

**BEFORE THE
DEPARTMENT OF NATURAL RESOURCES
STATE OF MISSOURI**

IN THE MATTER OF:

City of Brookfield)
Northeast Wastewater Treatment Facility)

No. 2016-WPCB-1295

SERVE:

The Honorable Martha Beach, Mayor)
City of Brookfield)

ABATEMENT ORDER ON CONSENT

I. NOTICE TO RECIPIENTS OF ABATEMENT ORDERS

The issuing of this Abatement Order on Consent (AOC) No. 2016-WPCB-1295, by the Department of Natural Resources, is a formal administrative action by the state of Missouri and is being issued because the current wastewater treatment facility (WWTF) serving the city of Brookfield is in violation of the Missouri Clean Water Law (MCWL). This AOC is issued under the authorities of Sections 640.130, 640.131, 644.056 and 644.079, RSMo. Failure to comply with this AOC is, by itself, a violation of the MCWL Section 644.076.1, RSMo. Litigation may occur without further administrative notice if there is not compliance with the requirements of this AOC. This AOC does not constitute a waiver or a modification of any requirements for the MCWL, or its implementing regulations, all of which remain in full force and effect. Compliance with the terms of this AOC shall not relieve the city of Brookfield of liability for, or preclude the department from, initiating an administrative or judicial enforcement action to recover civil penalties for any future violations of the MCWL, or to seek injunctive relief, pursuant to Chapter 644, RSMo.

II. FINDINGS OF FACT

A. The city of Brookfield is a third class municipality with approximately 4,542 residents. As part of the city's business, the city owns and operates two WWTFs. The Southwest WWTF consists of a three-cell aerated lagoon, located in the SE ¼, Section 12, Township 57 North, Range 20 West, in Linn County. Based upon the WWTF's Missouri State Operating Permit (MSOP) No. MO-0028738, the design population equivalent is 4,000, the design flow is 400,000 gallons per day (gpd), with an actual flow of 305,000 gpd. Effluent from the Southwest WWTF discharges to Elk Creek, pursuant to the conditions and requirements of MSOP No. MO-0028738. The city also utilizes the Northeast WWTF which consists of a four-cell lagoon. The WWTF is located in the SW ¼, NE ¼, Section 5, Township 57 North, Range 19 West, in Linn County. Based upon the WWTF's MSOP No. MO-0028746, the WWTF has a population equivalent of 5,900, a

design flow of 606,000 gpd, and an actual flow of 528,000 gpd. Effluent from the WWTF discharges to West Yellow Creek, pursuant to the conditions and requirements contained in MSOP No. MO-0028746. The Northeast WWTF is the sole subject of this AOC.

- B. West Yellow Creek, Yellow Creek, and their tributaries are waters of the state as the term is defined in Section 644.016 (27), RSMo.
- C. Domestic wastewater is a water contaminant as the term is defined in Section 644.016 (24).
- D. On November 17, 2006, the department reissued MSOP No. MO-0028746 to the city, which expired by its own terms on November 16, 2011. The MSOP requires the city to sample monthly the effluent discharged from Outfall No. 001 and chemically analyze the effluent sample for the water contaminants listed in Part "A". MSOP No. MO-0028746 also requires the effluent to comply with the permitted effluent limitations contained in Part "A" and requires the results of the analysis to be submitted to the department on monthly Discharge Monitoring Reports (DMRs) by the 28th day of each month following the reporting period.
- E. MSOP No. MO-0028746 issued on November 17, 2006, includes interim and final effluent limitations for Ammonia as Nitrogen and Fecal Coliform, and a Schedule of Compliance (SOC) for the city to complete improvements to the WWTF that would enable the effluent to comply with the final limitations for Ammonia as Nitrogen by November 17, 2009, and final limitations for Fecal Coliform by November 15, 2011.
- F. MSOP No. MO-0028746 issued on November 17, 2006, also contained an SOC requiring the city to complete repairs to the lagoon berms and divert sludge away from the WWTF by January 15, 2008. Additionally, the SOC required the city to submit to the department, for review and approval, an engineering evaluation of the collection system serving the WWTF by January 15, 2008. The engineering evaluation must include an evaluation of the sources of Inflow & Infiltration (I&I) in the collection system; identify all Sanitary Sewer Overflows (SSOs); and include a plan for data collection for all SSO and bypass events. The city was further required to submit a Corrective Action Plan that includes financial planning for capital improvements and ongoing operational activities, and a quarterly SOC for implementing corrective actions necessary for elimination of SSOs and a substantial reduction in the sources of I&I. The city is required by the SOC to submit semi-annual progress reports on its efforts to eliminate SSOs by June 1st and December 1st each year. The city is currently in compliance with its reporting requirements.
- G. Monthly DMRs submitted to the department documented that the effluent discharged from Outfall No. 001 failed to comply with the applicable permitted effluent limitations for Ammonia as Nitrogen during January through April 2013, and December 2013 through April 2014.

