P)	LOW-FLOW VALUES (CFS)		
	1Q10	7Q10	30Q10
Unnamed Tributary to Short Creek (U)	0	0	0

MIXING CONSIDERATIONS

Mixing Zone: Not Allowed [10 CSR 20-7.031(4)(A)4.B.(I)(a)].
Zone of Initial Dilution: Not Allowed [10 CSR 20-7.031(4)(A)4.B.(I)(b)].

RECEIVING STREAM MONITORING REQUIREMENTS:

Site 01. (Downstream)

PARAMETER(S)	SAMPLING FREQUENCY	SAMPLE TYPE	LOCATION
Temperature	Once/month	Grab	Old Highway 66 Bridge in Kansas

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

ALTERNATIVE EVALUATIONS FOR NEW FACILITIES:

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

Not Applicable;

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

ANTI-BACKSLIDING:

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

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

ANTIDegradation:

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

- Renewal no degradation proposed and no further review necessary.

AREA-WIDE WASTE TREATMENT MANAGEMENT & CONTINUING AUTHORITY:

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

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://dnr.mo.gov/env/wpp/pub/index.html>, items WQ422 through WQ449.

Not applicable;

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

COMPLIANCE AND ENFORCEMENT:

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

Not Applicable;

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

PRETREATMENT PROGRAM:

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

Pretreatment programs are required at any POTW (or combination of POTW operated by the same authority) and/or municipality with a total design flow greater than 5.0 MGD and receiving industrial wastes that interfere with or pass through the treatment works or are otherwise subject to the pretreatment standards. Pretreatment programs can also be required at POTWs/municipals with a design flow less than 5.0 MGD if needed to prevent interference with operations or pass through.

Several special conditions pertaining to the permittee's pretreatment program may be included in the permit, and are as follows:

- Implementation and enforcement of the program,
- Annual pretreatment report submittal,
- Submittal of list of industrial users,
- Technical evaluation of need to establish local limitations, and
- Submittal of the results of the evaluation

Not Applicable;

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

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.

Not Applicable;

A RPA was not conducted for this facility.

REMOVAL EFFICIENCY:

Removal efficiency is a method by which the Federal Regulations define Secondary Treatment and Equivalent to Secondary Treatment, which applies to Biochemical Oxygen Demand 5-day (BOD₅) and Total Suspended Solids (TSS) for Publicly Owned Treatment Works (POTWs)/municipals.

Not Applicable;

Influent monitoring is not being required to determine percent removal.

SANITARY SEWER OVERFLOWS (SSO) AND INFLOW AND INFILTRATION (I&I):

Sanitary Sewer Overflows (SSOs) are defined as an untreated or partially treated sewage release are considered bypassing under state regulation [10 CSR 20-2.010(11)] and should not be confused with the federal definition of bypass. SSO's have a variety of causes including blockages, line breaks, and sewer defects that allow excess storm water and ground water to (1) enter and overload the collection system, and (2) overload the treatment facility. Additionally, SSO's can be also be caused by lapses in sewer system operation and maintenance, inadequate sewer design and construction, power failures, and vandalism. SSOs also include overflows out of manholes and onto city streets, sidewalks, and other terrestrial locations.

Additionally, Missouri RSMo §644.026.1 mandates that the Department require proper maintenance and operation of treatment facilities and sewer systems and proper disposal of residual waste from all such facilities.

Not applicable;

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

SCHEDULE OF COMPLIANCE (SOC):

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

Not Applicable;

This permit does not contain an SOC.

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;

The permittee is required to develop and implement a SWPPP. 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.

“Since the facility already has an SPCC and a Facility Response Plan, which provides for a procedure to observe and document the presents of any oil prior to draining the fuel oil secondary containment, the facility shall either prepare a stand along SWPPP plan or incorporate the requirements of an SWPPP plan into its existing plans.”

VARIANCE:

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

Not Applicable;

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

WASTELOAD ALLOCATIONS (WLA) FOR LIMITS:

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

Not Applicable;

WLA was not conducted.

