

# **Request for Adoption of Well Construction Rules**

**Chapter 690 Divisions 200, 205, 210, 215 and 240**

## **Agenda Item G**



Brenda Bateman, Technical Services Administrator

Kristopher Byrd, Well Construction & Compliance Section Manager

# Purpose of Rulemaking

- Update and modernize existing well construction standards.
- Clean-up out of date, or incorrect, rule, table, or appendix numbers.
- Clarify and clean-up existing rule language so that it is clear and easy to read.

# Rules Advisory Committee

- Sippel Well Drilling
- Abbas Well Drilling
- Cascade Drilling
- Clouser Well Drilling
- Zollman's Larry Burd Well Drilling
- Schneider Water Services
- Arrow Drilling
- Westerberg Drilling
- Pacific Hydro-Geology Inc.
- Oregon Health Authority
- Benton County Dept. of Environmental Health

# **Rules Advisory Committee**

## **Rules Advisory Committee met:**

- January, 2016
- May, 2016

# Rulemaking

- ▣ Public comment period June 1 thru 29.
- ▣ GWAC reviewed proposed rules on June 17.
  - Recommended changes to proposed measuring tube language.
  - Recommended approval of other rules as written.

# Rulemaking

- ▣ **June 24, 2016 Public Hearing in Salem.**
  - No testimony was provided.
- ▣ **Three written comments received.**
  - Attachment 2
    - ▣ 2 Comments in favor, except for measuring tube.
    - ▣ 1 Comment in favor of all proposed changes.

# Response to Comments

- ▣ Measuring tube requirement was removed based on concerns expressed in the written public comments.
- ▣ Remaining rules moving forward as written.