- H. Monthly DMRs submitted to the department documented that the effluent discharged from Outfall No. 001 failed to comply with the applicable permitted effluent limitations for Fecal Coliform during April and August 2013.
- I. Monthly DMRs submitted to the department documented that the effluent discharged from Outfall No. 001 failed to comply with the applicable permitted effluent limitations for Biochemical Oxygen Demand during February 2013.
- J. On January 15, 2009, the department received an Engineering Evaluation and Corrective Action Plan for the Northeast WWTF, completed by Allstate Consultants, LLC, as required by the permit's SOC for the collection systems to eliminate SSOs and substantially reduce sources of I&I. The city has also submitted six biannual reports to the department documenting the status of their I&I work completed on the collection system since submitting the engineering evaluation as required by the SOC.
- K. On April 11, 2011, the department received an application to renew MSOP No. MO-0028746 from the city.
- L. On January 23, 2012, the department received a Preliminary WWTF plan from Allstate Consultants recommending replacing the city's Northeast and Southwest WWTFs with an extended aeration plant.
- M. On May 1, 2012, department staff conducted a compliance inspection of the city's Northeast WWTF. During the inspection, department staff observed tall vegetation around the WWTF and erosion on the inner slope of the cell furthest west. Staff observed the water level in the large cell furthest east was less than a foot from overflowing. Department staff reviewed the file for MSOP No. MO-0028746 and found that the city had failed to install disinfection facilities, present an evaluation to show that disinfection is not required to protect the recreational uses; or present a Use Attainability Analysis that demonstrates one or both designated recreational uses are not obtainable, in the classified waters receiving the effluent, as required by the SOC.
- N. On June 14, 2012, the department issued Notice of Violation No. NER2012052508012886 to the city for failure to comply with the SOC; failure to provide a minimum of two feet of freeboard above the wastewater level in the lagoon; and failure to maintain the inner berm slopes of the lagoon to be no less than three to one (3:1). The city has attempted to mitigate the failures with repairs.
- O. On February 27, 2013, the department received a revised WWTF plan from Allstate Consultants, for replacing the city's Southwest and Northeast lagoon systems with a single new mechanical WWTF. The WWTF plan also included modifications to the collection system.
- P. On June 28, 2013, the department received a complete application for a construction permit and plans and specifications for a new WWTF to replace the Southwest and Northeast lagoons from Allstate Consultants.

