

**BEFORE THE MISSOURI DEPARTMENT OF NATURAL RESOURCES**

**In the Matter of:** )  
 )  
City of Hawk Point )  
Wastewater Treatment Facility )  
**Serve:** )  
The Honorable Robert Henebry, Mayor )  
City of Hawk Point )

**Order No. 2016-WPCB-1294**

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**ABATEMENT ORDER ON CONSENT**

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**NOTICE TO RECIPIENTS OF ABATEMENT ORDERS ON CONSENT**

The issuing of this Abatement Order on Consent (AOC) No. 2016-WPCB-1294, by the Department of Natural Resources, is a formal administrative action by the state of Missouri and is being issued because the city of Hawk Point violated 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 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.

## FINDINGS OF FACT

1. The city of Hawk Point is a fourth class municipality with a population of approximately 803 residents. As part of the services it provides to its citizens, the city owns and operates a wastewater treatment facility (WWTF) located in the NW¼, NE¼, Section 33, Township 49 North, Range 2 West in Lincoln County. The WWTF consists of a two-cell lagoon with the sludge retained in the lagoon. The WWTF has a design population equivalent of 540, a design flow of 54,000 gallons per day (gpd), and an actual flow of 48,000 gpd. The design sludge production is 10.86 dry tons per year. Treated effluent from the facility discharges from Outfall No. 001 to a tributary of Turkey Creek, pursuant to the requirements and conditions of Missouri State Operating Permit (MSOP) No. MO-0028053.

2. Turkey Creek and its tributaries are waters of the state as defined in Section 644.016(27), RSMo.

3. Domestic wastewater is a water contaminant as the term is defined in Section 644.016(24), RSMo.

4. MSOP No. MO-0028053 was reissued to the city on June 26, 2009, and included final effluent limitations for Biochemical Oxygen Demand (BOD), Total Suspended Solids (TSS), oil and grease, and Ammonia as Nitrogen. Section "E", Schedule of Compliance (SOC), of the MSOP required the city to: 1) submit an engineering report by June 26, 2010, describing the facility upgrades and modifications necessary to allow the WWTF to meet the final effluent limitations for BOD, TSS, and Ammonia as Nitrogen; 2) submit an application for a construction permit to construct the facilities necessary to enable the WWTF to comply with the final effluent limitations by December 26, 2010; 3) submit a construction progress report by December 26,

2011; and 4) complete construction by July 1, 2012. MSOP No. MO-0028053 expired by its own terms on June 25, 2014. On November 7, 2013, the department received a MSOP renewal application from the city, allowing MSOP No. MO-0028053, issued on June 26, 2009, to be administratively continued and remain fully effective and enforceable pursuant to 10 CSR 20-6.010(10)(E).

5. MSOP No. MO-0028053 requires the city to sample the effluent discharged from Outfall No. 001 and chemically analyze the effluent sample for the water contaminants listed in Part "A" every month. MSOP No. MO-0028053 further requires the effluent to comply with the effluent limitations contained in Part "A" and requires the results of the analyses to be submitted to the department on monthly Discharge Monitoring Reports (DMRs) by the 28<sup>th</sup> day of the month following the reporting period.

6. MSOP No. MO-0028053 requires the city to conduct annual Whole Effluent Toxicity (WET) tests and submit the annual reports to the department by January 28<sup>th</sup> each year.

7. Special Condition No. 8 of the MSOP requires the city to develop and implement a program for maintenance and repair of the collection system. As part of the Special Condition, the city is required to submit a report annually, in conjunction with the November DMR, which describes measures taken to locate and eliminate sources of infiltration and inflow (I&I) into the collection system serving the WWTF.

8. Monthly DMRs submitted to the department document that the effluent discharged from the city's WWTF failed to comply with the applicable permitted limitations for TSS during the months of August 2013; February, March, June, July, August, and September 2014; and January, February, March, June, and July 2015.

9. Monthly DMRs submitted to the department document that the effluent discharged from the WWTF failed to comply with the applicable permitted limitations for Ammonia as Nitrogen each month throughout the period from August 2013 through July 2015.

10. The results of annual WET tests submitted to the department document that effluent discharged from the WWTF failed WET tests during 2012, 2013, and 2014.

11. On January 27, 2011, department staff conducted a compliance inspection of the WWTF. As part of the inspection, staff conducted a file review of the MSOP and found that the city had failed to submit an engineering report and a construction permit application for upgrades to the WWTF. Based upon the violations documented during the inspection, the department issued a Letter of Warning (LOW) to the city on March 18, 2011.

