

## **Cost of Clean Water Compliance**

Pursuant to Section 644.145.9, Revised Statutes of Missouri, which became law in 2014, the Department of Natural Resources presents this annual report to the Governor, Speaker of the House of Representatives, the President Pro Tempore of the Senate, and the chairs of the committee in both houses having primary jurisdiction over natural resource. The statutory language requiring this report is shown in Appendix A.

This report contains information on the cost analyses for compliance completed in the previous calendar year, beginning at the time this section of law became effective. These analyses are completed when the Department issues permits that incorporate new requirements for discharges from publicly owned combined or separate sanitary or storm sewer systems or treatment works.

“Affordability” with respect to payment of a utility bill is defined in Section 644.145, RSMo as a measure of whether an individual customer or household with an income equal to the lower of the median household income for their community or the state of Missouri can pay the bill without undue hardship or unreasonable sacrifice in the essential lifestyle or spending patterns of the individual or household. During the National Pollutant Discharge and Elimination System (NPDES) permit renewal process, every permittee categorized as a Publicly Owned Treatment Works (POTW) receives a financial questionnaire to complete and send to the Department. The financial questionnaire asks a series of questions relating to the sustainability and financial capability of the municipality. This information provided by the permittee and/or readily available data from the U.S. Census Bureau is used to draft the cost analysis for compliance associated with new permit requirements. During the courtesy 15 day preview and the 30 day public notice period, the permittee is given the opportunity to review the draft permit and the cost analysis for compliance. The comment period offers the permittee the opportunity to provide additional information about the community’s unique financial situation before the final NPDES permit is issued. It is the Department’s practice to contact the permittee after the 15 day preview has been sent to ensure the permittee received and understood the draft permit and cost analysis. The analysis is based on eight different criteria, in accordance with Section 644.145, RSMo, which allow the Department to make a decision on the financial capability of the community. If the new permit requirements should necessitate a schedule of compliance, the Department then uses the analysis to support an adequate schedule based on the community’s unique financial situation.

The total number of analyses for permits with effective dates between August 28, 2014 and December 31, 2014 issued by the Department was seventeen, as shown below and in Appendix B. All of the analyses were conducted due to new, significant NPDES permit requirements. No cost analyses for compliance were issued based on Department enforcement actions during the same time period.

As Senate Bill No. 642 and 664 became law, the Department has worked diligently with communities, the Environmental Improvement and Energy Resources Authority (EIERA) and Stakeholders to refine the cost analysis policy and procedures. As the 2014 revisions to Section 644.145, were coming into effect, many of the permits that needed a cost analysis for compliance were kept in draft form until they were processed with the modifications to ensure compliance with this new law.

Fifty-six percent of the NPDES permits issued between August 28, 2014 and December 31, 2014 contained only new or increased monitoring and/or sampling requirements which would not result in a municipality conducting a major upgrade or other reconstruction of the current facility to comply with new requirements. For example, the average cost for a community to perform quarterly sampling on Total Phosphorus and Total Nitrogen is \$400.00 annually. The costs associated with the changed monitoring requirements will not cause a financial burden on the community as it is unlikely the requirements will cause residential user rates to be increased.

All seventeen permits issued by MDNR with an effective date between August 28, 2014 and December 31, 2014 were categorized as affordable based upon their cost analyses. These permits are the following:

1. MO-0021466, Albany Wastewater Treatment Facility
2. MO-0050326, Bloomfield Wastewater Treatment Facility
3. MO-0104671, Ewing Wastewater Treatment Facility
4. MO-0122777, Festus Interim West Wastewater Treatment Facility
5. MO-0093505, Higbee Wastewater Treatment Facility
6. MO-0129046, Hillsboro North Wastewater Treatment Facility
7. MO-0085383, Hillsboro Reclamation Plant
8. MO-0022845, New Madrid Wastewater Treatment Facility
9. MO-0119474, Platte County Regional Sewer District, Brush Creek Facility
10. MO-0047341, Piedmont Wastewater Treatment Facility
11. MO-0093076, Pilot Grove East Wastewater Treatment Facility
12. MO-0041238, Polo Sewage Treatment Plant
13. MO-0028762, Princeton Wastewater Treatment Facility
14. MO-0022985, Seymour Wastewater Treatment Facility
15. MO-0108880, Stewartsville Wastewater Treatment Facility
16. MO-0133086, Village of Oak Ridge Wastewater Treatment Facility
17. MO-0100714, Winona Municipal Wastewater Treatment Facility

