

Notes from Feb. 21, 2019 Reg 84 Stakeholder Meeting - Non-commercial Crops

The purpose of this meeting was to have the Water Quality Control Division propose ideas and concepts to stakeholders about what Regulation 84 should require for irrigation of non-commercially processed crops with reclaimed water. Several speakers provided presentations to stakeholders and feedback was noted. The notes from the meeting are outlined below.

Treatment, Bret Icenogle, Water Quality Control Division

- Discussed risk assessment through quantitative and qualitative microbial risk assessments.
 - Risk assessments help to determine the quality of water needed and BMPs for the exposure to reclaimed water.
- California completed a risk assessment for the water they use to irrigate non-commercially processed crops and found that it was safe.
- Colorado recently adopted *similar* water quality treatment requirements for toilet and urinal flushing (2018).
 - *Perhaps* this level of treatment is a starting point to determine treatment needed for non-commercially processed crops in Colorado.
- A comment was made that just because other states use reclaimed water for edible crops (or other uses) does not mean it is guaranteed safe.
 - There is truly no way to completely eliminate risk.
 - Using the EPAs risk in one in 1,000 or one in 10,000 people getting sick per year is what many entities use in a risk assessment.
- Bret also presented about the difference between source waters (e.g. graywater vs. blackwater), pathogen concentration differences in those waters and level of risk based upon those. He also distinguished between localized and centralized reclaimed water treatment systems and the differences in pathogen load and risks associated to those two types of treatment systems.

Proposed Definitions of Edible Crops, Meg Parish, Water Quality Control Division

- Early in the stakeholder process, it was decided that there would be separate definitions of commercially processed crops and non-commercially processed crops.
- Definitions were proposed for each.
 - Commercially processed crops options:
 - Farms with average monetary value of produce sold greater than \$25,000 (3 year average on a rolling basis);
 - Or, just point to the Food Safety Modernization Act, Produce Safety Rule
 - FSMA and PSR are highly likely subject to change. Do we want to rely on the monetary value or point to PSR?
 - Inconclusive but both ideas were generally accepted. Uniformity with other regulations is positive.
 - Non-commercially processed crops:
 - Agriculture that does not fall under the commercial definition.
 - Generally well received by stakeholders.
- A question arose as to whether produce irrigated with reclaimed water can still be organically certified.
 - Yes.

- A question arose as to how the Cottage Foods Act fits into these definitions. The WQCD will consider this and discuss at the next meeting.
- Concerns were expressed about how emerging contaminants (e.g. endocrine disruptors, Pharmaceuticals and Personal Care Products and other contaminants of emerging concern) could pose health risks when using reclaimed water to irrigate crops.
- Concerns were also raised about how recycling water will concentrate total dissolved salts and could be detrimental to farming downstream.
 - We set up another work group meeting to cover these items, as well as planned items that we were not able to cover during this meeting for April 8, 2019.

Residential Gardens, Dave Takeda, MSK Consulting

- A client of Dave's is interested in irrigating lawns and vegetable gardens with reclaimed water. Dave presented on ideas of how to best manage these gardens.
- Pompano Beach, FL allows for this use through a variance.
 - They do 10% inspections each year (amounts to each house being inspected every 10 years).
- Should we only allow drip irrigation on these?
 - Could limit implementation; automatic shut off hoses could be an option as well.
- Should a different risk assessment be considered for residential gardens?
 - Something to consider.
- Should there be different BMPs for residential gardens than community gardens?
- Require education about reclaimed water and how to use safely; in general and at house closing.
 - Keep safety plan with the house (similar to graywater manual requirement in Regulation 86).
- How to know if there are new gardens being planted?
 - Possibly drones.
- Additional information can be found here:
 - <https://environmentalrecords.colorado.gov/HPRMWebDrawer/Record?q=recNotes%3ASTAKEHOLDER+-+Reg+84&sortBy=>

Signage, Damian Higham, Denver Water

- Signs at multiple locations (e.g. entrance, hoses, around the garden plots).
 - Signs of different sizes for various locations.
- Try to be language appropriate.
 - Use visuals on signs too.
- At minimum, sign should say, "Reclaimed Water - Do Not Drink"