

**REGULATORY IMPACT REPORT
COMMENTS AND RESPONSES
Proposed Rulemaking to Adopt
“Minimum Design Standards for Missouri Public Water Systems”
April 16, 2013**

The Regulatory Impact Report (RIR) for the proposed rulemaking to adopt “Minimum Design Standards for Missouri Public Water Systems” was posted on the internet and available for public comments from January 22 through March 22, 2013. Two comment letters were received. One letter was from an association representing municipal utilities, the Missouri Public Utility Alliance (MPUA). One letter was from an association with approximately 900 members representing water and wastewater systems, the Missouri Rural Water Association (MRWA). Comments and responses are provided here in the same order as the topics in the Regulatory Impact Report.

General Comment on Costs -- MRWA expressed the hope that both sides can agree that the new provisions and changes proposed for the current Design Guide or rule will cause the cost of new construction to significantly increase.

Response – The Department of Natural Resources (Department) agrees that the Design Standards will increase new construction costs in some situations. We do not anticipate that these will be significant in most cases. The fiscal notes accompanying the proposed rule provide detailed information on the estimated costs.

General Comment on Guide v. Rule – MRWA commented that by its very nature a *rule* is going to impose less flexibility than a *guide*. The commenter stated that the Department contends this will not be the case even though public water systems operating under the current Design Guide have indicated that in certain cases during sanitary inspections, Department field personnel have attempted to initiate practices or actions that are not required. MRWA contends that the present Design Guide has withstood the test of time with little adverse effect to the safety and reliability of Missouri's public water supplies and change to a "Design Rule" is not needed.

Response – The Department recognizes that a rule by its nature has less flexibility than a guidance document. We have not hidden this reality and, in fact, have addressed this problem in numerous ways as mentioned in Section 13 of the Regulatory Impact Report. The Design Standards allow for exceptions (variances) from many of the requirements. It has been, and will continue to be communicated to department field staff inspectors that the new design standards do not apply to construction that existed prior to publication or promulgation of the standards.

The question of whether construction requirements should continue being a guide or should be in regulation is a largely a legal issue. In making its decision the Department relied on its own attorneys, the Office of the Attorney General, and the Joint Committee on Administrative Rules, all of whom advised codifying design requirements as regulations so that the requirements will be enforceable. Section 640.115.2, RSMo states that “construction, extension or alteration of a public water system shall be in accordance

with the rules and regulations of the safe drinking water commission.” Historically, the Department has often used permit (construction authorization) conditions to place design requirements on new drinking water construction. However, since 2004, state law has prohibited the Department from placing “in any permit any requirement, provision, stipulation, or any other restriction which is not prescribed or authorized by regulation or statute, unless the requirement, provision, stipulation, or other restriction is pursuant to the authority addressed in statute.” (Section 640.016, RSMo) The Department can no longer use permit conditions to require compliance with design requirements, as it previously could do.

Comment on Determination – MPUA disagrees with the statement that this rulemaking does not set environmental conditions or standards. Also, the Department states that the rulemaking has the potential for significant impacts to public water systems. MPUA objects to the word “potential” and states that the rule will have significant impacts.

Response – Regulatory Impact Reports are required for rulemakings that set environmental conditions or standards, and is optional for all others. The Department chose to provide a Regulatory Impact Report for this rulemaking, so the question of whether or not the rule sets environmental standards is moot. The Department recognizes that some water systems may have significant new construction cost increases, while others will have no or minimal added costs.

Comment on Section 1 – The Department states that the rulemaking prescribes standards that must be followed in the design and construction of new public water systems or alteration of existing systems, which MPUA interprets to mean that the rulemaking sets environmental standards.

Response – The Department disagrees that water system design requirements and environmental standards are the same.

Comment on Sections 3 and 4 – In Section 3 the RIR states, “Community water systems that construct new systems or modify existing systems will be required. . . .” Section 4, however, states, “The cost for compliance with these standards will be limited to new systems, or existing systems adding to or significantly altering existing infrastructure.” MRWA states that these are two entirely different meanings, subject to interpretation, that will be compromised if the Design Guide is a regulation.

Response – Section 3 of the RIR asks for a description of the persons who will most likely be affected by the proposed rule. Section 4 asks for a description of the environmental and economic costs and benefits of the proposed rule. As the RIR states, community water systems that construct new systems or modify existing systems will be required to comply with the regulation. And the Department expects that the costs of the rule will primarily fall on new systems and existing systems *significantly* altering existing infrastructure. In the context of the questions asked by the RIR, there is no discrepancy in the responses.

Comment on Section 4 – MPUA believes the cost of compliance must be enumerated in the Regulatory Impact Report, such as consulting engineers’ cost estimates, comparison of the policy and the proposed rule, and minimum pressure requirements. MPUA states that providing detailed cost information is the purpose of the Regulatory Impact Report.

