

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

IN THE MATTER OF:

Village of Hartsburg's
Wastewater Treatment Facility

SERVE:

The Honorable Bob Brown, Mayor
Village of Hartsburg

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No. 2014-WPCB-1282

ABATEMENT ORDER ON CONSENT

I. NOTICE TO RECIPIENTS OF ABATEMENT ORDERS

The issuing of this Abatement Order on Consent (AOC) No. 2014-WPCB-1282, by the Missouri Department of Natural Resources, is a formal administrative action by the state of Missouri and is being issued because the village of Hartsburg's wastewater treatment facility 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 village of Hartsburg 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 village of Hartsburg is located approximately fifteen miles northwest of Jefferson City, Missouri, and had a population of 103 during the 2010 United States Census. The village is served by a two-cell wastewater lagoon with aeration in both cells. The design population equivalent is 144 with a design flow of 14,400 gallons per day. The actual flow is 6,540 gallons per day. The lagoon is located at SE ¼, SW ¼, Section 8, Township 45 North, Range 12 West, in Boone County, and operates pursuant to the terms and conditions of Missouri State Operating Permit (MSOP) No. MO-0108995. The lagoon discharges effluent from Outfall No. 001 to an unnamed tributary to Slate Creek. The first

classified stream, located approximately 1.8 miles downstream, is the Missouri River.

- B. Slate Creek, the Missouri River and tributaries thereof are waters of the state as the term is defined by Section 644.016(27) RSMo.
- C. Domestic wastewater and fecal coliform are water contaminants as the term is defined in Section 644.016(24), RSMo.
- D. MSOP No. MO-0108995 was last issued to the village on August 11, 2006, and expired on its own terms on August 10, 2011. On December 16, 2010, the Department received an application from the village to renew MSOP No. MO-0108995, and it is currently under review by the Department's Water Protection Program, Operating Permits Section. MSOP No. MO-0108995 requires the village 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-0108995 also requires the effluent to comply with the 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 28th day of the month following the reporting period.
- E. MSOP No. MO-0108995, Part D, Schedule of Compliance, provided a five year schedule for the village to upgrade the lagoon to enable the effluent to comply with final effluent limitations for fecal coliform, which took effect August, 2011. To date, the village has not completed the required upgrades.
- F. Monthly DMRs submitted to the Department document that the effluent discharged from the lagoon failed to comply with the applicable permitted effluent limitations for fecal coliform during the months of August through October 2011, April through October 2012, and April through October 2013.
- G. On January 23, 2012, Department staff conducted a compliance inspection at the lagoon and documented that the village had not installed disinfection equipment. Department staff observed that the discharge from the lagoon had a slight green tint and contained a small amount of duckweed. As a result of violations documented during the inspection and accompanying file review, the Department issued Notice of Violation (NOV) No. NER2012030614585388 to the village on March 23, 2012.
- H. On December 27, 2012, the Department issued NOV No. NER2012121815355610 to the village for failing to take action necessary to install disinfection equipment as required by the Schedule of Compliance in MSOP No. MO-0108995 and failing to comply with permitted effluent limits during the months of April through October 2012.

- I. On July 19, 2013, the Department received a preliminary engineering report and an application for a construction permit, including proposed plans and specifications for the addition of a new ultraviolet disinfection system at the lagoon.
- J. On October 24, 2013, Department staff conducted a compliance inspection at the lagoon and documented that the village did not have any disinfection equipment at the lagoon, nor a construction permit to complete the required upgrades.
- K. On February 7, 2014, the Department issued the village Construction Permit No. CP0001561 to install an ultraviolet disinfection system at the lagoon. The construction permit is set to expire February 6, 2015. To date, the village has not completed disinfection upgrades at the lagoon.
- L. On April 10, 2014, the Department received correspondence from the village stating that the village has funds to select and pay a contractor to bid the construction project by April 15, 2014. The correspondence also indicates that the village anticipates completing upgrades no later than September 1, 2014.
- M. Section 644.076.1, RSMo, makes it unlawful to violate the MCWL and regulations promulgated pursuant thereto and establishes civil penalties of up to ten thousand dollars (\$10,000.00) per day per violation.
- N. Pursuant to Section 644.145 RSMo, the Department's Affordability Finding, addressing the obligations included within this AOC, is attached hereto as Exhibit A.