12. On September 20, 2012, the department issued Notice of Violation (NOV) No. 2998 SL to the city for an exceedance of their permitted effluent limits for TSS and Ammonia as N, as reported in the city's July 2012 DMR.

13. On January 3, 2013, the department issued NOV No. 3034 SL to the city for an exceedance of their permitted effluent limits for TSS and Ammonia as Nitrogen, as reported in the city's October 2012 DMR.

14. On January 22, 2013, the city's engineering contractor, Shafer, Kline, and Warren, Inc. submitted an engineering report to the department recommending construction of a no-discharge lagoon and land application of the wastewater.

15. On March 6, 2013, department staff conducted a routine compliance inspection at the WWTF accompanied by two of its operators. In the record review that accompanied the inspection, department staff noted numerous exceedances of the permitted effluent limits for TSS

and Ammonia as Nitrogen. Staff also noted that the city had failed to meet the SOC deadlines to complete upgrades to the WWTF.

16. On March 18, 2013, the city's engineering contractor, Shafer, Kline, and Warren, Inc. submitted Addendum No. 1 to the engineering report. Addendum No. 1 included a change in the project's design flow.

17. Based on the violations documented during the March 6, 2013 inspection, the department issued NOV No. 3022 SL to the city on April 15, 2013.

18. On April 4, 2013, the department sent a letter to the city approving the engineering report.

19. On May 7, 2013, a representative of the city sent a letter to the department stating that: (1) funding for the proposed facility upgrade had been secured with general revenue bonds and financing from the Missouri Department of Economic Development (Community Development Block Grant) and the U.S. Department of Agriculture (Rural Development); (2) final negotiations were underway for the purchase of land for the proposed lagoon site; (3) the city's board of aldermen had approved the plans for the system upgrade; and (4) Shafer, Kline and Warren, Inc. was planning to submit the construction permit application to the department in the near future.

20. On April 11, 2014, the city's engineering contractor, Shafer, Kline, and Warren, Inc. submitted Addendum No. 2 to the engineering report. Addendum No. 2 included the addition of a life-cycle analysis, updated costs, identification of a land application area, and an updated project schedule.

21. On May 27, 2014, the department received correspondence from the city stating that the city had closed on the sale of the 143 acres needed for the storage site and land application field.

22. On December 21, 2015, the department received a complete application for a construction permit to convert the WWTF to a no-discharge, land application system.

23. Section 644.076.1, RSMo makes it unlawful to violate the MCWL and regulations promulgated pursuant thereto and establishes penalties up to \$10,0000.00 per day per violation.

### **STATEMENT OF VIOLATIONS**

The city has violated the MCWL and its implementing regulations as follows:

21. Failed to complete construction at the WWTF to comply with the final effluent limitations by July 1, 2012, as required in Part "E", SOC, of MSOP No. MO-0028053, in violation of Section 644.076.1, RSMo and 10 CSR 20-6.010(7)(A);

22. Failed to comply with effluent limits contained in Part "A" of MSOP No. MO-0028053, in violation of Sections 644.051.1(3) and 644.076.1, RSMo; and

23. Caused pollution of an unnamed tributary of Turkey Creek, waters of the state, or placed or 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.

### **AGREEMENT**

24. The department and the city desire to amicably resolve all claims that might be brought against the city for the violations alleged above in Statement of Violations.

25. 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.

26. 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 \$6,000.00. The department and the city further agree that \$6,000.00 shall be suspended for a period of two years on the condition the city does not violate the MCWL and its implementing regulations or the terms of this AOC. Upon determination that the city failed to meet the terms of this AOC, the city agrees to pay the civil penalty of \$6,000.00 within 15 days from receipt of the written demand by the department to the city. The check shall be made payable to the "Lincoln County Treasurer, as custodian of the Lincoln County School Fund" and delivered to:

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

27. In the period of time from the effective date of this AOC until recommended upgrades for the WWTF are completed, the city shall operate and maintain the existing WWTF at all times so as to produce the best effluent quality possible and comply with the terms and conditions of MSOP No. MO-0028053. The effluent discharging from the WWTF shall comply with the interim effluent limitations contained in Part "A" of MSOP No. MO-0028053 issued by

the department on June 26, 2009. 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 and the repair of the facility.

