SUMMARY OF CHANGES IN PROPOSED OWTS REGULATIONS FOR JEFFERSON COUNTY – draft as of October 16, 2013

In 2012, the Colorado State Legislature amended the §25-10 of the Colorado Revised Statutes (C.R.S.) also known as the Individual Sewage Disposal System Act. In addition to changing the name of the statute to the "Onsite Wastewater Treatment Systems Act" other significant changes were:

- amending the list of defined terms,
- clarifying certain design requirements, to adding "protection of public health and water quality" as a rulemaking consideration,
- authorizing a new fee of $23.00 to support the state OWTS program, and
- allowing the local Boards of Health broader latitude to prohibit installations in unsuitable areas.

In 2013, after significant input from the counties and the regulated community, the Colorado Individual Sewage Disposal System Guidelines were repealed by the Water Quality Control Commission, and replaced with a new regulation called the ON-SITE WASTEWATER TREATMENT SYSTEM REGULATION, 5 CCR 1002-43, (also known as REGULATION #43) that became effective June 30, 2013. This represented the most significant change in the statewide guidance document in many years.

Whenever state septic regulations are revised, local health departments – at least those that have their own regulations - have one year to change theirs to conform to the new state code. They may also adopt provisions that are stricter that Regulation 43, but not less strict. In Jefferson County, we have typically added and deleted provisions to our existing regulations as needed to conform to the new state codes while keeping the basic document intact. However, due to the numerous significant changes that have been made and to work toward commonality of language we have decided to repeal our existing regulation in its entirety and adopt a new one, based closely on the provisions and regulatory language of Regulation #43.

Although much of the language of the old regulation may have changed, the basic regulatory framework and organization remains the same. The following are some of the more significant changes we propose:

<u>SECTION 1 – Declaration</u>
Stakeholders: all

- No significant changes

<u>SECTION 2 – Definitions</u>
Stakeholders: all

- No significant changes, but most definitions are now taken verbatim from Regulation #43
- A list of common acronyms is now included

SECTION 3 – General Requirements and Prohibitions

Stakeholders: all

- Additional provisions in Section 3.1 for systems exceeding 2,000 gallons per day that specify the state regulatory requirements
- Section 3.8 now specifies information resources that are incorporated by reference

SECTION 4 – Permit Application Requirements and Procedures

Stakeholders: all

- Section 4.12 sets new requirements for engineer certification and approval of installations, including a scaled, as-built drawing of the new system

SECTION 5 – Board of Health Administrative Procedures

Stakeholders: all

- In 5.1 there are new provisions for granting variances from Reg 43. This is primarily needed for repairs to existing systems that do not meet the minimum setback distances. Previously these were approved by staff but now must follow more formal submittal requirements. However, a public hearing is not required.
- Section 5.3 eliminates certain types of applications that require Board of Health approval, such as multi-family dwellings, commercial structures, steep-slope installations, and alternate systems such as vaults and composting toilets; these may now be approved by staff after technical review.
- Section 5.4 allows the Board more leeway in prohibiting installation of systems in what are determined to be unsuitable areas, regardless of the size of the impacted lots.

SECTION 6 – Enforcement

Stakeholders: primarily property owners

- No significant changes

SECTION 7 – System Contractors and Owner Installers

Stakeholders: primarily systems contractors

- No significant changes

SECTION 8 – System Cleaners

Stakeholders: primarily systems cleaners

- No significant changes, but straw man proposal for requiring pampers to report any leaking tanks to the Department

SECTION 9 – Experimental Systems

Stakeholders: primarily engineers and property owners

- No significant changes

SECTION 10 – Use Permits

Stakeholders: primarily property owners, real estate agents, use permit inspectors and system cleaners

- In 10.1, the validity of a pumping and inspection report has been reduced from 18 to 12 months to conform to Reg 43, and the applicant must submit a copy of an operation and maintenance contract or Operating Permit for higher level treatment systems

- In 10.2, the presence of an O&M contract or Operating Permit is required to issue a Use Permit

SECTION 11 – Operating Permits

Stakeholders: primarily property owners, manufacturers and service providers

- This is the only entirely new section, including requirements that systems with mechanical treatment components must have an ongoing permit to assure proper operation and maintenance. It also will include inspection and reporting requirements.

