

Water Well Construction Rules 2014–2015 Rulemaking

Background, Process, & Potential Issues

Matt Sares
Manager, Hydrogeological Services

Before we get started...



Please leave your weapons at the door

Hydrogeological Services

Who Are We?

- ▶ **Matt Sares** – Manager; Hydrogeologist
- ▶ **Ralf Topper** – Senior Hydrogeologist
- ▶ **Kevin Donegan** – Staff Hydrogeologist
- ▶ **Doug Stephenson** – Chief Well Inspector
 - Vacant – Well Inspector (Div. 1, 2, 5)
 - Larry Hakes – Well Inspector (Div 3)
- ▶ **Laura Kalafus** – BOE Admin staff

Hydrogeological Services

What We Do

- ▶ **Board of Examiners Support**
 - BOE Administrator
 - Variances to Well Construction Rules
- ▶ **Well Inspection Program**
- ▶ **Staff assistance**
 - Aquifer determinations
 - Aquifer hydraulic properties (lag depletions/return flow)
 - Geothermal permitting support
- ▶ **Ground Water Commission Support**
- ▶ **Groundwater Monitoring Program**

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What We Do (cont.)

- ▶ **COGCC UIC Review**
- ▶ **Litigation Support – Geology/Hydrogeology**
- ▶ **Nontributary Initial Determinations**
 - Produced Water Petitions
 - Policy 2010–4 Petitions
 - Water Court Applications
- ▶ **Hydrogeologic Investigations**
 - Sterling, Gilcrest–Lasalle – high groundwater levels
 - Aquifer stratigraphy

Why Are We Here?

37-91-101. Legislative Declaration

(1)(b) Therefore, the proper location, construction, repair, and abandonment of wells, the proper installation and repair of pumping equipment, the licensing and regulation of persons engaging in the business of contracting either for the construction of wells or for the installation of pumping equipment, and the periodic inspection of well construction and pump installation **are essential for the protection of the public health and the preservation of ground water resources.**

Why Are We Here?

37-91-104. Duties of the Board.

(1)(c) Adopt, and from time to time revise, such rules, not inconsistent with law, as may be necessary to effectuate the provisions of this article, all such rules to be adopted in accordance with **article 4 of title 24, C.R.S.**;

What is Title 24–Article 4, C.R.S. Anyway??

The “State Administrative Procedure Act” or “APA”

- ▶ This act governs the rulemaking process
- ▶ The BOE Water Well Construction Rulemaking will follow the procedures defined in the APA
- ▶ Assisted by the **Derek Turner** of the Attorney General’s Office

Executive Order D 2012-002

“Regulatory Efficiency Reviews”

- ▶ **Goal:** Review rules periodically to “ensure they are effective, efficient, and essential.”
- ▶ Each Dept shall review all its rules; public process.
- ▶ Agencies shall consider whether each rule:
 - Is necessary and does not duplicate existing rules
 - Uses plain language
 - Achieves desired intent
 - Can be amended to reduce burden; maintain benefit
 - Implemented efficiently and effectively

Purpose of the Construction Rules (Rule 4)

- Enable the BOE to carry out the law (37–91 C.R.S.), which requires the Board (and us) to:
 - Safeguard public health and protect groundwater.
 - Set minimum standards for construction, repair, plugging, sealing, and abandonment of various well types AND pump and cistern installation.
 - Allow certain types of monitoring holes and wells, etc. to be constructed by other than licensed contractors.

Rulemaking Process & Schedule

Goal: Establish 2-way communication with, and disseminate information to stakeholders

Currently in process:

- ▶ **BOE Rulemaking Website**

- **Information** on the rulemaking process and schedule. Eventually, the 1st draft and final draft of proposed rule changes.
- **Mail/email signup** for communications and new info as it becomes available.
- **Timeline** for rulemaking meetings and comment deadlines.*

Rulemaking Process & Schedule

- ▶ **September 3, 2014:**
 - Deadline for BOE to receive written forms identifying an issue with the current rules and an initial proposal to address the issue.
 - Send your potential rule changes to the rulemaking email address or by posted mail.

Rulemaking Process & Schedule

▶ September 10, 2014:

4:30 – 6:00 PM, 1313 Sherman St., Room 318

➤ First public stakeholder meeting.