III. CITATIONS AND CONCLUSIONS OF LAW

Violations of the MCWL and its implementing regulations alleged herein and found to have been committed by the village at the facility are as follows:

1. Since August 10, 2011, during the recreational season (April through October each year), caused pollution of a tributary to Slate 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.
2. Since August 10, 2011, during the recreational season (April through October each year), failed to comply with the effluent limits contained in Part A of MSOP No. MO-0108995, in violation of Sections 644.051.1(3) and 644.076.1, RSMo.
3. Since August 10, 2011, failed to upgrade the lagoon for disinfection requirements as required in Part B, Standard Conditions, and Part D, Schedule of Compliance, of MSOP No. MO-0108995, in violation of Section 644.076.1, RSMo, and 10 CSR 20-6.010(7)(A).

IV. AGREEMENT

- A. The Department and village desire to amicably resolve all claims that may be brought against the village for violations alleged above in Section III, Citations and Conclusions of Law, without the village 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 village under this AOC.
- C. The village in compromise and satisfaction of the Department's claims relating to the above-referenced violations agrees, without admitting liability or fault, to pay a civil penalty in the amount of six thousand dollars (\$6,000). The Department and village further agree that four thousand dollars (\$4,000) shall be suspended as described in paragraph D below. The upfront civil penalty in the amount of two thousand dollars (\$2,000) shall be paid in the form of a check made payable to "Boone County Treasurer, as custodian of the Boone County School Fund." The check in the amount of two thousand dollars (\$2,000) is due and payable upon execution of this AOC by the village. The check and signed copy of the AOC shall be delivered to:
- Missouri Department of Natural Resources
Accounting Program
P.O. Box 477
Jefferson City, MO 65102-0477
- D. The suspended penalty described in paragraph C of four thousand dollars (\$4,000) shall be suspended for a period of two (2) years from the execution of this AOC upon the condition that the village does not violate the terms of the AOC. Upon determination that the village has failed to meet the terms of this AOC, including the requirements of paragraphs E through J, the Department may send a written demand for the suspended penalty to the village. The village shall have fifteen (15) days from receipt of the written demand to submit the suspended penalty to the address listed in paragraph C.
- E. In the period of time from the effective date of this AOC until the upgrades to the lagoon are completed, the village shall operate and maintain the existing lagoon at all times in compliance with the conditions and requirements of MSOP No. MO-0108995. All units or components of the existing lagoon shall be maintained in an operable condition, even if this requires the purchase and installation of new parts or equipment, or repair of the lagoon.

- F. By September 1, 2014, the village shall complete construction of the improvements according to the Department-approved plans and specifications, and submit to the Department: 1) 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 Construction Permit No. CP0001561; and 2) a complete application with the applicable fee to modify MSOP No. MO-0108995.
- G. Within thirty (30) days of completing construction of the improvements, the lagoon's discharge shall achieve compliance with the final effluent limitations contained in Part A of MSOP No. MO-0108995.
- H. Immediately upon becoming aware that a deadline or milestone as set forth in this AOC will not be completed by the required deadline, the village 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 (5) days of notifying the Department, the village 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 village's right to request an extension and may be grounds for the Department to deny the village an extension.
- I. Should the village fail to meet the terms of this AOC, including the deadlines for completion of construction set out in paragraphs E through I, the village 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	\$500.00 per day
31 to 90 days	\$1,000.00 per day
91 days and above	\$2,500.00 per day

Stipulated penalties will be paid in the form of a check made payable to "Boone County Treasurer, as custodian of the Boone County School Fund." Any such stipulated penalty shall be paid within ten (10) days of demand by the Department and shall be delivered to:

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

- M. Nothing in this AOC forgives the village 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 noncompliance 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.
- N. 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.
- O. 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 village for its records.
- P. The village 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, the Affordability Finding, which addresses the obligations included within this AOC, based upon the village's cost estimate of \$70,110.00 through completion of corrective actions outlined in the village's July 19, 2013 engineering plans and specification is attached hereto as Exhibit 1. This Affordability Finding does not address future improvements that may be necessary to comply with the MCWL or its implementing regulations. This AOC requires the village to complete construction of disinfection upgrades at the lagoon in accordance with the Department-approved engineering report, plans, and specifications.

VI. RIGHT OF APPEAL

By signing this AOC, the village 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.

**Missouri Department of Natural Resources
Water Protection Program
Affordability Determination and Finding
(In accordance with RSMo 644.145)**

**Village of Hartsburg Wastewater Treatment Facility
Boone County, Missouri
MO-0108995**

Section 644.145 RSMo requires the Department of Natural Resources 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.”

