

Reclaimed Water Use Rule Advisory Committee
Department of Ecology Lacey, WA
9:15-3:15am
September 23, 2009

Meeting Notes

Attendees

Don Perry, Lakehaven Utility District
Bill Peacock, City of Spokane
Karla Fowler, LOTT Alliance
Craig Riley, Department of Health
Allen deSteiguer
Denise Lahmann, Department of Health
Bruce Rawls, Spokane County
Clint Perry, Evergreen Valley Utilities
Dave Monthie, King County
Walt Canter, WA Water and Sewer District Association
Doug Raines, Department of Corrections
Susan Kaufman-Una King County (video-NW)
Heather Trim, PPS (video-NW)

Ecology

Katharine Cupps (conference call)
Lynn Coleman
Kathleen Emmett
Jim McCauley
Tim Gaffney

Introductions and Agenda

- Reuse Symposium highlights
- Rule – Part VI, Section 800 Groundwater
- Rule, Part VI, Section 500 commercial/Industrial
- Water Quantity Issues – Water Rights Impairment
- Fee for DOH permitting

Part VI Use Specific – Groundwater recharge, WAC 173-219, section 800

Ecology staff presented draft rule language on ground water recharge to the RAC. The draft rule included four general topics of interest.

1. Three types of groundwater recharge – surface percolation, vadose zone percolation and direct aquifer recharge.
2. Recovery of reclaimed water and relationship to exclusive right.
3. Water quality standards for groundwater recharge by surface percolation.
4. Water quality standards for direct recharge.

1. Types of Groundwater Recharge

Ecology reviewed a drawing of surface or vadose zone percolation and direct injection to illustrate the difference in the recharge methods and aid the discussion.

2. Recovery of Reclaimed Water

Ecology's draft language proposed:

- a) Recovery of the reclaimed water may not be required in order to classify a groundwater recharge project as a beneficial use.
- b) Set a time limit (5 years – unless otherwise established on a project specific basis) for recovery of the reclaimed water before the exclusive right to the recharged water is lost.
- c) The provisions of this chapter do not limit a Permittee's ability to submit application for and acquire water rights appropriated under chapter 90.03 RCW.

RAC Comments:

- a) RAC members present expressed concerns over how a five-year timetable would work and stated that the rule needed further clarification.
 - A hydrogeologist has to determine the recharge timetable to establish appropriate timeframes for withdrawal.
 - Surface percolation to recharge lower aquifers could take 7 to 25 years to migrate to producing aquifers.
 - When would the time period start? Does the time frame include travel time or is it tied to the initial withdrawal of the water?
 - The 5 years appears to be based on water code for water right relinquishment for nonuse and that is not appropriate for reclaimed water which does not have an appropriative water right.
- b) RAC members present stated that utilities want to retain the exclusive right until they decide to give it up.
 - Just because it's not used today should not mean it is not available to us in the future.
 - We should not have to commit to recharging the aquifer forever. We should be able to change the use.
 - The reclaimed water recharge should not be committed to support other water rights.
- c) RAC members present recommended:
 - Do not set a specific time limit.
 - Base it on the engineering/hydrogeologist report for the specific project.
 - Intent regarding withdrawal or cessation of groundwater recharge should be clearly stated within the engineering report (and permit).
 - The rule should state that anyone using groundwater that has been recharged by reclaimed water does not have the right to rely on the continuation of the recharge by the reclaimed water project.

3. Standards for Groundwater Recharge by Surface Percolation

- a) Ecology noted that prior to rule development, the reclaimed water statute listed the drinking water standards in RCW 90.46.080(2) as the criteria for recharge by surface percolation. It also included a provision in RCW 90.46.080(3) for Ecology to add additional limits in permits issued for groundwater recharge. Section RCW 90.46.080(4) allows the rule to supersede the above requirements.
- b) Ecology's draft language proposed:
- For groundwater protection and consistency with other laws and rules, the draft language proposes using the state ground water quality standards as standards for ground water quality (in the ground water) for all types of ground water recharge including surface percolation.
 - Ecology has consulted with the Office of the Attorney General.
 - A final decision has not been made.