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(3)(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 test will be required by all facilities meeting the following criteria:

Facility has Water Quality-based Effluent Limitations for toxic substances (other than NH₃)

40 CFR 122.41(M) - BYPASSES:

The federal Clean Water Act (CWA), Section 402 prohibits wastewater dischargers from “bypassing” untreated or partially treated sewage (wastewater) beyond the headworks. A bypass, which includes blending, is defined as an intentional diversion of waste streams from any portion of a treatment facility, [40 CFR 122.41(m)(1)(i)]. Additionally, Missouri regulation 10 CSR 20-2.010(11) defines a bypass as the diversion of wastewater from any portion of wastewater treatment facility or sewer system to waters of the state. Only under exceptional and specified limitations do the federal regulations allow for a facility to bypass some or all of the flow from its treatment process. Bypasses are prohibited by the CWA unless a permittee can meet all of the criteria listed in 40 CFR 122.41(m)(4)(i)(A), (B), & (C). Any bypasses from this facility are subject to the reporting required in 40 CFR 122.41(l)(6) and per Missouri’s Standard Conditions I, Section B, part 2.b. Additionally, Anticipated Bypasses include bypasses from peak flow basins or similar devices designed for peak wet weather flows.

- Not Applicable;

This facility does not bypass.

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

Section 303(d) of the federal Clean Water Act requires that each state identify waters that are not meeting water quality standards and for which adequate water pollution controls have not been required. Water quality standards protect such beneficial uses of water as whole body contact (such as swimming), maintaining fish and other aquatic life, and providing drinking water for people, livestock and wildlife. The 303(d) list helps state and federal agencies keep track of waters that are impaired but not addressed by normal water pollution control programs.

A TMDL is a calculation of the maximum amount of a given pollutant that a body of water can absorb before its water quality is affected. If a water body is determined to be impaired as listed on the 303(d) list, then a watershed management plan will be developed that shall include the TMDL calculation

Not Applicable;

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

Part V – Effluent Limits Determination

Basis for Effluent Limits

In general, the Clean Water Act (CWA) requires that the effluent limits for a particular pollutant be the more stringent of either technology-based limits or water quality-based limits. Technology-based limits are set according to the level of treatment that is achievable using available technology. A water quality-based effluent limit is designed to ensure that the water quality standards applicable to a waterbody are being met and may be more stringent than technology-based effluent limits.

How Water Quality-based Effluent Limits are derived

The first step in developing a water quality-based effluent limit is to develop a wasteload allocation (WLA) for the pollutant. A wasteload allocation is the concentration or loading of a pollutant that the permittee may discharge without causing or contributing to an exceedance of water quality standards in the receiving water.

In cases where a mixing zone is not authorized, either because the receiving water already exceeds the criterion, the receiving water flow is too low to provide dilution, or the State does not authorize one, the criterion becomes the WLA. Establishing the criterion as the wasteload allocation ensures that the permittee will not cause or contribute to an exceedance of the criterion. The following discussion details the specific water quality-based effluent limits in the draft permit.

Chronic WLA: $C_e = ((\text{design flow} + 7Q_{10} \text{ MZ}) \text{ WQ Criterion} - (7Q_{10} \text{ MZ} * \text{background concentration upstream})) / \text{design flow}$
 $C_e = \text{xx } \mu\text{g/L}$

Acute WLA: $C_e = ((\text{design flow} + 7Q_{10} \text{ ZID}) \text{ WQ Criterion} - (7Q_{10} \text{ ZID} * \text{background concentration upstream})) / \text{design flow}$
 $C_e = \text{xx } \mu\text{g/L}$

$$C_e = [((Q_e + Q_s) * C) - (Q_s * C_s)] / Q_e$$

Where:

Q_e = volume of effluent discharge (design flow in cfs)

Q_s = volume of receiving stream available for mixing (7Q10 of MZ in cfs for chronic; use ZID for acute)

C_e = concentration of a pollutant of concern in the effluent (effluent limit)

C_s = upstream concentration of pollutant of concern (background concentration)

EFFLUENT LIMITATIONS TABLE: *Outfall #001* – Main Facility Outfall

PARAMETER	UNIT	DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MODIFIED	PREVIOUS PERMIT LIMITATIONS
FLOW	MGD	*		*	NO	*
TEMPERATURE	°F	*		*	NO	*
TOTAL SUSPENDED SOLIDS	MG/L	100		30	NO	100/30
BROMINE/TRC/HALOGENS	µG/L	19		11	NO	19/11
OIL & GREASE	MG/L	15		10	NO	15/10
PH	SU	**		**	YES	6.0-9.0
SULFATE AS SO ₄	MG/L	*		*	NEW PARAMETER	
CHLORIDE AS CL	MG/L	*		*	NEW PARAMETER	
HARDNESS AS CaCO ₃	MG/L	*		*	NEW PARAMETER	
WHOLE EFFLUENT TOXICITY (WET) TEST	% Survival	Please see WET Test in the Derivation and Discussion Section below.				