28. If the department comments on and/or requests modification of the construction permit application, the city shall respond to and adequately address, to the department's satisfaction, all of the department's comments on the construction permit application within 60 days of receipt of the department's comments.

29. Within 4 years of the department's issuance of the construction permit, the city shall complete construction of the upgrades pursuant to the plans and specifications included with the construction permit application.

30. Within 30 days of completing construction, the city shall 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 was completed in accordance with department approved plans and specifications and a complete application for the modified MSOP No. MO-0028053 with applicable fee.

31. Within 60 days of completion of construction, the city shall achieve compliance with all effluent limitations contained in MSOP No. MO-0028053 or divert the wastewater flows from the existing lagoon to a new no-discharge WWTF.

32. The city is ordered and agrees to comply with the MCWL, Chapter 644, RSMo, and its implementing regulations at all times in the future.

#### **SUBMISSIONS**

33. All other documentation submitted to the department for compliance with this order shall be submitted within the timeframes specified to:

Ms. Lauren Lewis  
Department of Natural Resources  
Water Protection Program  
Compliance and Enforcement Section  
P.O. Box 176  
Jefferson City, Missouri 65102-0176

**OTHER PROVISIONS**

34. 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 information. 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 extension.

35. Should the city fail to meet the terms of this AOC, 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	\$50.00 per day
31 to 90 days	\$100.00 per day
91 days and above	\$250.00 per day

Stipulated penalties will be paid in the form of a check made payable to "Lincoln County Treasurer, as custodian of the Lincoln 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

36. Compliance with this AOC resolves only the specific violations described herein, and this AOC shall not be construed as a waiver or modification of any other requirements of the MCWL and regulations, or any other source of law. Nor does this Order resolve any future violations of this Order or any law or regulation. Consistent with 10 CSR 20-3.010(5), this Order shall not be construed as satisfying any claim by the state or federal government for natural resource damages.

37. 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 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.

38. 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.

39. 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 their records.

#### **COST ANALYSIS FOR COMPLIANCE**

Pursuant to Section 644.145, the Cost Analysis for Compliance (CAFCom) is attached hereto as Exhibit 1. This CAFCom does not address future improvements that may be necessary to comply with the MCWL or its implementing regulations. This AOC requires the city to complete the construction of upgrades to the WWTF that allow the WWTF to achieve

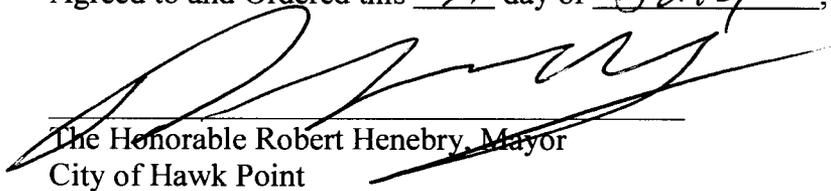
compliance with all effluent limitations contained in MSOP No. MO-0028053 or divert the wastewater flows from the existing WWTF to a new no-discharge facility.

**NOTICE OF APPEAL RIGHTS**

By signing this AOC No. 2016-WPCB-1294, 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.

**SIGNATURE AUTHORITY**

Agreed to and Ordered this 11 day of July, 2016

  
\_\_\_\_\_  
The Honorable Robert Henebry, Mayor  
City of Hawk Point

Agreed to and Ordered this 25<sup>th</sup> day of July, 2016

  
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DEPARTMENT OF NATURAL RESOURCES  
John Madras, Director  
Water Protection Program

Copies of the foregoing served by certified mail to:

The Honorable Robert Henebry, Mayor  
City of Hawk Point  
P.O. Box 302  
Hawk Point, MO 63349

CERTIFIED MAIL # 7012 2920 0002 0662 8643

c: Ms. Dorothy Franklin, Director, St. Louis Regional Office  
Ms. Diane Huffman, Environmental Protection Agency  
Mr. Chris Wieberg, Chief, Operating Permits Section  
Missouri Clean Water Commission  
Accounting Program

**Missouri Department of Natural Resources  
Water Protection Program  
Cost Analysis for Compliance  
(In accordance with RSMo 644.145)**

**City of Hawk Point  
Wastewater Treatment Facility  
Missouri State Operating Permit #MO-0028053**

Section 644.145 RSMo requires the Department of Natural Resources (DNR) to make a “finding of affordability” when “issuing permits under” or “enforcing provisions of” state or federal clean water laws “pertaining to any portion of a combined or separate sanitary sewer system for publicly-owned treatment works.”