Identify representative stakeholders of BOE constituencies.

➤ Identify and discuss current Construction Rule issues to be addressed.

➤ The initial step for a change in the rules is to:
(a) ID an issue with a current rule, or
(b) ID an issue not addressed by the rules.

Any rule change must be justified and explained.

Rulemaking Process & Schedule

- ▶ **October 7, 2014:**
 - **BOE Quarterly Meeting**
 - **Staff presents:**
 - 1) Summary of 1st public stakeholder meeting,
 - 2) Summary of the comments and rule changes proposed
 - 3) An updated rulemaking timeline, if necessary.

Rulemaking Process & Schedule

- ▶ **By November 21, 2014:**
2nd Public Stakeholder Meeting
 - Discuss specific rule proposals that will address the identified issues.
- ▶ **By December 19, 2014:**
 - Staff publishes and provides notice of initial draft of proposed rule changes.

Rulemaking Process & Schedule

- ▶ **By January 6, 2015:** BOE Quarterly Mtg
 - Present initial draft for discussion and comment by the BOE.
- ▶ **By February 6, 2015**
 - Deadline to accept written comments on initial draft of proposed rule changes.
- ▶ **By March 20, 2015:**
 - Staff completes 2nd draft of proposed rule changes

Rulemaking Process & Schedule

- ▶ **April 7, 2015: BOE Quarterly Mtg**
 - Discuss 2nd draft of proposed rule changes with BOE.
- ▶ **May 1, 2015:**
 - Deadline for acceptance of comments on 2nd draft of proposed rules changes.
- ▶ **By May 30, 2015:**
 - Staff finalizes 2015 Construction Rules and presents to BOE for hearing. BOE files Notice of Rulemaking in Colorado register.

Rulemaking Process & Schedule

- ▶ **June 10, 2015:**
 - Notice of Rulemaking published in Colorado Register.
- ▶ **June 30, 2015 (approx):**
 - Formal public hearing on proposed rules.
- ▶ **July 11, 2015:**
 - Adoption of rules after hearing.
- ▶ **August 30, 2015:**
 - Rules become effective.



SUGGESTIONS for RULES CHANGES

Rule 10.3 – Well Casing

- 10.3.1–Require Schedule 40 for steel and PVC
- 10.3.2–Minimum OD of steel production casing 5.5625 in.
- 10.3.3–Change minimum steel wall thickness to .219 in., PVC to Schedule 40

Rule 10.4 – Construction Procedures

Centralizer Spacing:

- 10.4.1 – Distance between centralizers shall not exceed 40 feet for PVC and 42 feet for steel

SUGGESTIONS for RULES CHANGES

Casing, Annulus, and Grout:

- 10.4.2 – All wells must be constructed with new steel surface casing
- 10.4.4.1 – Borehole diameter shall not be less than 2.3125 inches larger than the outside diameter of the casing if the annular space is grouted by a method of positive displacement through the casing
- 10.4.4.1 – Require 2" annular space for entire grout interval
- 10.4.4.2 – If grout is poured from the surface, the annular space, as defined and calculated in Rule 5.2.1 shall not be less than 2 inches
- 10.4.4.3 – Minimum annular space for placing grout with a tremie pipe – 1.4375

SUGGESTIONS for RULES CHANGES

Casing, Annulus, and Grout (continued):

- 10.4.5 – All Type I wells shall be constructed with steel surface casing and grouted to 40'
- 10.4.5.1 – For wells constructed into Type I aquifers, the annulus between the borehole and the casing string shall be grouted from the base of the deepest confining unit back to 10 feet above the base of the surface casing
- 10.4.5, 10.4.6, 10.4.7 – Require continuous casing (solid or Perforated) to the bottom of the well
 - Do not allow grouting around PVC casing

SUGGESTIONS for RULES CHANGES

▶ Rule 11 Minimum pump installation

- 11.8.1 – Require that electrical installations meet today's NEC Code

▶ Rule 15 Minimum disinfection

- 15.3 – Emphasis on the requirement that the disinfectant solution shall be thoroughly circulated through the **entire well and installed water system**
- Do not allow compressed or pelletized chlorine tablets