OUTFALL #001 – DERIVATION AND DISCUSSION OF LIMITS:

- **Flow.** In accordance with [40 CFR Part 122.44(i)(1)(ii)] the volume of effluent discharged from each outfall is needed to assure compliance with permitted effluent limitations. If the permittee is unable to obtain effluent flow, then it is the responsibility of the permittee to inform the Department, which may require the submittal of an operating permit modification.
- **Temperature.** Monitoring only. 10 CSR 20-7.031(4)(D)5 states that temperature shall not exceed the monthly temperature criteria established of 90°F.

- **Total Suspended Solids (TSS).** Effluent limitations have been retained from previous state operating permit. Daily maximum 100 mg/L and 30 mg/L monthly average per 40 CFR 423.15(c). These limitations seem to be achievable by the facility as shown in their 5-year DMR.
- **Bromine and Total Residual Chlorine, Halogens.** Effluent limitations have been retained from previous state operating permit. Daily maximum of 19 µg/L and 11 µg/L monthly average per 10 CSR 20-7.031, Table A. These limitations seem to be achievable by the facility as shown in their 5-year DMR.
- **Oil & Grease.** Effluent limitations of 10 mg/L monthly average and 15 mg/L daily maximum for this conventional pollutant have been retained from previous state operating permit for protection of aquatic life.
- **pH.** In accordance with [10 CSR 20-7.031(4)(E)], pH shall be maintained in the range from six and one-half to nine (6.5-9.0) standard units
- **WET Test.** 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*. It is recommended that WET testing be conducted during the period of lowest stream flow. (Any schedule more frequent than what is established below will need justification. If a WET testing schedule is not listed below, but has been determined appropriate, please justify here. If a facility has multiple schedules, then the most frequent should be used.)
 Acute
- **Sulfate as SO₄.** The facility’s analytical testing showed a concentration of sulfate of 515 mg/L; therefore, monitoring of this parameter has been established. Sulfate value is needed to calculate Chloride limits during the next permit cycle.

The new policy per 10 CSR 20-7.031 (4)(L) uses the median concentration of chloride and the 25th percentile of the hardness data within the Ecological Drainage Code (EDU) or Hydrological Unit Code 8 (HUC8) to calculate the sulfate limits. However, site-specific data may also be used.

- **Chloride as Cl.** The facility’s analytical testing showed a concentration of chloride of 104 mg/L; therefore, monitoring of this parameter has been established. Chloride value is needed to calculate Sulfate limits during the next permit cycle
- **Hardness as CaCO₃.** Monitoring requirement only. Sulfate and Chloride are dependent on the hardness of water.

EFFLUENT LIMITATIONS TABLE: Outfalls #002, #003, & #004

PARAMETER	UNIT	DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MODIFIED	PREVIOUS PERMIT LIMITATIONS
FLOW	MGD	*		*	NO	*
TOTAL SUSPENDED SOLIDS	MG/L	100		30	NO	100/30
OIL & GREASE	MG/L	15		10	NO	15/10
PH	SU	**		**	YES	6.0-9.0

* -Monitoring requirement only.

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

OUTFALL #002, #003, AND #004 – DERIVATION AND DISCUSSION OF LIMITS:

- **Flow.** In accordance with [40 CFR Part 122.44(i)(1)(ii)] the volume of effluent discharged from each outfall is needed to assure compliance with permitted effluent limitations. If the permittee is unable to obtain effluent flow, then it is the responsibility of the permittee to inform the Department, which may require the submittal of an operating permit modification.
- **Total Suspended Solids (TSS).** Effluent limitations have been retained from previous state operating permit. Daily maximum 100 mg/L and 30 mg/L monthly average per 40 CFR 423.15(c). These limitations seem to be achievable by the facility as shown in their 5-year DMR.
- **Oil & Grease.** . Effluent limitations of 10 mg/L monthly average and 15 mg/L daily maximum for this conventional pollutant have been retained from previous state operating permit for protection of aquatic life.
- **pH.** In accordance with [10 CSR 20-7.031(4)(E)], pH shall be maintained in the range from six and one-half to nine (6.5-9.0) standard units

Part VI – Finding of Affordability

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

Not Applicable;

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

Part VII – 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.

This permit will expire on **March 30, 2018** in order to meet the permit synchronization goals.