Facility Description:

The village of Hartsburg is located approximately fifteen (15) miles northwest of Jefferson City, Missouri, and had a population of 103 at the 2010 United States census. The village is served by a two (2)-cell wastewater lagoon with aeration in both cells. The design population equivalent is 144 with a design flow of 14,400 gallons per day. The actual flow is 6,540 gallons per day. The lagoon is located at SE ¼, SW ¼, Section 08, Township 45 North, Range 12 West, in Boone County, and operates pursuant to the terms and conditions of Missouri State Operating Permit (MSOP) number MO-0108995. The lagoon discharges effluent from Outfall #001 to an unnamed tributary to Slate Creek. The first classified stream, located approximately 1.8 miles downstream, is the Missouri River.

Residential Connections ¹ :	<u>53</u>
Commercial Connections:	<u>0</u>
Total Connections ¹ :	<u>53</u>

New Permit Requirements or Requirements Now Being Enforced:

MSOP number MO-0108995 expired on August 10, 2011, and included a schedule of compliance for the village to upgrade the lagoon to enable the effluent to comply with final limitations for fecal coliform by August 9, 2011. To date, the village has not completed the required upgrades to the facility. The Abatement Order on Consent (AOC) includes a schedule for the village to obtain a construction permit and complete upgrades to the facility to enable the effluent to comply with final effluent limitations for E. coli (which will replace fecal coliform when MSOP number MO-0108995 is renewed).

Range of Anticipated Costs Associated with Complying with the New Requirements:

The village has elected to install an ultraviolet disinfection system to enable the facility’s effluent to comply with final effluent limitations for E. coli.

Capital Cost ² :	<u>\$70,110</u>
Annual O&M ² :	<u>\$500</u>
Total Lifecycle Cost ² :	<u>\$79,910</u>

There is no expected user rate increase.

¹ Obtained from Form B of the application to renew MSOP number MO-0108995.

² Obtained from January 2013 engineering report.

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

Current User Rates ⁴ :	\$16/month
Rate Capacity or Pay as You Go Option ³ :	Not Available
Municipal Bond Rating (if applicable) ³ :	Not Available
Bonding Capacity: <i>(General Obligation Bond capacity allowed by constitution: cities=up to 20% of taxable tangible property sewer districts=up to 5% of taxable tangible property)</i>	Up to 20%
Current outstanding debt ³ :	Not Available
Other indicators:	

The village has indicated that it has the funds necessary to complete the disinfection upgrades. Therefore, village does not intend to seek any outside funding sources.

(2) Affordability of pollution control options for the individuals or households of the community;

There is no expected user rate increase, but current population is 103 with no expected growth in the next 20 years.

Current annual operating costs (exclude depreciation) ³ :	Not Available
Current user rate ⁴ :	\$16/month (\$192/year)
Estimated capital cost of pollution control options:	\$70,110
Annual Cost of Additional (Operating Costs & Debt Service):	\$500
Estimated Resulting User Rate and/or Cost per Household:	\$16/month (\$192/year)
Median Household Income ⁵	\$35,367
Rate and/or Cost per Household as a Percent of Median Household Income ⁶ :	$(\$192/\$35,367) \times 100 = 0.54 \%$

<i>(Rate or Cost/MHI)</i> Check Appropriate Box	Financial Impact	Residential Indicatory (Cost or Usage Rate as a percent of Median Household Income)
<input checked="" type="checkbox"/>	Low	Less than 1% MHI
<input type="checkbox"/>	Medium	Between 1% and 2% MHI
<input type="checkbox"/>	High	Greater than 2% MHI

The required upgrades will have a negligible financial impact on the population. No increase in user rates is expected.

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

³ Information was not available at the time the Department conducted this affordability analysis.

⁴ This figure was obtained from a spreadsheet compiled by the Missouri Public Utility Alliance regarding water and wastewater rates, updated March 16, 2012.

⁵ Median Household Income is provided by the American Fact Finder – INCOME IN THE PAST 12 MONTHS (IN 2011 INFLATION ADJUSTED DOLLARS) – 2007 – 2011 American Community Survey 5-Year Estimates, which can be found online at: http://factfinder2.census.gov/faces/tableservices/jsf/pages/productview.xhtml?_afpt=table

⁶ $(\$192/\$35,367) \times 100 = 0.54 \%$

Monthly discharge monitoring reports submitted by the village document that the effluent discharged from the lagoon failed to comply with the applicable permitted effluent limitations for fecal coliform during the months of August through October 2011; April through October 2012; and April through October 2013. The village elected to install an ultraviolet disinfection system to enable the facility's effluent to comply with final limitations for E. coli. The selected disinfection system will remove bacterial water contaminants from the effluent which will improve conditions for aquatic life in the receiving stream and decrease health risks to humans.