OREGON  
WATER RESOURCES DEPT  
WELL#  
L81746  
DO NOT REMOVE LABEL





# Proposed Changes

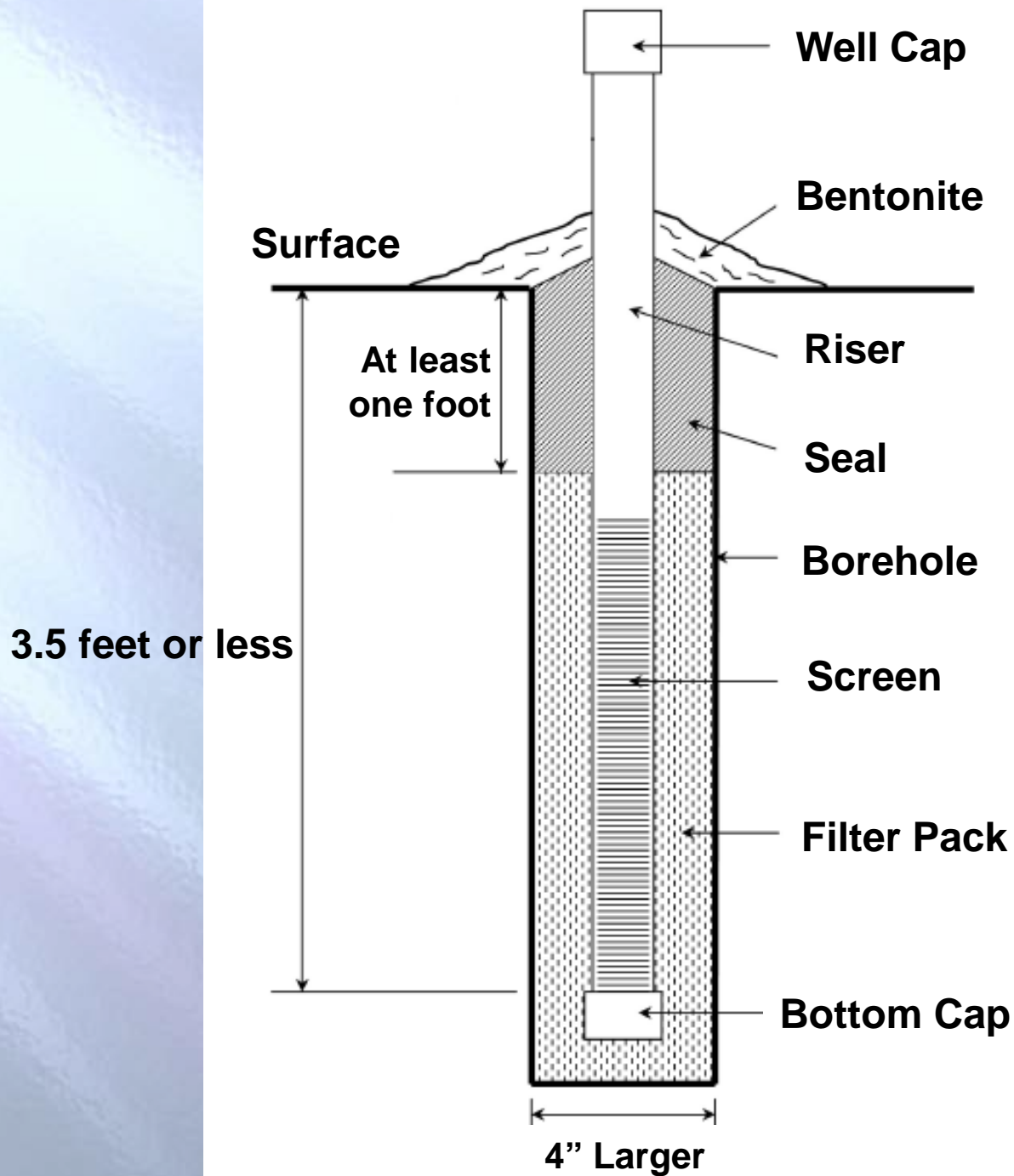
Appendix 200-2, Appendix 240-1

## ▣ **Well Identification Label Requirements**

- Remove Appendix 200-2 & 240-1
- Add text to 690-200-0048 & 690-240-0024
- Remove ability to use zip ties
- 690-215-0055 now points to 690-200-0048

OAR 690-200-0048, 690-215-0055, 690-240-0024

# Wet Soil Monitoring Hole



The Department regulates the construction of borings through which ground[ ] water may become contaminated. The type of boring (and its purpose) will determine [the construction standards that] which set of regulations apply. Questions often arise as to how a certain boring is to be regulated. In general, if the purpose of a boring is to seek water then it is considered a well. The table below lists common types of holes and the standards that apply. This is not a complete list of borings and there are other types of borings regulated by other agencies. Contact the Water Resources Department if you have any questions.

The general[construction] standards and their Oregon Administrative Rule reference [that apply] are [as follows]:

Water Supply Wells	OAR 690-200 through 690-235
Monitoring Wells[, Geotechnical Holes and other Holes]	OAR 690-240 [through 690-240-0640]
Other Holes	OAR 690-240-0030
Geotechnical Holes	OAR 690-240-0035 through 690-240-0049

# Table 200-1 And Table 240-1

[Type]Description of Boring	[Construction]Standards that Apply
Air Sparging Well	Monitoring Wells
Aquifer Storage and Recovery Well	Water Supply Wells
Cathodic Protection Hole	Geotechnical Holes
Community Well	Water Supply Wells
Construction Hole	Other Holes
Dewatering Well	Water Supply Wells
Domestic Well	Water Supply Wells
Drive Point (Core holes)	Geotechnical Holes
Drive Point Well (Dewatering)	Water Supply Wells
Drive Point Well(Water Sampling)	Monitoring Wells
Drive Point Well(Water Supply)	Water Supply Wells
Dry (Disposal) Well	Other Holes
Elevator Shaft	Other Holes
Extraction Well	Monitoring Wells
Gas Migration Hole	Geotechnical Holes
Geothermal Well	Water Supply Wells
Gravel Pit	Other Holes
[Ground Source]Heat Exchange Hole [Pump Borings] (Closed Loop)	Geotechnical Holes
[Ground Source]Heat Exchange Hole [Pump Borings] (Open Loop)	Water Supply Wells
Horizontal Drain (Slope Stability)	Geotechnical Holes
Horizontal Well (Monitoring)	Monitoring Wells
Horizontal Well (Water Supply)	Water Supply Wells

# Proposed Changes

## Table 200-1 and Table 240-1

Lists types of borings - Describes category

Tables modified so they duplicate each other.