This cost analysis is based on data available to the department as provided by the permittee and data obtained from readily available sources. For the most accurate analysis, it is essential that the permittee provides the department with current information about the city’s financial and socioeconomic situation.

**Current Facility Description:**

The city of Hawk Point is a fourth class municipality with approximately 803 residents. As part of the city’s business, it owns and operates the Hawk Point Wastewater Treatment Facility (WWTF) consisting of a two-cell lagoon, with the sludge retained in the lagoon<sup>1</sup>. The design population equivalent is 540, the design flow is 54,000 gallons per day (gpd), and the actual flow is 48,000 gpd. The design sludge production is 10.86 dry tons per year. The WWTF is located in the NW ¼, NE ¼, Section 33, Township 49 North, Range 2 West in Lincoln County. Effluent from the WWTF discharges to a tributary of Turkey Creek, pursuant to the requirements and conditions of Missouri State Operating Permit (MSOP) No. MO-0028053.

**Flow evaluated:**

Residential Connections:	333 <sup>ii</sup>
Commercial Connections:	0
Industrial Connections:	0
Total Connections for this facility:	333

**Requirements Now Being Enforced:**

The MSOP issued to the city on June 26, 2009, included a Schedule of Compliance (SOC) requiring the city to complete upgrades to its WWTF to comply with the final permitted limits for Total Suspended Solids (TSS), Biochemical Oxygen Demand<sub>5</sub> (BOD<sub>5</sub>) and Ammonia as Nitrogen no later than July 1, 2012. The city was required to follow an activity schedule summarized as follows:

1. By June 26, 2010, submit an engineering report to describe facility upgrades and modifications that will be necessary to meet the final effluent limitations for the parameters listed above;
2. By December 26, 2010, submit a construction permit application for construction of WWTFs as necessary to enable the treatment facility to comply with the final effluent limitations;
3. By December 26, 2011, submit a progress report of construction activities; and
4. By July 1, 2012, complete construction of the facilities needed to comply with the final effluent limitations.

On January 22, 2013, the city’s engineering firm submitted an engineering report to the department. On March 18, 2013, the firm submitted Addendum #1 to the engineering report. On April 4, 2013, the department sent a letter to the city approving the engineering report, and requiring the city to submit a construction permit application, along with plans and specifications, and a closure plan for the existing lagoon.

Discharge Monitoring Reports document exceedances of effluent limits for TSS in July and August 2013; February, March, June, July, August, and September 2014; and January, February, March, June, and July

2015. The reports document exceedances of effluent limits for Ammonia as Nitrogen in July 2012 and consistently through the period from September 2012 through July 2015. Additionally, the city has failed the Whole Effluent Toxicity test in 2012, 2013, and 2014.

**Anticipated Costs Associated with Complying with the New Requirements:**

The city is planning to convert to a no-discharge land-application wastewater treatment system. The estimated capital cost for this project is \$2,532,243.00. This total includes the land acquisition cost, and the engineering, construction, and administration costs for building the new WWTF and closing the previous lagoon.

**(1) A community's financial capability and ability to raise or secure necessary funding;**

Current User Rates:	<u>\$21.37<sup>iii</sup></u>
Municipal Bond Rating (if applicable):	<u>None<sup>iii</sup></u>
Bonding Capacity: <i>(General Obligation Bond capacity allowed by constitution: cities=up to 20% of taxable tangible property sewer districts or villages=up to 5% of taxable tangible property)</i>	<u>\$1.66 million remains in authorized authority<sup>iii</sup></u>
Current outstanding debt for the City:	<u>\$2,040,521<sup>iii</sup></u>
Amount within the current user rate used toward payments on outstanding debt related to the current wastewater infrastructure:	<u>Information not available</u>
Consideration of integrated planning to address the most significant needs of the municipality	<u>Information not available</u>

The Department considers Integrated Planning a very important tool when balancing multiple new environmental requirements. Please contact the community services coordinator by email at [Hannah.Humphrey@dnr.mo.gov](mailto:Hannah.Humphrey@dnr.mo.gov) for further guidance on financial planning.

