

Water Quality:

EQC response requested on
proposal for human consumption of
recycled water

April 2015
Portland, Oregon

What is being requested?

- DEQ received a request to approve the use of recycled water for human consumption
- Clean Water Services, the wastewater agency in Washington County, wants to provide high-purity recycled water to brew beer.

What is Recycled Water?

- Recycle water is treated effluent from a wastewater treatment system which as a result of treatment is suitable for a direct beneficial purpose
- DEQ encourages recycling treated discharge water
- Common uses are irrigation, industry, reservoirs
- DEQ regulates recycled water use through a wastewater permit

Why does DEQ regulate recycled water?

- DEQ's responsibilities are to:
 - Protect the environment, and
 - Protect public health.
- DEQ defers to the Oregon Health Authority regarding human health assessments.

What's being proposed?

- Advanced wastewater treatment to achieve high-purity water.
- Production in discrete batches with rigorous testing
- Provide product to individual home brewers
- Distribution of product at conferences and meeting to initiate discussion about water reuse

What water treatment does Clean Water Services propose?

1. Ultrafiltration
2. Reverse Osmosis
3. Ultraviolet light, enhanced with peroxide

How Effective is this treatment?

Treated water meets:

1. All Oregon drinking water criteria
2. Additional criteria proposed by the National Water Reuse Association for potable reuse.

What is DEQ's process for approving a potable use?

DEQ rules require scrutiny before approving drinkable uses of recycled water:

1. Approval by Oregon Health Authority,
2. A public hearing, and
3. Approval by the Environmental Quality Commission.

What has Oregon Health Authority Found?

*“Due to the high water quality of the treated water, the additional microbial reduction in the brewing process, and a low health risk overall, the **OHA Public Health Division approves the proposed use of recycled water in the limited case as described in this proposal....**”*

Dave Leland, Oregon Health Authority
September 8, 2014 approval letter to DEQ

Public Comment

- Written comments accepted
January 16 – February 20, 2015
- Public hearing February 12, 2015
- 23 attended hearing
- 14 people/organizations submitted
written comment

What comments were received?

- 3 oral comments
- Written comments from 14 parties (2 also commented orally)
- 9 generally supportive
- 4 requested denial;
 - 3 based on health concerns
 - 1 based on harm to craft brewer industry
- 2 brewers impartial, provided clarification on water sources, and involvement

What were the main concerns?

- Are monitoring requirements sufficient?
 - Must meet all drinking water requirements
 - Must meet all analyses proposed by National Water Resource Institute for potable reuse
- Does DEQ has a sufficiently funded enforcement program?
 - EPA's state review framework indicates program is sufficient and above average in many aspects

What were the main concerns?

- Did DEQ provide sufficient notification to craft brewers regarding the project?
 - Proposal for non-commercial beer
 - Wide ranging media exposure
- Is the water sufficiently safe for human consumption?
 - Approved by OHA
 - Meets all drinking water criteria
 - Meets recommended criteria for potable reuse

If approved, what's next?

- Clean Water Services will revise their Recycled Water Use Plan
- Recycled Water Use Plan subject to review and approval by DEQ, Oregon Health Authority
- Public comment period for Recycled Water Use Plan
- Inclusion in Clean Water Services discharge permit