RAC Comments:

- a) The majority of RAC members expressed a preference for drinking water standards over ground water quality standards citing a belief the ground water quality standards would be more difficult to meet and would be an economic barrier to meeting the requirements.
- b) RAC members wanted more information on why Ecology was proposing a change from the current practice of using drinking water standards for surface percolation.
- Why did the legislature put the drinking water standards in the statute?
 - How can Ecology change that legislative direction? Why are we having this discussion?
 - What benefit will be achieved that is missing from the current standards?
 - Do all current recharges of groundwater meet groundwater standards?
 - Drinking water standards are subject to change from EPA. What happens if/when they become more stringent?
- c) RAC member comments at meeting included the following:
- Maybe the legislature put in drinking water standards to encourage reclaimed water use.
 - Belief that the statute applies drinking water MCL's to surface percolation.
 - No standard is mentioned in the statute for direct recharge and the same standards should apply to both surface percolation and direct recharge and for consistency.
 - Members understand that SDWA is not the same as the CWA.
 - DOH staff indicated they were comfortable with the drinking water criteria as sufficient for public health protection. DOH expressed a concern that it would send the wrong message to say that drinking water standards aren't sufficiently protective of public health.
 - Flexibility would be good here.
- d) Ecology staff asked RAC members which parts of the groundwater standards were of most concern – constituents or the numerical standards.
- Nitrogen was noted as a major concern.

- Standards based on practical quantification levels (PQLs) rather than environmental or health was also noted as a concern.
- Monitoring requirements.

Ecology Response

- Explained that [RCW 90.46.080] (4) allows Ecology to supersede the statutory language requiring the drinking water standards. Consultation with the Office of Attorney General supports this interpretation.
- Stated that the agency seeks consistency with other laws and regulations that apply groundwater quality protection. Voiced concern with creating two conflicting standards.
- Noted that Ecology is responsible to assure that groundwater quality is protected.
- Reminded the RAC that the Technical Advisory Panel (TAP) recommended applying both the groundwater quality and drinking water quality standards, whichever were more stringent.
- Noted that the statute does not mention that the maximum contaminant levels MCL's are the drinking water standards. There are other, more stringent, criteria in the drinking water standards including maximum contaminant level goals and advisory levels. The source of drinking water should not be degraded up to the drinking water maximum contaminant levels if it can be avoided.
- Noted that in RCW 90.46.080(3) the legislature also requires Ecology to establish other parameters and limits in the reclaimed water before recharge and that using the groundwater standards would clarify what those are. Analytical test methods are also different for the some of the parameters mentioned in both standards.
- Noted that implementation is different and only constituents expected to be present in the reclaimed water would be monitored as a requirement in implementing the groundwater quality standards. Some wastewaters have more industrial contributors or other sources of pollutants than others. Expects a reclaimed water use permit to select key parameters to monitor for.
- Reiterated that Ecology has not made a final decision. Agency is getting input to address concerns, legal advice from the Office of the Attorney General and is still considering parameters of concern and points of compliance.

4. Direct Recharge

The draft rule language proposes that the quality of the water for direct injection be the same as in the 1997 Water Reclamation and Reuse Standards. RAC members briefly discussed direct recharge requirements.

RAC Comments:

- Some RAC members thought direct recharge should be the same as for surface percolation and supported using the drinking water standards for both to avoid a double standard.
- Some RAC members thought the legislature specified that drinking water standards for direct recharge. The statute does not specify the standard for direct recharge. The 1997 Water Reclamation and Reuse Standards have been used to date.
- RAC members asked if Ecology required reverse osmosis treatment (RO) or if this could be demonstrated by other methods. Ecology staff noted that the draft rule language proposed

would allow RO or the applicant would have the option of meeting specific water quality criteria or present pilot results for equivalent treatment.

- RAC utility members noted that advanced treatment techniques such as reverse osmosis would make direct recharge cost prohibitive for smaller systems.
- The environmental representative noted that stringent ground water standards are applied in California for large systems now and should be applied here also.
- RAC members noted that for turbidity, there is a three-fold difference between the drinking water standards for conventional sand filtration and the water quality standards proposed for direct recharge to groundwater, and wanted to know the basis. DOH stated that the basis for this decision will be developed and provided in the future

Part VI Use Specific –WAC 173-219, section 500 - Commercial/industrial/community – review of working draft issues

Ecology staff lead discussion, going over the Section 500 worksheet. Ecology noted that they heard the RAC position not to develop water quality criteria for specialized industrial users within the rule.