PUBLIC NOTICE:

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

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

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

- The Public Notice period for this operating permit is tentatively scheduled to begin in January 2013.

The Public Notice period for this operating permit was from January 25, 2013 to February 25, 2013. No comments received.

DATE OF FACT SHEET: JANUARY 11, 2013

COMPLETED BY:

JOY JOHNSON, ENVIRONMENTAL SPECIALIST III
NPDES PERMITS UNIT
WATER PROTECTION PROGRAM
joy.johnson@dnr.mo.gov

Pre - Public Notice COMMENTS

Fact Sheet

Page 1: Facility Description

Empire requested that the following two paragraphs be inserted after first paragraph under Facility Description

“The facility has a fuel oil (jet A) storage capacity of approximately 1,470,000 gallons (2-735,000 gallon tanks). These tanks and the secondary containment system were installed in 1995. The tanks are located within a lined secondary containment, sized to contain the fuel contained in both tanks. This containment is operated with a closed drain valve to allow any rain water to be inspected prior to being drained. Additionally, when rain water is actually drained the outflow is further processed through an oil water separator prior to it being routed to a site runoff containment pond which in turn discharges as outfall 002, with is currently monitored for oil & grease.

The site currently has in place both a Spill Control and Counter measure (SPCC) Plan and a Facility Response Plan. Both plans are reviewed periodically.”

Response: The facility description has been updated.

Page 8: Schedule of compliance (SOC)

Empire believes this should be marked “NOT applicable”

Response:
SOC has been updated.

Storm Water Pollution Prevention Plan (SWPPP)

Empires requests that the following sentence be inserted right after the first sentence.

“Since the facility already has an SPCC and a Facility Response Plan, which provides for a procedure to observe and document the presents of any oil prior to draining the fuel oil secondary containment, the facility shall either prepare a stand along SWPPP plan or incorporate the requirements of an SWPPP plan into its existing plans.”

Response: SWPPP has been updated to incorporate the proposed language.

Page 9: Whole Effluent Toxicity (WET) test:

Empire believes that the paragraph which begins with “This parameter has been.....” should be deleted

Response: Paragraph in question has been deleted.

Page 11: WET TEST

Believe the second paragraph which begins “This Parameter.....” Should be deleted

Response: Paragraph in question has been deleted.

Page 14---17

Empire questions if the PRE-PN-Response to comments are to be included in the public draft copy, if they are we do have some comments

- Comment to #4 may need to be updated
- Comments to # 5 may need to be updated
- Sulfate, chloride numbers need to be updated
- Comment # 7 may need to be dropped
- Comment # 8 may need to be dropped
- Comment # 9 may be ok?????

Response: Previous comments have been removed from the fact sheet since they no longer apply due to the new data provided.

Actual Permit

Special Condition #12

Empires requests that the following sentence be inserted right after the first sentence.

“Since the facility already has an SPCC and a Facility Response Plan, which provides for a procedure to observe and document the presents of any oil prior to draining the fuel oil secondary containment, the facility shall either prepare a stand along SWPPP plan or incorporate the requirements of an SWPPP plan into its existing plans.”

Since Empire, already has the major of the essential elements to address fuel oil from leaving the site it respectfully requests a longer time to get the actually plan into place, and requests the sentence which begins with “The SWPPP must be prepared within....”. with the following sentence:

“The permittee shall have the necessary plan(s) prepared and implemented with 180 days of permit issuance.”

Response: The proposed language has been incorporated to the SWPPP language.

Special Condition #15

Empire requested that the word “fuel oil” be inserted between the words “in” and “secondary” in the first sentence, and in the sentence prior to the Minimum Sampling Requirements.

Additionally,

While Empire believes that it currently has in place both best management practices and engineered systems which limit the ability of fuel impacting the waters of the State of Missouri, Empire is agreeable to sampling of the rain water within the fuel oil secondary containment. However, Empire does desire to point out that it has as a part of the engineered systems an oil water separator which may be used to remove trace amounts of fuel oil, if such fuel oil should be observed within the fuel or secondary containment.

Response: The fuel oil has been inserted between the words “in” and “secondary” in the first sentence and in the sentence prior to the Minimum Sampling Requirements.