**(2) Affordability of pollution control options for the individuals or households at or below the median household income level of the community;**

**A Current Costs**

Current operating costs (exclude depreciation):	<u>\$70,349<sup>iii</sup></u>
Current user rate:	<u>\$21.37<sup>iii</sup></u>

**B Estimated Costs for Improvements**

Estimated total present worth of pollution control:	<u>\$1,916,414<sup>iv</sup></u>
Estimated capital cost of pollution control:	<u>\$2,532,243<sup>iii</sup></u>
Annual cost of operation and maintenance:	<u>\$5,252<sup>iv</sup></u>
Estimated resulting user cost per household per month plus the amount used toward payments on outstanding debt:	<u>\$61.67<sup>iii</sup></u>
Median household income(MHI)	<u>\$42,069<sup>v</sup></u>

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Estimated cost per household per month plus the amount used toward payments on outstanding debt as a percent of median household income:

1.76%<sup>vi</sup>

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**(3) An evaluation of the overall costs and environmental benefits of the control technologies;**

The discharge of effluent that does not comply with permitted effluent limitations contributes to the further impairment of the receiving stream and endangers the aquatic life in the stream, livestock, wildlife, and public health. Such discharges have the potential to contaminate lakes and streams causing serious water quality problems that negatively impact the beneficial uses.

On August 22, 2013, the U.S. Environmental Protection Agency (EPA) finalized new water quality criteria for ammonia, based on toxicity studies of mussels and gill breathing snails. When new water quality criteria are established by the EPA, states must adopt them into their regulations in order to keep their authorization to issue permits under the National Pollutant Discharge Elimination System. This permit renewal requires final effluent limitations for Ammonia as N based on Missouri Water Quality Standards (WQS) 10 CSR 20-7.031 and the Clean Water Act. Ammonia (NH<sub>3</sub>) is toxic to early stages of aquatic life. NH<sub>3</sub> removal prevents damage to aquatic life and enables the receiving stream to support a healthier and diverse aquatic life community. Please see the Water Protection Program fact sheet titled "Changes to the Water Quality Standard for Ammonia" at <http://dnr.mo.gov/pubs/pub2481.htm>.

Total Suspended Solids (TSS) is measure of the filterable solids present in a wastewater or effluent sample that includes dissolved solids and settle able solids. The concentration of total dissolved solids affects the water balance in the cells of aquatic organisms. An organism placed in water with a high concentration of solids will shrink somewhat because the water in its cells will tent to move out. This will in turn affect the organism's ability to maintain the proper cell density, making it difficult to keep its position in the water column. It might float up or sink down to a depth to which it is not adapted, and it might not survive. Higher concentrations of suspended solids can serve as carriers of toxics, which readily cling to suspended particle. A high concentration of total solids will make drinking water unpalatable and might have an adverse effect on people who are not used to drinking such water. Levels of total solids that are too high or too low can also reduce the efficiency of drinking water treatment plants. As well as the operation of industrial processes that use raw water. Total solids also affect water clarity. Higher solids decrease the passage of light through water, thereby slowing photosynthesis by aquatic plants. Water will heat up more rapidly and hold more heat; this, in turn, might adversely affect aquatic life that has adapted to a lower temperature regime.

By converting the existing wastewater treatment lagoon to a no-discharge system with land application of the wastewater, the city will be avoiding the direct discharge of effluent into the receiving stream, a tributary to Turkey Creek, reducing the health risks of the community. The wastewater treatment modifications provide an opportunity to lessen the environmental impacts associated with surface water discharges, improves recreational water quality, and the wastewater recharges the groundwater to increase the base flow in the stream. Additionally, the natural treatment of the wastewater that takes place in the soil allows plants to remove nitrogen and phosphorus from the wastewater.

**(4) Inclusion of ongoing costs of operating and maintaining the existing wastewater collection and treatment system, including payments on outstanding debts for wastewater collection and treatment systems when calculating projected rates:**

The community reported their outstanding debt for their current wastewater collection and treatment systems to be approximately \$95,000<sup>iv</sup>. The community reported that each user pays approximately \$21.37 each month<sup>iii</sup>, which is used toward payments on the current outstanding debt.

**(5) An inclusion of ways to reduce economic impacts on distressed populations in the community, including but not limited to low and fixed income populations. This requirement includes but is not limited to:**

- (a) Allowing adequate time in implementation schedules to mitigate potential adverse impacts on distressed populations resulting from the costs of the improvements and taking into consideration local community economic considerations.
- (b) Allowing for reasonable accommodations for regulated entities when inflexible standards and fines would impose a disproportionate financial hardship in light of the environmental benefits to be gained.