The Department did not issue a permit categorized as “not meeting the definition of affordable” during this timeframe.

The Department did not issue a permit characterized as being implemented as a federal mandate. As a practical matter, no permit of this nature would be issued by the Department. Any requirement contained in a permit issued by the Department is based on requirements as adopted in rule by the Missouri Clean Water Commission, which administers the Missouri Clean Water Law. Any direction by a federal agency must first meet the requirement to be implemented as a state requirement before it would become a requirement of a state permit. Therefore there will not be any permit coming under this category unless and until a federal rule is imposed in place of state rules.

The average increase in residential sewer rates of the permits issued and effective between August 28, 2014 and December 31, 2014 was \$1.65 or 6.59%. It is important to note, the cost analyses completed by the Department contain only cost estimates. Where needed, these cost estimates are used by the Department to determine an appropriate schedule of compliance to meet the new requirements within the NPDES permit.

Based on the estimates calculated during the analysis, the average increase in residential sewer rates as a percentage of MHI of the NPDES permits categorized as affordable was 0.05% as shown in Appendix B. Many of the NPDES permits issued with a cost analysis for compliance did not contain a conclusion that included the cost estimates associated with a complete replacement to the wastewater treatment facility, but rather contained new or increased monitoring and/or sampling requirements.

There were no analyses completed where the estimated average increase in sewer rates was higher than the definition of affordable. The Department did not issue a permit that did not meet the definition of affordable.

Appendix B shows all of the permits receiving analyses, including the current and projected monthly residential sewer rates in dollars, the projected monthly residential sewer rates as a percentage of median household income and the percentage of households at or below the state poverty rate.

The projected monthly residential sewer rates listed in Appendix B were estimated using cost information provided by Engineering Surveys and Services located in Columbia, Mo and/or the Department's cost estimation calculator, CapdetWorks. CapdetWorks is a preliminary design and costing software program from Hydromantis for wastewater treatment plants that uses national indices, such as the Marshall and Swift Index and Engineering News Records Cost Index for pricing in development of capital, operating, maintenance, material, and energy costs for each treatment technology. As the program works from national indices and each community is unique in its budget commitments and treatment design, the estimated costs are expected to be higher than actual costs.

## **Appendix A**

### **Reporting Requirement of Section 644.145, RSMo**

644.145.9. The department shall file an annual report by the beginning of the fiscal year with the governor, the speaker of the house of representatives, the president pro tempore of the senate, and the chairs of the committees in both houses having primary jurisdiction over natural resource issues showing at least the following information on the findings of affordability completed in the previous calendar year:

(1) The total number of findings of affordability issued by the department, those categorized as affordable, those categorized as not meeting the definition of affordable, and those implemented as a federal mandate regardless of affordability;

(2) The average increase in sewer rates both in dollars and percentage for all findings found to be affordable;

(3) The average increase in sewer rates as a percentage of median house income in the communities for those findings determined to be affordable and a separate calculation of average increases in sewer rates for those found not to meet the definition of affordable;

(4) A list of all the permit holders receiving findings, and for each permittee the following data taken from the finding of affordability shall be listed:

(a) Current and projected monthly residential sewer rates in dollars;

(b) Projected monthly residential sewer rates as a percentage of median house income;

(c) Percentage of households at or below the state poverty rate.

## **Appendix B**

### **Cost Analyses for Compliance Completed in 2014 Pursuant to Section 644.145, RSMo**

(spreadsheet)