SECTION 12 – Site Characterization and Design Requirements

Stakeholders: primarily design engineers

- This section has been changed to clarify what must be done to properly design an onsite wastewater treatment system, including specific requirements for soil tests, a method of determining long term acceptable rates to calculate the size of systems, and additional provisions for more rigorous site evaluations and more detailed design reports.

SECTION 13 – Wastewater Flow and Strength

Stakeholders: primarily design engineers

- 13.1 allows wastewater design flows to be reduced for single family dwellings. Formerly, flow was set at 75 gal/person/day with a minimum occupancy of 2 persons per bedroom; thus, a 3 bedroom house had 6 occupants (450 gpd), 4 bedrooms had 8 occupants (600 gpd), etc. It was felt that did not reflect typical occupancy patterns and resulted in excessively large systems. While still set at 75 gal/person/day, occupancy will now be based on 2 persons per bedroom for the first 3 bedrooms, then an additional one person per bedroom thereafter.

- Wastewater flows from non-residential structures are based on a specific formula, such as 15 gallons per day for office workers, 250 gallons per bed for hospitals, etc. Formerly, an applicant could request a reduction in these flow rates based on similar facilities without providing a lot of specifics. Now the applicant will be required to provide a detailed analysis of flows from similar facilities, including metered flows of up to a year as well as water tests. This may mean that non-residential systems may be significantly increased in size.

- Section 13.4 has new provisions for allowing flow equalization to be the basis for an engineering design. This will apply to facilities that have an unequal rate of wastewater generation, such as a church, and could be the basis for smaller sized systems.

- Section 13.5 includes additional provisions for determining wastewater strength and sets forth specific "Treatment Levels" that are associated with certain levels of Biological Oxygen Demand, Total Suspended Solids and Total Nitrogen that are contained in treated wastewater; the higher the treatment level, the cleaner the wastewater.

- Although there is no longer a state requirement that flows be increased by 50% to allow for a peaking factor, the Department is considering retaining this requirement for systems producing TL1 effluent (basically, a septic tank and soil treatment area).

SECTION 14 – Component Design Standards

Stakeholders: primarily design engineers and component manufacturers

- No significant changes

SECTION 15 – Septic Tanks

Stakeholders: primarily design engineers and component manufacturers

- There are additional design standards included throughout this section as well as more stringent provisions on watertightness and tank anchoring (in high groundwater locations).

SECTION 16 – Soil Treatment Areas

Stakeholders: primarily design engineers and systems contractors

- Section 16.0 has provisions to allow reductions in the vertical setback to groundwater or bedrock, based on the quality of effluent that is placed into the trench or bed.
- There are additional provisions for either increasing or reducing the size of absorption beds or trenches based on the type of wastewater distribution (gravity or dosed) and the media in the absorption system (such as chambers or tire chips)
- The width of absorption beds will now be limited to 12 feet, except for repairs.
- When connecting an existing absorption bed to a new system, the 'credit' for existing absorption capacity will be limited to 25% of the minimum required.

SECTION 17 – Higher Level Treatment Systems (advanced treatment systems)

Stakeholders: primarily design engineers, component manufacturers and system contractors

- Section 17.0 differentiates between propriety systems (such as Hoot, Micro Fast and Advantex) and public domain systems, such as recirculating sand filters, and requires Board of Health approval for public domain systems
- An Operating Permit will be required for these types of systems
- Section 17.1 sets forth specific treatment levels that can be met based on the type of higher level system.
- Additional design requirements for these systems are provided throughout this section.

SECTION 18 – Alternate Disposal Systems

Stakeholders: primarily design engineers

- No significant changes.

SECTION 19 – System Maintenance and Abandonment

Stakeholders: primarily property owners

- No significant changes.

Appendix A – Distance Setbacks
Stakeholders: primarily design engineers

- No significant changes.

Appendix B – Average Daily Flow
Stakeholders: primarily design engineers

- No significant changes.

Appendix C – Guidelines for Distance Reductions
Stakeholders: primarily design engineers

- No significant changes.

Your comments on any section of the proposed revisions are both encouraged and welcome.

Sincerely,

Craig Sanders, R.S.
Environmental Health Services Division – Golden Office
303 271-5759
csanders@jeffco.us

Public Health
Prevent. Promote. Protect.

m:\hwq\wastewater\isds program\regulations\2013\summary of changes.doc