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

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- MO-0126713 Expiration Date May 10, 2012

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 State Line Combined Cycle Power Plant		TELEPHONE WITH AREA CODE (417) 623-0102	
ADDRESS (PHYSICAL) 2299 S. State Line Ave.		CITY Joplin	FAX (417) 659-9856
		STATE MO	ZIP CODE 64804

3. OWNER

NAME The Empire District Electric Company		E-MAIL ADDRESS kstull@empiredistrict	TELEPHONE WITH AREA CODE (417) 625-5100
ADDRESS (MAILING) PO Box 127		CITY Joplin	FAX (417) 625-5169
		STATE MO	ZIP CODE 64802-0127

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

4. CONTINUING AUTHORITY

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

5. OPERATOR

NAME Not Applicable		CERTIFICATE NUMBER	TELEPHONE WITH AREA CODE
ADDRESS (MAILING)		CITY	FAX
		STATE	ZIP CODE

6. FACILITY CONTACT

NAME William Howell		TITLE Plant Manager	TELEPHONE WITH AREA CODE (417) 623-0102
			FAX (417) 659-9856

7. ADDITIONAL FACILITY INFORMATION

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

001 NE 1/4 NW 1/4 Sec 14 T 27N R 34W Jaspr County
 UTM Coordinates Easting (X): 3704049 Northing (Y): 09436441
For Universal Transverse Mercator (UTM), Zone 15 North referenced to North American Datum 1983 (NAD83)

002 NW 1/4 SW 1/4 Sec 14 T 27N R 34W Jaspr County
 UTM Coordinates Easting (X): 3703492 Northing (Y): 09436514

003 NW 1/4 NW 1/4 Sec 14 T 27N R 34W Jaspr County
 UTM Coordinates Easting (X): 3704049 Northing (Y): 09436588

004 NW 1/4 NW 1/4 Sec 23 T 27N R 34W Newt County
 UTM Coordinates Easting (X): 3703209 Northing (Y): 9436551

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

001 – SIC 4911 and NAICS 221112 002 – SIC 4911 and NAICS 221112
 003 – SIC 4911 and NAICS 221112 004 – SIC 4911 and NAICS 221112

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 Mars Petcare US, Inc.			
ADDRESS 1983 S State Line Ave	CITY Joplin	STATE MO	ZIP CODE 64801

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) Blake Mertens, Vice President of Energy Supply	TELEPHONE WITH AREA CODE (417) 625-5100
SIGNATURE	DATE SIGNED

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?

**INSTRUCTIONS FOR COMPLETING FORM A
APPLICATION FOR CONSTRUCTION OR OPERATING PERMIT**

1. Check which option is applicable. **Do not check more than one item.** Construction and operating permit refer to permits issued by the Department of Natural Resources' Water Protection Program, Water Pollution Control Branch. Effective Sept. 1, 2008, a facility will be required to use *MISSOURI'S ANTIDEGRADATION RULE AND IMPLEMENTATION PROCEDURE*. For more information, this document can be reviewed at www.dnr.mo.gov/env/wpp/docs/aip-cwc-appr-050708.pdf. This procedure will be applicable to new and expanded wastewater facilities and requires the proposed discharge to a water body to undergo a level of Antidegradation Review, which documents that the use of a water body's available assimilative capacity is justified.
- 1.1 An operating permit and antidegradation review public notice requires a Water Quality/Antidegradation Review Sheet to be submitted with the application (No fee required).
CONSTRUCTION PERMIT FEES
 - A. \$750 for a sewage treatment facility with a design flow of less than 500,000 gallons per day.
 - B. \$2,200 for a sewage treatment facility with a design flow of 500,000 gallons per day or more.Different application and construction fees are applicable if only sewer and/or lift stations are to be constructed.
OPERATING PERMIT FEES

If the application is for a site-specific permit re-issuance, send no fees.. You will be invoiced separately by the department.

