Oregon
Theodore R. Kulongoski, Governor

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Kerry Kavanagh
Oregon Water Resources Department
725 Summer St NE Suite A
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RE: Recommendations for Oregon Water Resources Department Initial Review G-17079

Dear Kerry:

Anytime a new pumping well is activated in or near a Drinking Water Source Area (DWSA) it has the potential to cause interference with the drinking water well(s). Well interference can increase or shift the DWSA. The degree of interference is dependent on the water-bearing zone intercepted, the volume of water pumped, and the duration of pumping. From a public health standpoint this is important because new potential sources of contamination can become part of the DWSA and potentially contaminate the drinking water supply.

If a new well is activated, the water supplier should determine how the DWSA will change and implement drinking water protection strategies for any new potential contaminant sources now in the area. The Drinking Water Protection Programs of the Department of Human Services and the Department of Environmental Quality can provide technical assistance to water suppliers on best management practices for potential contaminant sources.

New wells also have the potential to contaminate the drinking water supply if they are not constructed properly. Wells in confined aquifers must have casing seals installed to a depth of at least five feet into the confining unit. Wells in unconfined aquifers must have casing seals installed to a depth of at least 18 feet, but to be more protective of the drinking water supply it is recommended that the casing seal be installed to a depth of at least five feet below the first water-bearing zone of the aquifer. If there are Underground Injection Control wells in the area and the well

is sealed shallower than the water-bearing zone there is greater potential for injected water to impact the pumping well.

An alternative to activating a new well is to connect to the existing water supply. This enables the water supplier to have better control over the drinking water well pumping patterns to prevent or plan for the change to the DWSA.

Sincerely,

Amy Parmenter, R.G.
Regional Geologist
Drinking Water Program