



## MEMORANDUM

TO: Water Resources Commission

FROM: Phillip C. Ward, Director

SUBJECT: Agenda Item F, May 30, 2008  
Water Resources Commission Meeting

**Request for Adoption of Rules to Establish Special Area Well Construction Standards in the Eola Hills Ground Water Limited Area and in the Petes Mountain Area, OAR Chapter 690, Division 200 (Well Construction and Maintenance), Division 210 (Well Construction Standards) and Division 215 (Maintenance, Repair and Deepening of Water Supply Wells)**

### I. Issue Statement

The Department is proposing administrative rules that establish special area standards for well construction and maintenance in the Eola Hills Ground Water Limited Area of Polk and Yamhill Counties and in the Petes Mountain Area of Clackamas County. For both areas, the proposed rules require: 1) the installation of a minimum ¾-inch dedicated measuring tube in all water supply wells at the time of pump installation, pump repair, and/or pump replacement to provide an unobstructed conduit for lowering devices that measure water levels, and 2) the diameter of the casing be a minimum of 6 inches. The proposed rules also would require that newly deepened and new water supply wells developed in Columbia River Basalt aquifers in the Eola Hills Ground Water Limited Area be cased and sealed to within 100 feet of the bottom of the well. The attached final proposed rules would establish the standards and boundaries recommended by staff (Attachment 1).

### II. Background

The Oregon Water Resources Commission directed the Department to investigate concerns voiced by landowners in the Eola Hills Ground Water Limited Area, that well development in the area may be having a negative impact on water resources in the area. Investigations conducted by the Department could not substantiate claims that ground water levels are declining. However, the Department was able to determine that commingling of Columbia River Basalt aquifers provided the potential for interference

with senior surface water users. The Department found it difficult to gather water level data because of well construction and pump installation practices.

In the Petes Mountain Area, recent proposals for additional land development have elevated concerns regarding current and long-term impacts on the area's ground water supply. These concerns have resulted in numerous contacts with Department staff regarding the need for additional data collection to better understand the sustainability of the resource. The primary area of concern is a residential development on top of Columbia River Basalt with ground water levels in some wells more than 700 feet below land surface. A combination of well construction and pump installation practices make it very difficult for the Department or others to collect water level data in this area.

Using the Commission's authority to adopt rules to ensure the safe development of the ground water resource, the Department initiated rulemaking to make it possible to obtain accurate water level data in the Eola Hills Ground Water Limited Area and Petes Mountain Area. In both areas, the proposed rules (Attachment 1) include adding a ¾-inch dedicated measuring tube in all water supply wells at the time of initial pump installation, pump repair, or pump replacement. The tube would provide access for water level measurements, allowing the Department to determine the stability of the ground water resource. The Department developed the measuring tube specifications in consultation with the Technical Committee on Drilling Standards. In addition, all new wells in these two areas would require a minimum 6-inch diameter well casing to accommodate the measuring tube.

The rules also propose that new water supply wells and newly deepened water supply wells developed in Columbia River Basalt aquifers in the Eola Hills Ground Water Limited Area be cased and sealed to within 100 feet of the bottom of the well. The draft rules provide an opportunity to use alternate methods for both the measuring tube and well sealing requirements, providing those methods are as effective as those required by this proposal.

### **III. Rulemaking Process**

Notice of the rulemaking was published in the *Oregon Bulletin* and provided to interested parties on February 1, 2008. In addition to the opportunity to provide written comment, two public rulemaking hearings were held in Canby on February 12, 2008, and in Salem on March 4, 2008. Four individuals testified in favor of the proposed rules.

In addition to the oral testimony, seventeen written comments were received and are included as Attachment 2. Two written comments were received after the close of the comment period. Overall, three written comments were in favor of the proposed rules. Twelve written comments opposed some portions of the proposed rules. The Department

response is included as Attachment 3. The hearing draft rules were modified to address the following comments:

- The 6-inch diameter minimum casing requirement was included in the Petes Mountain Special Area Standard, but not included in the Eola Hills Ground Water Limited Area. Therefore, the final draft rules (200-0028-3(B)(a)) now include the 6-inch minimum standard in both areas.
- The word “continuously” was added to clarify the sealing requirement in 200-0028-3(B)(c).
- The well seal labeling on Figure 200-5 did not match industry standard naming convention. The Department subsequently modified the figure caption in the description of the annular seal and sanitary well seal.

On March 5, 2008, staff met with the Commission’s Ground Water Advisory Committee (GWAC), which advises the Commission on rules for the development and protection of ground water (ORS 536.090). After discussion among committee members, GWAC voted in a split decision to recommend the Commission adopt the proposed rules. Some committee members felt there were too many types of changes included in one rulemaking. Another member expressed concern about: 1) how the Department was going to educate landowners and pump installers about the proposed rules, and 2) the cost of enforcement.

The public comment period closed on March 10, 2008.

#### **IV. Summary**

The final proposed rules in Attachment 1 require: 1) adding a ¾-inch dedicated measuring tube in all water supply wells in Eola Hills GWLA and Petes Mountain at the time of pump installation, pump repair or pump replacement to provide access for water level measurements, and 2) all new wells have at least a 6-inch diameter well casing. Additionally, the proposed rules require that new water supply wells and newly deepened water supply wells that develop water from the Columbia River Basalt in the Eola Hills Ground Water Limited Area be cased and sealed to within 100 feet of the bottom of the well, for the purpose of eliminating movement of water from shallow aquifers to deeper aquifers.

### **Alternatives**

The Commission may consider the following alternatives:

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

### **V. Recommendation**

The staff recommends Alternative 1 that the Commission adopts the final proposed rules in Attachment 1.

Attachments:

1. Final Proposed Rules “Special Area Well Construction Standards in the Eola Hills Ground Water Limited Area and in the Petes Mountain Area,” OAR Chapter 690, Division 200 (Well Construction and Maintenance), Division 210 (Well Construction Standards) and Division 215 (Maintenance, Repair and Deepening of Water Supply Wells)
2. Written Comments on Proposed Rules
3. Written Comments Response

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