Response – The legislature added the Regulatory Impact Report requirement to the state environmental law in 2004 in order to ensure that the Department of Natural Resources shows statutory authority for the rule, has considered alternatives, has considered who the rule will affect and how, is basing the rule on sound science, and has considered risks, benefits, and costs. The Department has described the economic costs and benefits in the Regulatory Impact Report. Detailed assessments of the fiscal impact will be provided in the fiscal notes and will be published in the *Missouri Register* with the proposed rule.

Comment on Section 4 – MRWA commented that the statement in section 4 regarding cost impacts staying within a consulting engineer’s cost estimate is irrelevant and borders on misleading. An engineer’s cost estimate will reflect whatever standards the project is required to meet. What should be taken into account is the cost of new requirements – pressure, redundancy, etc. These will drive the cost of construction significantly higher. MRWA also points out that the alleged benefits of a more expensive system fails to take into account how water systems will be able to afford this construction in a time of shrinking public infrastructure funds. Section 4 also fails to mention the negative impact to the public when necessary projects are not undertaken due to the increased costs associated with the new design requirements. Projects not built due to increased, unaffordable costs could have significant health impacts, especially in low-income areas.

Response – Many engineering reports were reviewed by permits staff during the preliminary phase of the fiscal impact assessment. When a report offered a cost opinion on projects, most reports would provide an adjustment for contingencies on a percentage basis to account for all the unknowns that are inherent to projects until it is completed. The percentage used for contingencies varied from report to report, but in nearly every case, exceeded preliminary estimates for the cost impacts of the design standards on each project. The statement provided in the Regulatory Impact Report is a conservative assessment. Requiring redundancy for treatment and firm capacity for pumping (elements that are essential in delivering reliable service to customers) are not new. Exceptions with regard to design pressure requirements have been clarified, but for the most part the requirements are not new.

The Department is aware of the potential for further limits to the availability of public funding. Limited funds make it even more important for available public funds to be used appropriately, effectively, and with concern for long term viability of the system so that public loans can be paid off by the time replacements are needed. Necessary projects that are not performed do negatively impact public health. All public water systems are responsible for having viable technical, managerial and financial capacity to provide safe and adequate drinking water to their customers

Comment on Section 6 – MPUA agrees with setting a level playing field for all entities responsible for providing potable water.

Response – The Department appreciates the comment.

Comment on Section 6 – MRWA commented that Section 6 rehashes Section 4 and touts the supposed benefits from construction of a more expensive water infrastructure system. MRWA pointed out that for those who cannot afford such a system, for various economic reasons, significant negative health effects could occur from their inability to meet the more expensive construction standards. MRWA pointed out further that Section 6 discusses the hazards of inaction; therefore, it seems reasonable to pose some questions.

This report indicates in Section 3 that a total of 2,503 public water supplies will be affected by these changes. Use of a Design Guide to set requirements has been in place since 1982, or 31 years. The commenter asks if, in the 31 years that those 2,503 systems have been regulated by the Design Guide, are there numerous documented cases of the installation of improper, deficient, or inferior infrastructure that the department has been unable to deal with? If so, the commenter asks for examples.

Likewise the commenter asks if, in those 31 years, are there numerous documented cases of problems associated with unenforceable standards resulting in known risks to public health and safety? If so, the commenter asks for examples. If no such numerous examples can be cited, how is it that, suddenly, the time-proven practice of using the Design Guide is going to result in an inability to enforce minimum standards on water system construction resulting in an uneven playing field for the construction or modification of public water systems. Why is this suddenly a problem, after 31 years?

Response – The commenter has raised several issues. Regarding costs, the Department continues to acknowledge that in some cases the revised design standards will result in increased new construction costs. This is covered in detail in the fiscal notes accompanying the rulemaking. However, the Department contends that the assertion that costs will increase cannot be universally applied, and some cases the design standards may reduce overall costs, as well as improving a system's long-term viability.

As a point of clarification, the *Standards for Non-Community Public Water Supplies* (1982) has been incorporated by reference into the public drinking water regulations since at least 1992. Out of the 2,503 public water systems referred to previously, approximately 1,030 are noncommunity systems. Any of those that were constructed after 1992 were regulated by the incorporation by reference of the noncommunity standards into 10 CSR 60-3.010. The Department is unaware of any flexibility or regulatory issues or complications caused by including the noncommunity standards in regulation but is open to receiving such information.

Of the 2,503 systems, approximately 1,473 are community water systems. Design guidance for community water systems has been used in Missouri since at least the mid-1960's. The Department believes that community water systems constructed, operated,

and maintained over the past 50 or so years have generally been constructed in compliance with appropriate industry-accepted standards. Missouri community water systems' outstanding compliance statistics bear this out. The issue isn't that public water systems have suddenly become unsafe, or whether or not the Design Guide has been effective in most cases over the previous decades. The issue is, can we continue relying on voluntary compliance in an increasingly complex world, and should we do so.