- Q. On September 1, 2013, the department reissued MSOP No. MO-0028746 to the city, which requires the effluent discharging from the city's Northeast WWTF to comply with final limitations for E. coli immediately upon the effective date.
- R. Monthly DMRs submitted to the department document that the effluent discharged from Outfall No. 001 failed to comply with the applicable permitted effluent limitations for E coli during May 2014.
- S. On December 23, 2013, the department issued Construction Permit No. 1578 to the city. Construction Permit No. 1578 was issued for the purpose of replacing the city's Southwest and Northeast lagoon systems with an extended aeration Aeromod system. Modifications to the collection system, which feeds the new WWTF, is also part of the construction project.
- T. On January 22, 2014, the department received a closure plan for the Northeast and Southwest lagoons from Allstate Engineering. The department sent a letter to the city on April 17, 2014, approving the closure plan for the Northeast lagoon, and on June 4, 2014, the department sent correspondence to the city approving the closure plan for the Southwest lagoon.
- U. On April 27, 2015, the department conducted an inspection of an occurring SSO of a clean out reported by the city, at 5:00PM on April, 27 2015. The SSO started at 4:01 PM on April 26, 2015, and continued through 7:30 PM on April 27, 2015. During the investigation, staff observed the clean out overflowing, raw wastewater pooled on the property, solids in the pooled locations, and wastewater flowing down the street to a storm drain located approximately 875 feet away. Staff then inspected, collected samples, and conducted Ammonia monitoring upstream and downstream of the receiving stream (West Yellow Creek) where the storm drain was believed to discharge per city personnel. Samples results showed E. coli levels were >2419.6 mpn/100 mL and field monitoring showed elevated Ammonia levels in both locations. Staff noted no visible pipes discharging sewage into the receiving stream nor did staff observed impacts to the receiving stream. Staff also inspected, collected samples, and conducted Ammonia monitoring upstream and downstream of where the receiving stream enters Yellow Creek. Samples results showed E. coli levels were 2419.6 mpn/100 mL downstream and 1986.3 mpn/100 mL upstream of where the receiving stream enters Yellow Creek. Staff did not detect elevated levels of Ammonia in either location, nor did staff observe any impacts to Yellow Creek. During the inspection, the city informed staff that they believed the overflow was occurring due to the force main collapsing. On April 29, 2015, the city confirmed that a portion of the gravity main had collapsed and was being replaced.
- V. On August 31 and September 1, 2015, staff conducted an inspection of the WWTF. Staff cited the WWTF for significant non-compliance which includes failing to comply with effluent limits, failed to operate and maintain, failed to perform effluent testing according to most current edition of Standard Methods for the Examination of Water and Wastewater or by other department approved methods, failed to submit accurate DMRs, failed to provide proper warning signs, and failed to provide adequate fencing.

- W. On December 22, 2015, the city's construction permit expired. The city failed to request an extension in writing to the department at least 30 days prior to the permit expiration date.
- X. The city has been working to obtain funding for the upgrades from the United States Department of Agriculture (USDA) Rural Development. The city has been awarded a low interest loan in the amount of \$6,526,000.00 and a grant in the amount of \$4,262,000.00 from the USDA Rural Development Program for the WWTF and collection system improvements. The city has also obtained voter approval for bonding to underwrite the loan.
- Y. Section 644.076.1, RSMo, makes it unlawful to violate the MCWL and regulations promulgated pursuant thereto and establish civil penalties of up to \$10,000.00 per day per violation.

III. CITATIONS BY THE DEPARTMENT AND CONCLUSIONS OF LAW

Violations of the MCWL and its implementing regulations alleged by the department herein against the city at the WWTF are as follows:

1. Failed to upgrade WWTFs as required in Part D, SOC, of MSOP No. MO-0028746 in violation of Section 644.076.1, RSMo, and 10 CSR 20-6.010(7)(A).
2. Placed, caused, or permitted to be placed a water contaminant in a location where it is reasonably certain to cause pollution of waters of the state, in violation of Sections 644.051.1(1) and 644.076.1, RSMo.
3. Failed to comply with the effluent limits contained in Part "A" of MSOP No. MO-0028746, in violation of Sections 644.051.1(3) and 644.076.1, RSMo.
4. Operated, used or maintained a water contaminant source, domestic wastewater from a non-permitted outfall, which intermittently discharges to West Yellow Creek, waters of the state, without an MSOP in violation of Sections 644.051.2 and 644.076.1, RSMo, 10 CSR 20-6.010(1)(A) and (5)(A).

