Individual Sewage Disposal System Stakeholder Process
Work Group Position Paper

Work Group: OWS Risk / Performance Code Work Group

Problem:

Colorado's onsite wastewater law and regulations lack uniformity, lack flexibility for individual site constraints, and do not utilize current peer-reviewed science of onsite wastewater (septic) systems (OWS). Currently there is not a mechanism for determining the risk to human and environmental health for individual sites requiring an OWS and relating to the level of system performance needed for those conditions.

Mission Statement:

"The OWS Performance Code Committee will strive to protect human and environmental health and the resources of Colorado by creating a performance-based code that will recognize and account for the risks presented by different sites and conditions"

Consensus Proposals and why they are the best solutions:

"Performance, training and certification, design criteria, O&M and use of OWS requirements shall be based on the risk to public health & the environment determined at the site."

Justifications:
•Each OWS location would be evaluated for risk and performance requirements and the system would be matched accordingly
•Allows flexibility to address site specific needs and constraints
•Provides more tools to address site specific needs
•Would utilize the most current science regarding soils, practices, and technologies
•Would have the ability to evolve and change

"Site Evaluation for Pairing Performance to Risk Should be a Consistent Regulation Across Colorado."

Justifications:
•A risk and performance based approach will create a diversity of possible solutions that will suit sites in all environments, thus eliminating the need for county by county approaches to risk.
•If systems are regulated in the same way, data may be more easily collected and compared across the state. This can help make better informed policy decisions in the future.
•Since less-dense areas often represent lower risk, many rural areas with low population density may see few changes.

Additional Considerations:
• Implementation will be local.
• The regulations can and need to be moderately simple, but complete, in order to not be a burden to those applying them

"Support the concept of an OWS Technical Advisory Committee (TAC) to evaluate technologies and performance. This should be authorized in statute and the TAC defined within the regulations."

Justifications:
•Provides experienced and knowledgeable resources for the state to consult when making decisions on product approvals and technical issues.
•The TAC would not make approvals but provide advice to the Division.
•Provides continuity of regulation interpretation over time.
•Reduce confusion of county-by-county approvals for technologies
•May assist with equitable third party evaluation of products for state-wide product approvals

Strategy and Ideas for Implementation:

In order for change in the statute to allow for and require a risk determination and performance approach:

• "Risk" needs to be included. "Performance" is already in the statute, but needs to be specifically defined for the Colorado Model Code.
• Authorization for Technical Advisory Committee
• To effectively use the Risk/Performance approach, all regulatory components must be compatible so both statute and regulation changes for all applications must be coordinated.
- Performance requirements
- Training and certification requirements
- Design criteria requirements
- O&M requirements
- Use and Inspection requirements

With a risk/performance based approach to OWS laws, the Water Quality Control Commission could adopt regulations that would establish minimum requirements across the state.

Uniform regulations based upon risk at each site could provide local counties more flexibility in dealing with difficult sites for new construction or existing difficult sites that present higher risk to health. For sites with low identified levels of risk few changes from the existing prescriptive approach to system design, installation and management would occur.

The level of risk could be identified at the site using a risk evaluation score card. The score generated would be used to determine the appropriate level of treatment, maintenance, and education requirements for practitioners that would ensure adequate protection of health and water quality at the site.

A technical advisory committee (TAC) could prove beneficial as a resource to the state when addressing the acceptance of new technologies/practices or reviewing, interpreting, or revising statute or regulations in the future. They could also help ensure the original intent of the regulations is achieved.

Impacts (qualitative statement of cost and whether this could/would impact someone's ability to maintain an existing business, and potential benefits and long-term cost reductions or business improvements) on Practitioners and Other Stakeholders:

-Could positively impact the businesses of OWS practitioners working within the legal requirements set forth in the guidelines.