- Rename Heat Exchange Holes
- Add “Wet Soil Monitoring Holes”, a type of geotechnical hole.

# Proposed Changes

## Definitions

Opportunity to update & modernize definitions

Add “Petroleum” – Due to new setback

Add “Wet Soil Monitoring Hole”



# Proposed Changes

## Information Required on Well Reports

- Add requirement to include total dissolved solids (TDS) content, which is an indication of water quality, on submitted well reports.

OAR 690-205-0210 & 690-240-0395



New water well  
being drilled near  
petroleum AST.





Leak

04/01/2005

All of the soil should be this color.



04/01/2005

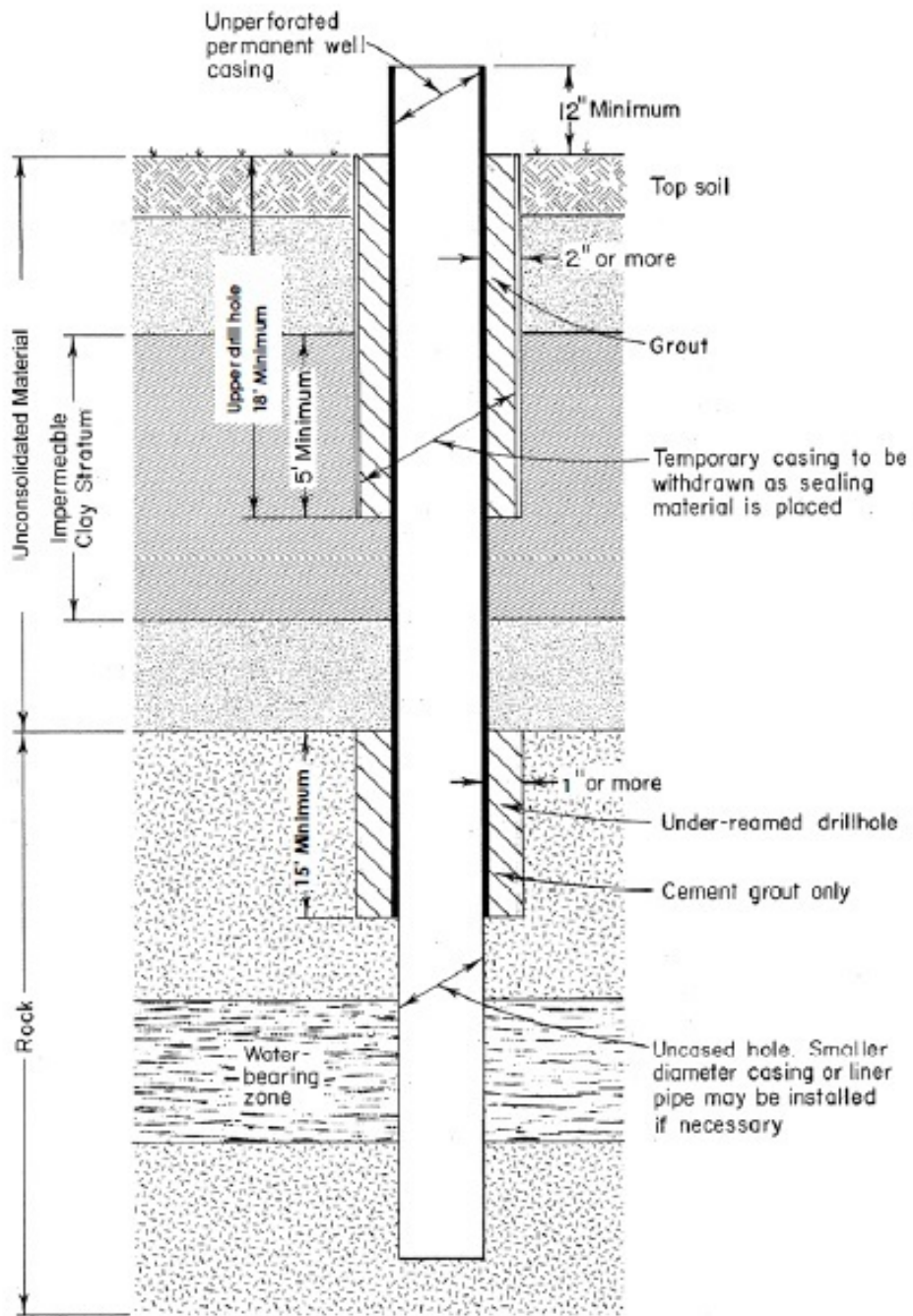


**New well with  
petroleum  
contamination.**

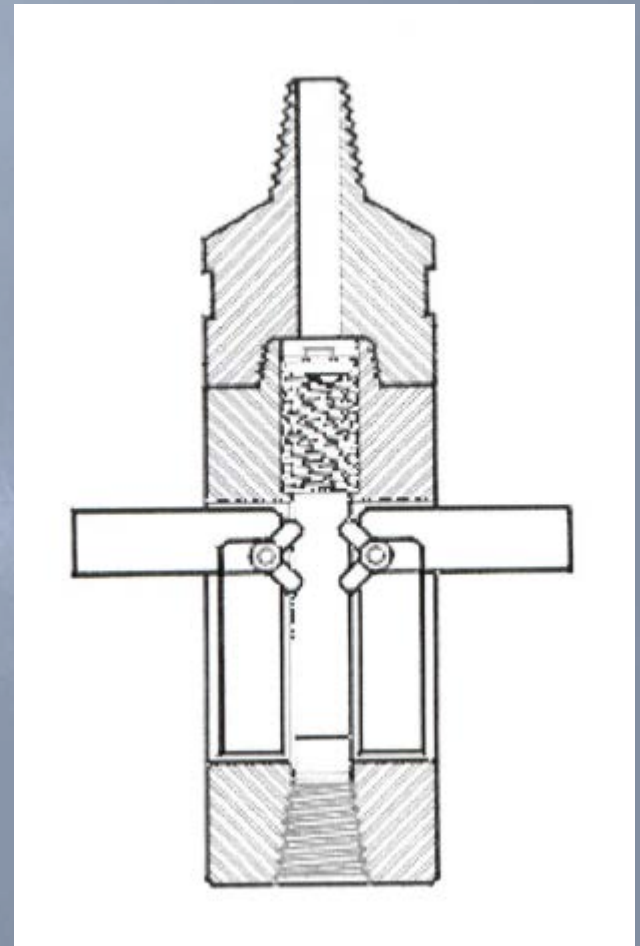
# Proposed Changes

## New Setback Standard

- ▣ 25 ft from petroleum UST/AST used for residential purposes.
- ▣ 50 ft from petroleum UST/AST used for commercial purposes.
- ▣ 20 ft recommended distance well/power pole
- ▣ Clarified OHA standards also apply –PWS wells



# Under-Ream



Fluid or Air Pressure

# Proposed Changes

## Sealing Standards

- ▣ Cleaned up language and worked with Groundwater Section staff to be more accurate in sealing interval terminology.
- ▣ Extend lower under-reamed seal interval.
  - For split seals, under-reamers are used to enlarge the lower seal interval to prepare the borehole for seal material placement.

OAR 690-210-0140, 0150, 0155

# Proposed Changes

## Geotechnical Holes

- ▣ Clarified geotech hole construction standards.
- ▣ Added “Wet Soil Monitoring Hole” requirements.
- ▣ Clarified geotech hole abandonment standards.



# Piezometers



# Proposed Changes

## Piezometers

Piezometers are a type of monitoring well installed solely to obtain groundwater levels.

- ▣ Clarified piezometer well abandonment standards.

# Direct push well machine



# Proposed Changes

## Direct Push Wells

Direct push wells are installed by pushing the tooling into the ground, whereas typical wells are installed using drilling methods.

- ▣ Current rules in place since 2001.
- ▣ Larger annular space.
- ▣ Centering guides if deeper than 30 feet.
- ▣ Up to two inches in diameter. Larger installations require Department approval.

# Alternatives

The Commission may consider the following alternatives:

1. Adopt the final proposed rules in Attachment 3.
2. Adopt modified final proposed rules.
3. Not adopt rules and request the Department to further evaluate the issues.

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