**Socioeconomic Data:**

Potentially Distressed Populations – City of Hawk Point	
Unemployment	4.2% <sup>vii</sup>
Adjusted Median Household Income (MHI)	\$42,069 <sup>v</sup>
Percent Change in MHI (2000-2013)	+43.6% <sup>viii</sup>
Percent Population Growth (2000-2013)	+26.7% <sup>ix</sup>
Change in Median Age in Years (2000-2013)	-4.7 <sup>x</sup>
Percent of Households in Poverty (2013)	26.2% <sup>xi</sup>
Percent of Households Relying on Food Stamps (2013)	23.7% <sup>xii</sup>

Opportunity for cost savings or cost avoidance:

If available, connection to a larger centralized sewer system in the area may be more cost effective for the city.

The city may apply for State Revolving Fund (SRF) financial support in order to help fund a Capital Improvements Plan. Other loans and grants also exist for which the city may be eligible. Contact information for the department's Financial Assistance Center (FAC) and more information can be found on the department's website at <http://dnr.mo.gov/env/wpp/srf/wastewater-assistance.htm>.

Opportunity for changes to implementation/compliance schedule:

The AOC will allow the city to request extension of milestones, should the city become aware of a milestone date that they will not be able to meet.

The city may propose changes to the schedule of compliance based on their own cost estimate or financial information.

**(6) An assessment of other community investments and operating costs relating to environmental improvements and public health protection;**

The city recently undertook a \$1.7 million drinking water project<sup>iii</sup>.

**(7) An assessment of factors set forth in the United States Environmental Protection Agency's guidance, including but not limited to the "Combined Sewer Overflow Guidance for Financial Capability Assessment and Schedule Development" that may ease the cost burdens of implementing wet weather control plans, including but not limited to small system considerations, the attainability of water quality standards, and the development of wet weather standards;**

**Secondary indicators for consideration:**

Indicators	Strong (3 points)	Mid-Range (2 points)	Weak (1 point)	Score
Bond Rating Indicator <sup>iii</sup>	Above BBB or Baa	BBB or Baa	Below BBB or Baa	N/A <sup>iii</sup>

Overall Net Debt as a % of Full Market Property Value <sup>iii</sup>	Below 2%	2% - 5%	Above 5%	<b>1</b> \$2,040,521/\$4,576,846 = 0.45 0.45x100 = 45%
Unemployment Rate <sup>vii</sup>	>1 below Missouri average of 4.1%	± 1 of Missouri average of 4.1%	>1 above Missouri average of 4.1%	<b>2</b> City rate=4.2% 4.2%-4.1% = 0.1
Median Household Income <sup>v</sup>	More than 25% above Missouri MHI (\$49,008)	± 25% of Missouri MHI (\$49,008)	More than 25% below Missouri MHI (\$49,008)	<b>2</b> City MHI=\$42,069 \$42,069-\$49,008 = -6,939 -6,939/49,008 = -0.142 -0.142x100 = -14.2%
Percent of Households in Poverty <sup>*xi</sup>	>10 below Missouri average of 11.7%	± 10 of Missouri average of 11.7%	>10 above Missouri average of 11.7%	<b>1</b> City rate=26.2% 26.2%-11.7% = 14.5
Percent of Households Relying on Food Stamps <sup>*xii</sup>	>5 below Missouri average of 10.6%	± 5 of Missouri average of 10.6%	>5 above Missouri average of 10.6%	<b>1</b> City rate=23.7% 23.7%-10.6% = 13.1
Property Tax Revenues as a % of Full Market Property Value <sup>xiii</sup>	Below 2%	2% - 4%	Above 4%	<b>3</b> \$18,230/\$4,576,846 = 0.00398 0.00398x100 = 0.398%
Property Tax Collection Rate <sup>iii</sup>	Above 98%	94% - 98%	Below 94%	<b>1</b> 91%

Financial Capability (FCI) Indicators Average Score: 1.57  
Land Application Residential Indicator (RI, from Criteria #2 above): 1.76

\* Financial Capability Indicators are specific to the State of Missouri

**Financial Capability Matrix:**

Financial Capability Indicators Score from above ↓	Residential Indicator (User cost as a % of MHI)		
	Low (Below 1%)	Mid-Range (Between 1.0% and 2.0%)	High (Above 2.0%)
Weak (below 1.5)	Medium Burden	High Burden	High Burden
Mid-Range (1.5 – 2.5)	Low Burden	Medium Burden	High Burden
Strong (above 2.5)	Low Burden	Medium Burden	High Burden

Estimated Financial Burden for Land Application: Medium Burden

The resulting financial burden has been determined by comparing the Financial Capability Indicator score (FCI) with the Residential Indicator (RI) stated in Criteria #2. The cost associated with converting the WWTF to a no-discharge, land application system could result in a medium financial burden placed on the community due to the mid-range FCI paired with the mid-range RI.