Revised Table:

The table is used to show applicability in the rule for commercial/industrial and community uses. At the last RAC meeting, a RAC environmental member proposed a table separating out indoor and outdoor uses for commercial, industrial and community uses. Outdoor uses may have potential for environmental impact while the indoor uses would not. The table should not stop with separating out the two columns. The purpose of the table revision is to add appropriate requirements to the outdoor uses for environmental protection. The revised table was presented and RAC members supported the concept.

The revised table also proposes moving urban landscaping uses to Section 500 rather than keeping them in Section 530, irrigation (land application) uses. Agricultural irrigation would remain in Section 530. RAC members present supported this concept with the caveat that we should revisit this after discussing irrigation uses at next meeting and then make a determination as to best fit for urban landscape irrigation uses.

Another RAC member noted that this table is intended to be descriptive and not regulatory.

Q: Does this table have fewer authorized uses than in the 1997 standards? Ecology should make sure that authorized uses are not left out of the list so that they will not require an individual determination by the agencies at a future date.

A statement allowing other similar uses should also be added as a category in the table or text.

Interactive water features such as splash fountains are not included. Suggestion to add them by removing the word aesthetic from the water feature category.

Water Quality Regulatory Options for Section 500 uses

Six original options were discussed on 8/26/09. Number six was deleted at that meeting. Ecology presented the five remaining options for RAC consideration.

1. Leave Class A and B as is. “Buyer beware”
2. Add additional protective water quality (wq) criteria to Class A and B – examples proposed.
3. Add additional protective wq criteria to Section 500 rather than to Class A,B.
4. Add a broad narrative standard to Section 500 and put detail in guidance.
5. Add “target levels” and monitoring to rule– but not enforcement limits.

Ecology staff stated a preference for Option 2. RAC members stated that they did not see a need for adding these parameters since wastewater treatment permit requirements would already include them. Ecology stated that the current Class A and B had very few water quality limits established. RAC members thought that this could be covered in the wastewater discharge permit and that those requirements did not need to be repeated in this rule. Ecology stated that this may not be the case. An example was that a splash garden could have a pH of 3 under the proposed standards. RAC members stated that this would not happen. DOH staff stated that Option 1 was sufficiently protective of public health for these nonpotable uses because of other applicable regulations that also defined minimum water quality levels. In this instance the example is the swimming pool rules implemented by DOH.

The twelve RAC members present voted their preference on the five options presented. Options 1, 4 and 5 received support from RAC members. Options 2 and 3 did not.

- All utility members present and DOC recommended Option 1.
- The environmental member present recommended a combination of Options 4 and 5 and stated that they needed further development.
- DOH recommended Option 4.
- Ecology did not vote and agreed to consider the input during rule development.

Water Quantity Issues – Water Right Impairment

Report to the legislature

Lynn Coleman went over the draft report to the legislature. Final comments are due to Ecology by October 5. Ecology plans to consult with the Yakama and Puyallup tribes, which have participated in the RW-WRAC in the past.

RAC Comments:

- Suggest Ecology request comments from all tribes, not just those who have stated they have issues with water rights. Some tribes support reclaimed water and the report needs to be balanced.

- DOH will find out who from DOH Office of Drinking Water is commenting in members absence.
- Substitute Senate Bill 5504 asks for review comments from both committees, the Rule Advisory Committee (RAC) and the Reclaimed Water and Water Rights Advisory Committee (RW-WRAC). Each committee's input should be identified in the report and clearly delineated one from the other. Start off the report with the language from SSB 5504 and what the legislature requested. Define the roles of the RAC and the RW-WRAC including why the RW-WRAC was created. Provide a complete picture of the background of how we got to where we are today.
- Should the recommendation that no change to statute is needed be pursued first? The report from the Water Rights Committee sent to the Legislature in January 2009 said no change in statute, and go with the proposed process that is inclusive.
- Keep the report short or the legislature won't read it. Add things to appendices like the history. A chronology could be added.

Ecology stated that legislative staff said they will read the report, but the legislators will usually only read the executive summary. The report is being written with this in mind. Ecology will have a joint (WQP and WR) management team meeting September 29 to make recommendations on the water right issues discussed in the committees. Ecology will share decisions made on agency recommendations to the legislature. Ecology asked the RAC to provide input to ensure that their opinions are accurately and fully described in the report. Ecology plans to add an appendix with the Environmental Law Institute report that outlines the two main approaches to reclaimed water and water rights.