The capital costs of the disinfection upgrades are expected to be approximately \$70,110. The village has the funds available, and therefore, will not have to increase user rates to complete the ultraviolet disinfection system upgrades. Alternatively, the village could have installed a chlorination/dechlorination system or evaluated options for converting the facility to a no-discharge system. Connecting to an area-wide system is not an option due to accessibility issues.

(4) 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; and*
- (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;*

Potentially Distressed Populations for Hartsburg, Boone County, Missouri	
Unemployment for Boone County ⁷	3.7%
Median Household Income (MHI) in village of Hartsburg ⁵	\$35,367
Percent Change in MHI (1990-2011) ⁵	9.8%
Percent Population Growth/Decline (1990-2011) ⁸	-6.9%
Change in Median Age in Years (1990-2011) ⁸	23.7
Percent of Households in Poverty ⁹	0.0%
Percent of Households Relying on Food Stamps ¹⁰	13.4%

Opportunity for cost savings or cost avoidance:

MSOP number MO-0108995 contained a schedule of compliance for the facility's effluent to comply with final limitations for fecal coliform by August 9, 2011. The AOC extends the compliance schedule beyond that of the permit, and thus reduces the economic impact by providing additional time for the city to complete disinfection upgrades

⁷ Unemployment data (November 2013) was obtained from the Missouri Department of Economic Development at <http://www.missourieconomy.org/pdfs/urel1311.pdf>.

⁸ Population trend data was obtained from online from: 2011 Census Bureau Population Data - http://factfinder2.census.gov/faces/tableservices/jsf/pages/productview.xhtml?_afpt=table
 2000 Census Bureau Population Data - <http://www.census.gov/popest/data/cities/totals/2009/tables/SUB-EST2009-04-29.xls>
 1990 Census Bureau Population Data - <http://www.census.gov/prod/cen1990/cp1/cp-1-27.pdf>

⁹ Poverty data – American Community Survey
http://factfinder2.census.gov/faces/tableservices/jsf/pages/productview.xhtml?_afpt=table

¹⁰ Food stamps – 2007-2011 American community Survey 5-year Estimates – S2201
<http://factfinder2.census.gov/faces/nav/jsf/pages/searchresults.xhtml?refresh=t>

Opportunity for changes to implementation/compliance schedule:

The AOC allows the village to submit an extension for additional time to complete any affected obligations included in the AOC if/when the village becomes aware that a milestone will not be met by the required deadline.

(5) An assessment of other community investments relating to environmental improvements;

When MSOP number MO-0108995 is renewed, it will include a multi-year schedule of compliance for the village to upgrade the existing facility to enable the effluent to comply with final limitations for ammonia as nitrogen.

The community has not reported any other investments relating to environmental improvements.

(6) 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 ³	Above BBB or Baa	BBB or Baa	Below BBB or Baa	Not Available
Overall Net Debt as a % of Full Market Property Value ³	Below 2%	2% - 5%	Above 5%	Not Available
Unemployment Rate ⁷	>1% below Missouri average	± 1% of Missouri average	>1% above Missouri average	3 3.8%– 5.7% = 1.9% below MO (Hartsburg UR – MO UR)
Median Household Income ⁵	More than 25% above Missouri MHI	± 25% of Missouri MHI	More than 25% below Missouri average	1 (((\$35,367 - \$47,202) /\$47,202) x 100 = 25.1% Below MO (Hartsburg MHI- MO MHI)/MO MHI) x 100
Property Tax Revenues as a % of Full Market Property Value ³	Below 2%	2% - 4%	Above 4%	Not Available
Property Tax Collection Rate ³	Above 98%	94% - 98%	Below 94%	Not Available

Secondary Indicators Average Score: $\frac{(3 + 2)}{2} = 2$ Mid-Range
 Residential Indicator (from Criteria #2 above): 0.54 % Low Impact

Financial Capability Matrix:

Financial Capability Indicators Score from above ↓	Residential Indicator (User rate 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	Low Burden	Medium Burden

Estimated Financial Burden: Low Burden

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

Hartsburg’s population decreased 6.9% from 1990 to 2011, but the unemployment rate is 1.9% below the state’s unemployment rate.

In terms of economic strength, Boone County is above average when compared to other counties in the state. Boone County captures most of the retail sales and gains most of the retail customers in the central region of the state. Boone County also holds the highest market share. The buying power index of Boone County residents is higher on average compared to the rest of the regional economy¹¹.

Conclusion and Finding

As a result of reviewing the above criteria, the Department hereby finds that the action described above will result in a low burden with regard to the community’s overall financial capability and a low financial impact for most individual customers/households.

¹¹ http://www.missourieconomy.org/pdfs/central_wia_retail_trade_analysis.pdf