**(8) An assessment of any other relevant local community economic condition.**

The community did not report any other relevant local economic conditions.

The department contracted with Wichita State University to complete an assessment tool that would allow for predictions on rural Missouri community populations and future sustainability. The purpose of the study is to use a statistical modeling analysis in order to determine factors associated with each rural Missouri community that would predict the future population changes that could occur in each community. A stepwise regression model was applied to 19 factors which were determined as predictors of rural population change in Missouri. The model established a hierarchy of the predicting factors which allowed the model to place a weighted value on each of the factors. A total

of 745 rural towns and villages in Missouri received a weighted value for each of the predicting factors. The weighted values for each town / village were then added together to determine an overall decision score. The overall decision scores were then divided into five categories and each town was assigned to a different categorical group based on the overall decision score.

The categorical groups were developed from the range of overall scores across all rural towns and villages within Missouri. The range covers 1,191 score points (-245 to 946).

Based on the assessment tool, the city of Hawk Point has been determined as a category 5 community. This means that the city of Hawk Point is predicted to be stable over time.

### **Conclusion and Finding**

As a result of reviewing the above criteria, the department hereby finds that the actions described above could result in a medium burden with regard to the city's overall financial capability and a medium impact for most individual customers/households.

The department considered the eight criteria presented in subsection 644.145.3 when evaluating the cost associated with the relevant actions. The city reported that the resulting monthly user cost for complete replacement of the existing treatment facility in order to eliminate the discharge of pollutants to waters of the state could be \$61.67.

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<sup>i</sup> Missouri State Operating Permit No. MO-0028053

<sup>ii</sup> Missouri Department of Natural Resources Fee Tracking System, October 2015

<sup>iii</sup> Information provided by Davenport, Tomko, and Butler on August 27, 2014.

<sup>iv</sup> Wastewater Improvements Preliminary Engineering Report Addendum #3 – August 27, 2014, developed by Shafer, Kline & Warren, Inc.

<sup>v</sup> 2009-2013 American Community Survey 5-year Estimates - Median Household Income - Median Income in the past 12 months(S1903)

[http://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ACS\\_13\\_5YR\\_S1903&prodType=table](http://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ACS_13_5YR_S1903&prodType=table)

<sup>vi</sup>  $(\text{Cost per household per month}/(\text{MHI}/12)) * 100 = \text{Cost per household as a percent of MHI}$   
 $(\$61.67/(\$42,069/12)) * 100 = 1.76\%$

<sup>vii</sup> Missouri Department of Economic Development (November 2015)

<http://www.missourieconomy.org/indicators/unemp/index.stm>

<sup>viii</sup> 2000 Median Household Income,

[http://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=DEC\\_00\\_SF3\\_DP3&prodType=table](http://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=DEC_00_SF3_DP3&prodType=table); and American Community Survey, U.S. Census Bureau,

<http://factfinder.census.gov/faces/nav/jsf/pages/searchresults.xhtml?refresh=t>

<sup>ix</sup> Total Population Universe: Total Population American Community Survey B01003,

<http://factfinder2.census.gov/faces/nav/jsf/pages/searchresults.xhtml?refresh=t>

<sup>x</sup> 1990 Median Age, <http://www.oseda.missouri.edu/mscdc/census/mo/trendplaces.html>; Median Age by Sex – American Community Survey 5-year Estimates – B01002,

<http://factfinder2.census.gov/faces/nav/jsf/pages/searchresults.xhtml?ref=geo&refresh=t>

<sup>xi</sup> Poverty data – American Community Survey,

<http://factfinder2.census.gov/faces/nav/jsf/pages/searchresults.xhtml?refresh=t>

<sup>xii</sup> Food Stamps/SNAP ACS Community Survey 5-year Estimates - S2201,

<http://factfinder2.census.gov/faces/nav/jsf/pages/searchresults.xhtml?refresh=t>

<sup>xiii</sup> 2014 Property Tax Rates, Missouri State Auditor, Report No. 2015-004