Until 2004, effective implementation of the design guide was achieved by voluntary compliance or through specific permit conditions. If the builder or water system staff wanted a construction authorization, they must agree to comply with permit conditions set by the department. This was effective in ensuring compliance with design guidance. However, state law was changed in 2004 to prohibit the Department from setting permit conditions that are not prescribed by law or rule. The Department has been left without meaningful recourse to ensure compliance with design guidance.

In 1990 state law was changed to prevent all state agencies from implementing a policy as if it were a rule. If it is found in a contested case that an agency has done so, the agency must pay the plaintiff's legal costs. The Department has been concerned about the status of the Design Guide and the department's vulnerability. When the Design Guide was revised in 1999-2003, the intent was to proceed with rulemaking upon completion of the revisions. The guide v. rule issue has been thoroughly discussed over the past 13 years, if not longer.

The Public Drinking Water Branch takes a multi-barrier approach to water protection that includes source water protection, design and construction, operation and maintenance, and public awareness. Using this approach provides some protection in case one of these barriers fails. If there is a failure in design or construction, we may not become aware of the problem until other barriers fall and emergency response becomes necessary.

The commenter asks for documented cases of improper, deficient, or inferior infrastructure. The commenter also asks for examples of problems associated with unenforceable standards resulting in known risks to public health and safety due to design problems.

Numerous cases can be cited by both regional and central office staff where a design or construction problem requires increased monitoring, increased operations and maintenance needs, or emergency response. The Department declines to call out specific systems by name in this type of forum, but specific examples of real situations include the following:

- Improper, deficient, or inferior infrastructure:
 - Incurring additional design, development and construction costs of installing lateral waterlines, additional booster stations or replacing recent construction to accommodate undersized distribution lines or respond to actual demand;

- Incurring additional design, development, and construction costs to install a temporary treatment facility in order to repair an existing facility, and continue providing water to the public;
 - Costs to temporarily provide drinking water and emergency response when a well becomes inoperable and the system has failed to provide firm capacity in source or an emergency interconnection;
 - Additional construction costs to meet consumer expectations when a water system supplier has either constructed below design standards or failed to account for expectations;
 - Increased maintenance costs when a water treatment system is not designed or constructed properly; and
 - Cost of emergency response during natural disasters or loss of system operators for under-designed facilities.
- Problems associated with unenforceable standards resulting in known risks to public health and safety due to design problems:
 - Unnecessary risks to water system operators and customers for responding to river flooding events due to difficulty accessing facilities;
 - Unnecessary risks to water system operators, inspectors and other personnel for conditions such as improperly constructed subsurface facilities or improper installation of antennas and wires on elevated storage tanks. This also potentially results in long-term degradation of water quality and eventually becomes a health hazard;
 - Unnecessary backflow contamination risks to customers during system high volume or low pressure events;
 - Increased operator needs and unnecessary health risks when installed waterline and appurtenances cannot be located due to lack of as-built plans and no tracer wire installation;
 - Unnecessary denial of service to large portions of a water system during line breaks due to insufficient number of isolation valves; and
 - Inability to flush or clean waterlines in the event of contamination or backflow due to undersized mains and lack of isolation valves

Comment on Section 8 – Section 8 asks for a description of alternative method for achieving the purpose of the proposed rule that were considered by the department. The Department states that no alternative methods were considered because the Department has the authority and responsibility to regulate construction, extension, or alteration of public water systems in accordance with rules promulgated by the Safe Drinking Water Commission. MRWA commented that the statement in the RIR that “no alternatives were considered” says it all, and the alternative of leaving the Design Guide as a guidance document with its present flexibility should be considered.

Response – The Department responded that during the stakeholder process, stakeholders commented on incorporating the 10-State Standards but otherwise no alternatives to incorporation by reference of the design standards were suggested or discussed. The

Department believes it is necessary to adopt a design standards regulation for reasons previously cited.

Comment on Section 9 – MPUA objects to the department’s statement that the rule is not expected to significantly change what has already been policy for decades. MPUA points out that a policy is different from a rule. MPUA believes the rule will have millions and perhaps billions of dollars of impact.

Response – This section of the RIR asks for an analysis of the short- and long-term consequences of the proposed rule. Because Missouri’s public water systems and engineers have been complying with design guides and industry standards since at least the 1960s the Department feels that adopting the guides and standards as an enforceable regulation will not significantly change what the systems and engineers are already accustomed to providing.

Conclusion – MPUA comments that the department’s potable water staff has not disclosed costs and is knowledgeable of the State’s clean water efforts regarding the proposed water quality standards rule and effluent standards (10 CSR 20-7.015). The RIR does not contain cost numbers. The purpose of the RIR is to document costs.

Response – The RIR contains a description of probable costs in sections 4, 5, and 6. As previously stated, a detailed fiscal analysis will be provided in the fiscal notes and will be published in the *Missouri Register* with the proposed rule.