-Could improve management of data, thus making more fiscally responsible policy decisions.
-Could increase short-term overhead and operating costs for CDPHE and local counties
-Could lower long-term overhead and operating costs for CDPHE and local counties.
-Could reduce the risk of future costly negative environmental/human health impacts.
-Could reduce future environmental service costs for drinking water and aquatic habitat protection.
-Could provide impetus for smarter/more informed approaches residential and commercial development.
-Could provide more economical options for wastewater treatment to developers and planners.
-Could provide increased property values for systems with adequate wastewater treatment.
-Could cost home/facility owners whom are currently served by a wastewater treatment system that has been deemed inadequate for the protection of health.
-Could provide additional financial protection to home buyers.
-Could help reduce liability and disclosure for real estate agents.
-Could reduce the liability risk to lenders for the purchase/repossession of a property with an inadequate or unapproved wastewater treatment system.
-Could potentially create new niche markets within the OWS industry in Colorado.

Alternatives Considered with Pros and Cons:

"State-wide Regulation with Local Administration"

POSITIVE IMPACTS

•Makes the designer's job easier because they would use the same standards across the state
•Review of the county regulations would be easier because they would all be using the same requirements.
•Approval of technologies could be streamlined at the state level.
•Statute changes could save counties money as regulations become uniform.
•Opens up competition between manufacturers as more companies will be willing to provide products to Colorado.
•A "watershed" approach to OWS design can take the bigger resource management picture into consideration.
•Provides an opportunity to track water quality and public health across the state.
•Statewide regulations could allow professionals to use one credential across the state.
•Could provide a single standard method of site/system evaluation across the state.
•Could foster dialogue that would encourage better education and information exchange in the onsite profession.

NEGATIVE IMPACTS

•Loss of flexibility at the county level for items like peak flow calculation, etc.
•Loss of some current county-level "changes to state regulations".
•Statute changes could create a short-term financial impact for counties.

"Implement Performance Based Statute and Regulations"

POSITIVE IMPACTS
•Could allow designers to design systems based on individual site constraints and not prescriptive codes.
•Could provide flexibility to use current science and evolve with the profession.
•Could Identify homeowner responsibility and provide homeowner education.
•Can offer better protection of our water resources and water quality

•A risk-based approach allows creative solutions for existing difficult legacy/pre-plotted lots.

NEGATIVE IMPACTS
•Changes in statute might require re-education of those who have been "doing it the same way for decades,"
•Changes may increase a designer's, installer's or manufacturer's liability
•There could be the potential to make a system very complex.
•The site evaluator would be responsible for determining real risk to human and environmental health as opposed to potential risk.
•Could increase density in areas by providing alternatives for any site.

"Maintain the Current Prescriptive Based Statute and Regulations"

POSITIVE IMPACTS
•Simple and straightforward. You don't have to learn anything new.
•A prescriptive approach has worked well in many cases.
•Easier for areas where homeowners do their own installations.

NEGATIVE IMPACTS
•Could allow use of ISDS regulations for zoning purposes or to side-step public health issues through land use/planning.
•Practitioners would need to spend more time educating those outside the profession.
•Could potentially impact low-income populations that would need more advanced treatment for adequate protection of health.

"Create the Ability within the Statute/Regulations to Evolve with the Times"

POSITIVE IMPACTS
•Could allow corrections for problems/mistakes that the new statute may present.
•Could enable the onsite regulations to evolve with new technologies and practices.
•Note: The statute would need to be simplified so frequent changes are not needed.

NEGATIVE IMPACTS
•Interpretation of regulations may not be based on the original intent of the authors.
•A simplified statute could be more ambiguous.

"Adoption of a Technical Advisory Committee with a tri-annual regulatory review."

POSITIVE IMPACTS
•A Technical Advisory Committee (TAC) review provides a level of continuity over time.
•TAC participants would come from different areas of the practice and would provide a more holistic view.

NEGATIVE IMPACTS
•Defining the TAC and the role it would play could create additional staffing/workload

"Allowance of Experimental Wastewater Treatment Technologies"

POSITIVE IMPACTS
•Could provide a deemed to comply list (list of proven technologies).
•Could define a statistically viable procedure for evaluating experimental systems; the current statute limits onsite systems to two effluent quality tests per year, which does not provide adequate information for evaluation of performance.

NEGATIVE IMPACTS /NOTES

•Note: [Need to define procedures and products; deemed by who; define comply, etc. The food inspection statute may have language that could be borrowed.]

•Unproven technologies could potentially be employed.

•A testing/certification protocol would have to be developed.