RAC Comments:

- There will be key legislators who actually will read the report, and they should be asked how much information they want.
- Many on RAC feel their perspectives were captured in the report.
- One member does not believe the report accurately reflects the discussion in the RW-WRAC.
- Ecology's former executive summary in the last report to the legislature was very effective. Look at that as an example.
- All options and implications for each option should be in the report.
- Have a legislative staff person review the report before it is sent to the Legislature.
- Ecology could brief legislative staff.
- The Color flowcharts presented today should be added to the report. Set up the bubbles in the flow chart with solid or dashed lines to distinguish the boxes if the report is not printed in color.
- Add a one paragraph summary of what the report says.
- Using the term "consumptive use" of reclaimed water does not accurately describe the issue, may not be needed, may be loaded, is not a term used in the Reclaimed Water Act, and needs to be defined. Consider using authorized uses and non-authorized uses, and the reduction of discharges to in-stream flows as a more accurate description of issues.

Rule language

Flowcharts developed by the RW-WRAC were presented. These describe a proposed review process to address the potential for impairment. RW-WRAC participants and Ecology generally believe that most of the process should be put in guidance, not rule. Ecology will ask for input on specifically what in these flowcharts should go into rule. In addition, what components of the report to the legislature belong in the rule? In guidance?

One of the main concepts in the flowcharts is to start the impairment review early in the planning process. The impairment should be done before any money is spent on detailed engineering plans.

RAC Comments:

- Ecology should be clear that once the impairment analysis is made, the decision, which is an appealable decision, won't be revisited.
- Add the latest time the analysis can be done and that the option to have it done earlier is an option to the flowchart.
- A set time frame for any impairment analysis should be included.
- Agency needs to get back to proponents within a set period of time.
- Q. Is it possible to have more than one impairment analysis going on at the same time (e.g. one for instream flows and one for other water rights)? A: Yes.
- How do we use the committees as efficiently as possible and dovetail our work? Having both committees looking at the water rights is okay.
- Have the bare-bones impairment analysis, broad language in the rule and the details in the guidance.
- Keep the impairment requirements in one place in the rule, and address various points throughout the guidance.
- Appeal period needs to be defined as well as what constitutes a complete analysis.
- Agency needs to get back to proponents within a set period of time.

Action item:

Ecology will come back with a draft of section 150 in the rule.

Permit Fees charged by the DOH.

PowerPoint presentation by DOH (link to it on the RW rule website?)

DOH can't issue permits until it adopts fees. Chapter 90.46 RCW tells DOH to seek RAC input before establishing a fee structure. DOH will not ask for legislative authorization for fees until the 2011 session. Cannot prepare a proposal until the rule is in final draft, to know what costs to cover.

Q: What about fixed fees VS hourly costs?

A: The operating permit fee will be in addition to current \$102/hr fee charges for engineering review. How the permit fee is structured and calculated is what DOH would like RAC input on.

Comments:

- Do not want to subsidize other systems. Charge us by the hour for what it takes to write our permit. Annual charge should be what DOH spends in time and materials to review our permit information or provide technical assistance – like with project charges. If the system or engineer is not competent, they will be charged for DOH time to deal with that.
- Charge by connections won't work: intermittent uses and non-residential (no "connections").
- Is there much difference in size of reclamation use (volume produced/sold)? May not make sense to charge this way.
- Concern for hourly review charge: what if the DOH reviewer is new or not as good as incumbent? Costs utility more.
- What does it take to write/review a permit: complexity of treatment and use or size or?
- Another option: base charge plus time and materials. (Cover overhead if not in hourly charge.)
- A fixed fee will even-out swings in time spent and revenue for DOH.
- Bill annually – keep consistent charge. (help for budgeting)

DOH handed out a survey for RAC members to provide feedback on the presentation. These were handed in before the end of the meeting.

Next meeting: October 28, 2009.

Subcommittee reports:

- The RW-WR advisory committee meeting tomorrow 9/24/2009.
- Trace organic compound committee: Ecology staff reported the recommendation to convene an expert panel and recommend back to the agencies – funding is an issue. Will look at CA model and talk with management. The subcommittee is looking for a name for these pollutants. Subcommittee intends to meet one more time and then give this RAC their final recommendations, including monitoring.