IV. AGREEMENT

- A. The department and the city desire to amicably resolve all claims that may be brought against the city for violations alleged above in Section III, Citations and Conclusions of Law, without the city admitting to the validity or accuracy of such claims.
- B. The provisions of this AOC shall apply to and be binding upon the parties executing this AOC, their successors, assigns, agents, subsidiaries, affiliates, and lessees, including the officers, agents, servants, corporations, and any persons acting under, through, or for the parties. Any changes in ownership or corporate status, including but not limited to, any transfer of assets or real or personal property shall not affect the responsibilities of the city under this AOC.
- C. The city, in compromise and satisfaction of the department claims relating to the above-referenced violations, agrees, without admitting liability or fault, to pay a

civil penalty in the amount of \$10,000.00. The department and the city further agree that the \$10,000.00 of the civil penalty shall be suspended for a period of two years on the condition that the city does not violate the MCWL and its implementing regulations or the terms of this AOC

Upon determination that the city has failed to meet the terms of this AOC, the department shall send a written demand for the suspended penalty in the amount of \$10,000.00 to the city. The city shall have 30 days from its receipt of the written demand to submit the suspended penalty which shall be delivered to:

Accounting Program
Department of Natural Resources
P.O. Box 477
Jefferson City, MO 65102-477

- D. In the period of time from the effective date of this AOC until the new WWTF is completed, the city agrees to operate and maintain the existing Northeast WWTF at the maximum operational ability of the system. The effluent discharging from the WWTF shall comply with the interim effluent limitations contained in Part "A" of MSOP No. MO-0028746, which expired by its own terms on November 16, 2011. All units or components of the existing WWTF shall be maintained in an operable condition, even if this requires the purchase and installation of new parts or equipment, or repair of the WWTF.
- E. Within five days of the effective date of this AOC, the city agrees to submit to the department for review and approval, a complete application for a construction permit including design summary, plans and specifications signed and sealed by a professional engineer licensed to practice in the state of Missouri for improvements that will result in compliance with the MCWL and its implementing regulations.
- F. Within 120 days of the effective date of this AOC, the city agrees to develop and implement a Maintenance and Repair (M&R) Program for its wastewater collection system and submit the M&R Program to the department for review. The M&R Program shall include the following: i) a SOC for routine and systematic inspection, maintenance and repair of the WWTF to identify all short term and long term capital investment projects and activities that will be necessary to ensure current and long term compliance with the city's MSOP; ii) a process to reevaluate the assumptions, SOCs, and conclusions of the city's M&R Program at a minimum of every two years or as necessary to ensure it continues to provide a viable planning tool; and iii) a written or electronic system to document information regarding SSOs events, bypasses, and basement backups.
- G. Within 30 days receipt of department comments on the city's M&R Program, the city shall respond to and adequately address, to the department's satisfaction, all of the department's comments on the M&R Program.
- H. On or before December 22, 2016, the city agrees to complete construction of the new WWTF pursuant to the department approved plans and specifications associated with Construction Permit No. 1578.

- I. Within 30 days of completing construction, submit to the department a Statement of Work Completed Form, signed, sealed, and dated by a professional engineer registered in the state of Missouri, certifying that the project is complete and operable in accordance with department-approved plans and specifications. In addition, a complete application requesting the termination of MSOP Nos. MO-0028738 and MO-0028746 must be submitted at this time.
- J. Within 60 days of completing construction of the improvements, the city shall achieve compliance with the final effluent limitations contained in Part "A" of MSOP No. MO-0028746.
- K. Within 24 months of the date the collection system is connected to a new WWTF and all the flow from the city is connected to the WWTF, the city agrees to complete proper closure of the existing lagoons pursuant to the department approved closure plans, referenced in Section II, Paragraph "T" of this AOC.
- L. Immediately upon becoming aware that a deadline or milestone as set forth in this AOC will not be completed by the required deadline, the city shall notify the department by telephone or electronic mail i) identifying the deadline that will not be completed; ii) identifying the reason for failing to meet the deadline; and iii) proposing an extension to the deadline. Within five days of notifying the department, the city shall submit to the department for review and approval a written request containing the same basic provisions of i, ii, and iii listed above. The department may grant an extension if it deems appropriate. Failure to submit a written notice to the department may constitute a waiver of the city's right to request an extension and may be grounds for the department to deny the city an extension.
- M. Should the city fail to meet the terms of this AOC, including the deadlines for completion of construction set out in Paragraphs D through K, the city shall be subject to pay stipulated penalties in the following amount:

<u>Days of Violation</u>	<u>Amount of Penalty</u>
1 to 30 days	\$100.00 per day
31 to 90 days	\$250.00 per day
91 days and above	\$500.00 per day

Stipulated penalties will be paid in the form of a certified or cashier's check made payable to "Linn County Treasurer, as custodian of the Linn County School Fund." Any such stipulated penalty shall be paid within ten days of demand by the department and shall be delivered to:

Accounting Program
 Department of Natural Resources
 P.O. Box 477
 Jefferson City, MO 65102-0477

- N. Nothing in this AOC forgives the city from future non-compliance with the laws of the state of Missouri, nor requires the department or state of Missouri to forego pursuing by any legal means for any non-compliance with the laws of the state of

Missouri. The terms stated herein constitute the entire and exclusive agreement of the parties. There are no other obligations of the parties, be they express or implied, oral or written, except those expressly set forth herein. The terms of this AOC supersede all previous memoranda or understanding, notes, conversations, and agreements, express or implied. This AOC may not be modified orally.

- O. By signing this AOC, all signatories assert that they have read and understood the terms of this AOC, and that they have the authority to sign this AOC on behalf of their respective party.
- P. The effective date of the AOC shall be the date the department signs the AOC. The department shall send a fully executed copy of this AOC to the city for its records.
- Q. The city shall comply with the MCWL, Chapter 644, RSMo and its implementing regulations at all times in the future.

V. FINDING OF AFFORDABILITY

Pursuant to Section 644.145 (2)(c), the city hereby waives the requirement for the department to develop a Cost Analysis for Compliance with respect to the requirements required by this AOC No. 2016-WPCB-1295.

VI. RIGHT OF APPEAL

By signing this AOC No. 2016-WPCB-1295, the city consents to its terms and waives any right to appeal, seek judicial review, or otherwise challenge the terms and conditions of this AOC pursuant to Sections 621.250, 640.010, 640.013, 644.056.3, 644.079.2, Chapter 536 RSMo, 644.145, RSMo, 10 CSR 20-1.020, 10 CSR 20-3.010, 10 CSR 20-6.020(5), the Missouri Constitution, or any other source of law.

VI. CORRESPONDENCE AND DOCUMENTATION

Correspondence or documentation with regard to conditions outlined in this AOC shall be directed to:

Mr. Kurtis Cooper
Missouri Department of Natural Resources
Water Protection Program
Compliance and Enforcement Section
P.O. Box 176
Jefferson City, MO 65102-0176

Agreed to and Ordered this 8th day of July, 2016



John Madras, Director
Water Protection Program
Missouri Department of Natural Resources

Agreed to and Ordered this 28 day of JUNE, 2016

Martha Beach
Martha Beach, Mayor
City of Brookfield

Copies of the foregoing served by certified mail to:

The Honorable Martha Beach, Mayor CERTIFIED MAIL # 7012 2920 0002 0660 6092
City of Brookfield
116 West Brook
Brookfield, MO 64628

c: Ms. Diane Huffman, Environmental Protection Agency
Mr. Chris Wieberg, Chief, Operating Permits Section
Ms. Irene Crawford, Director, Northeast Regional Office
Missouri Clean Water Commission
Accounting Program