Discharges covered by section 644.052.4 RSMo. (Primary or Categorical Facilities)
 - \$3,500 for a design flow under 1 mgd
 - \$5,000 for a design flow of 1 mgd or moreA. Discharges covered by section 644.052.5 RSMo. (Secondary or Non-Categorical Facilities)
 - \$1,500 for a design flow under 1 million gallons per day (mpg)
 - \$2,500 for a design flow of 1 mgd or more
- SITE-SPECIFIC STORM WATER DISCHARGE FEES
 - A. \$1,350 for a design flow under 1 mgd.
 - B. \$2,350 for a design flow of 1 mgd or more.
- OPERATING PERMIT MODIFICATIONS, including transfers, are subject to the following fees:
 - A. Municipals - \$200 each.
 - B. All others - 25 percent of annual fee.Note: Facility name and address changes where owner, operator and continuing authority remain the same are not considered transfers.
Incomplete permit applications and/or related engineering documents will be returned by the department if they are not completed in the time frame established in a comment letter from the department to the owner. Permit fees for returned applications shall be forfeited. Permit fees for applications being processed by the department that are withdrawn by the applicant shall be forfeited.
2. Facility - Provide the name by which this facility is known locally. Example: Southwest Sewage Treatment Plant, Country Club Mobile Home Park, etc. Also include the street address or location of the facility. If the facility lacks a street name or route number, give the names of the closest intersection, highway, county road, etc.
3. Owner - Provide the legal name and address of owner.
- 3.1 Prior to submitting a permit to public notice, the department shall provide the permit applicant 10 days to review the draft permit for nonsubstantive drafting errors. In the interest of expediting permit issuance, permit applicants may waive the opportunity to review draft permits prior to public notice. Check YES to review the draft permit prior to public notice. Check NO to waive the process and expedite the permit.
4. Continuing Authority - Permanent organization that will serve as the continuing authority for the operation, maintenance and modernization of the facility. The regulatory requirement regarding continuing authority is available at www.sos.mo.gov/adrules/csr/current/10csr/10c20-6a.pdf or contact the appropriate Department of Natural Resources Regional Office.
5. Operator - Provide the name, certificate number and telephone number of the person operating the facility.
6. Provide the name, title and work telephone number of a person who is thoroughly familiar with the operation of the facility and with the facts reported in this application and who can be contacted by the department, if necessary.
- 7.1 An outfall is the point at which wastewater is discharged. Outfalls should be given in terms of the legal description of the facility. Global Positioning System, or GPS, is a satellite-based navigation system. The department prefers that a GPS receiver is used at the outfall pipe and the displayed coordinates submitted. If access to a GPS receiver is not available, please use a mapping system to approximate the coordinates; the department's mapping system is available at www.dnr.mo.gov/internetmapviewer/.
- 7.2 List only your primary Standard Industrial Classification, or SIC, and North American Industry Classification System code for each outfall. The SIC system was devised by the U.S. Office of Management and Budget to cover all economic activities. To find the correct SIC code, an applicant may check his or her unemployment insurance forms or contact the Missouri Division of Employment Security, 573-751-3215. The primary SIC code is that of the operation that generates the most revenue. If this information is not available, the number of employees or, secondly, production rate may be used to determine your SIC code. Additional information is on the Web for Standard Industrial Codes at www.osha.gov/pls/imis/sicsearch.html and for the North American Industry Classification System at www.census.gov/naics or contact the appropriate Department of Natural Resources Regional Office.

**INSTRUCTIONS FOR COMPLETING FORM A
APPLICATION FOR CONSTRUCTION OR OPERATING PERMIT
(CONTINUED)**

8. If you answer yes to A, B, C, D, E or F, then you must complete and file the supplementary form(s) indicated. A U.S. Geological Survey 1" = 2,000' scale map must be submitted with the permit application showing all outfalls, the receiving stream and the location of the downstream property owners. This type of map is available on the Web at www.dnr.mo.gov/internetmapviewer/ or from the Missouri Department of Natural Resources' Division of Geology and Land Survey in Rolla at 573-368-2125.
9. Please provide the name and address of the first downstream landowner, different from that of the permitted facility, through whose property the discharge will flow. Also, please indicate the location on the map. For discharges that leave the permitted facility and flow under a road or highway, or along the right-of-way, the downstream property owner is the landowner that the discharge flows to after leaving the right-of-way. For no discharge facilities, provide this information for the location where discharge would flow if there was one. For land application sites, include the owners of the land application sites and all adjacent landowners.
10. Signature - All applications must be signed as follows and the signature must be **original**:
 - A. For a corporation, by an officer having responsibility for the overall operation of the regulated facility or activity or for environmental matters.
 - B. For a partnership or sole proprietorship, by a general partner or the proprietor.
 - C. For a municipal, state, federal or other public facility, by either a principal executive officer or by an individual having overall responsibility for environmental matters at the facility.

This completed form, along with the applicable permit fees, should be submitted to the appropriate Regional Office. Submittal of an incomplete application may result in the application being returned. A map of the department's regional offices with addresses and phone numbers can be viewed on the Web at www.dnr.mo.gov/regions/ro-map.pdf. If there are any questions concerning this form, contact the appropriate Regional Office or the Department of Natural Resources' Water Protection Program, Water Pollution Control Branch, Permits and Engineering Section at 573-751-6825.