

From: David Batts
To: [Jones, Jocelyn \(ECY\)](#)
Subject: Fwd: Reclaimed Water rulemaking: Comments
Date: Sunday, October 15, 2017 11:25:07 PM
Attachments: [Reclaimed Water Comments.pdf](#)
[Reclaimed Water Comments Errata.pdf](#)
[Reclaimed Water Comments Errata Fixes Accepted.pdf](#)

Dear Ms Jones,

I found some errata in my submittal and hope you can accept the corrected version. I've attached the redline version as well so you can readily see what changes were made.

Thank you,

David Batts
Olympia, WA

From: David Batts
Sent: Saturday, October 14, 2017 12:16AM
To: Jocelyn Jones
Subject: Reclaimed Water rulemaking: Comments

Dear Ms Jones,

Please find attached my comments on the Reclaimed Water Rule. I am submitting these comments as a private citizen of the state of Washington.

Please note that I attempted to send via web entry (entering text into the web form, not by file attachment) prior to midnight October 13. I backtracked at 11:58 pm to make an edit (Olympia was showing up as Olymp), and after a brief delay, at 11:59 pm I was sent to a page that says, "The comment period is closed for Reclaimed Water Rulemaking - Formal Comment Period August 23 - October 13, 2017".

As I would have been otherwise been able to submit by close of October 13 and was unable to because of this web anomaly, I am hoping you can accept my comments by email attachment at this time. The attachment date is a bit into October 14 because of the time necessary to create a PDF file from my prepared comments. The email is of course a bit later because of the time needed to compose.

Thank you,

David Batts
Olympia, WA

October 13, 2017

David Batts

Olympia, WA

There is a claim of relative safety regarding "Pharmaceuticals and other chemicals of concerns [sic]" made in the focus sheet, Reclaimed Water in Washington State <https://fortress.wa.gov/ecy/publications/documents/1710023.pdf>, I have not seen posted by Ecology any summary or detailed report of chemical analysis of reclaimed water to support that claim.

I could not find the term "human contact" in the Rule. Human contact should be only allowed for Class A+ reclaimed water, and expressly prohibited by the rule for all direct human contact including but not limited to swimming and/or wading pools, body rinsing, bathing, or washing facilities.

Class A+ reclaimed water should be tested and be found free of any hormones, hormone analogs, or antibiotic resistance factors.

'Priority pollutant' is not defined in the Rule or in the Purple book. I did locate:

Table 12-1 Combined Groundwater Criteria and Drinking Water Standards.

Is this what "priority Pollutants" refers to? If so, that should be made clear.

Otherwise: Ecology's Washington State Water Quality Standards: Human Health Criteria and Implementation Tools "<https://fortress.wa.gov/ecy/publications/documents/1410058.pdf>

defines 'priority pollutant' in these sections:

"Current human health criteria chemicals: Washington's current HHC are found in the federal National Toxics Rule (NTR) (EPA, 1999). The NTR contains the complete listing of all 126 of the CWA 307(a) priority toxic pollutants (priority pollutants), and actual calculated human health criteria concentrations for 85 of the priority pollutants (some of the priority pollutants names are not accompanied by HHC concentrations). Of the 126 priority pollutants, 85 have numeric criteria for fresh water (exposure routes of drinking untreated surface waters and ingestion of fish and shellfish), and 84 have criteria for marine water (ingestion of fish and shellfish only)."

"EPA's recommended national criteria for chemicals: Since the 1992 NTR was published (and subsequently updated in 1999), the EPA has developed and published several additional human health criteria values for both priority pollutants and for non priority pollutants. EPA's current recommended national criteria table (EPA, 2014) includes national recommended human health criteria for 97 of the priority pollutants and approximately 18 non-priority pollutants (see Appendix A). Washington is proposing to adopt new criteria for 96 of the 97 priority pollutants. This lower number of proposed chemicals (96) is because Washington is deferring adoption of new criteria for methylmercury, and will stay under the current NTR criteria for mercury."

In either case, I note that Table 12-1 includes extremely few pharmaceuticals, and no hormones, hormone analogs, or antibiotic resistance factors. I suspect the EPA and WA Priority Pollutant lists noted above are likewise deficient in these classes of concern. Table 6-4 Typical Monitoring for Class A Reclaimed Water Table 6-5 Typical Monitoring for Class B Reclaimed Water Table 12-2 (Example Schedule) and 12-3 Recommended constituents for Monitoring of Direct Groundwater Recharge.

None of these list specifically any organic chemicals that may be transformation byproducts of wastewater treatment. Especially notable is lack of required monitoring for many PBTs, and for personal care products, pharmaceuticals and antibiotic resistance factors. The category "Priority Pollutants" is listed, but as previously noted, there is no definition or list of substances under that heading present in the proposed Rule or Purple Book. If this refers to Table 12-1, that should be made

clear. The noted monitoring once per permit cycle is inadequate; at a minimum monitoring for priority pollutants should be annually for Class B and quarterly - ideally monthly - for Class A and direct groundwater discharge. For all substances in the table, required limits of detection should be included.

From: David Batts
To: [Jones, Jocelyn \(ECY\)](#)
Subject: Reclaimed Water rulemaking: Comments
Date: Saturday, October 14, 2017 12:17:01 AM
Attachments: [Reclaimed Water Comments.pdf](#)

Dear Ms Jones,

Please find attached my comments on the Reclaimed Water Rule. I am submitting these comments as a private citizen of the state of Washington.

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There is a claim of relative safety regarding "Pharmaceuticals and other chemicals of concerns [sic]" made in the focus sheet, Reclaimed Water in Washington State <https://fortress.wa.gov/ecy/publications/documents/1710023.pdf>, I have not seen posted by Ecology any summary or detailed report of chemical analysis of reclaimed water to support that claim.

I could not find the term "human contact" in the Rule. Human contact should be only allowed for Class A+ reclaimed water, and expressly prohibited by the rule for all direct human contact including but not limited to swimming and/or wading pools, body rinsing, bathing, or washing facilities.

Class A+ reclaimed water should be tested and be found free of any hormones, hormone analogs, or antibiotic resistance factors.

'Priority pollutant' is not defined in the Rule or in the Purple book. I did locate:

Table 12-1 Combined Groundwater Criteria and Drinking Water Standards. Is this what "priority Pollutants" refers to? If so, that should be made clear.

Otherwise:

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defines 'priority pollutant' in these sections:

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In either case, I note that Table 12-2 does not include any pharmaceuticals, hormones, hormone analogs, or antibiotic resistance factors. I suspect the EPA and WA Priority Pollutant lists noted above are likewise deficient in these classes of concern.

Table 6-4 Typical Monitoring for Class A Reclaimed Water Table 6-5 Typical Monitoring for Class B Reclaimed Water Table 12-2 (Example Schedule) and 12-3 Recommended constituents for Monitoring of Direct Groundwater Recharge

None of these list specifically any organic chemicals that may be pass through or byproducts of wastewater treatment. Especially notable is lack of monitoring for any PBTs, personal care products, and pharmaceuticals and antibiotic resistance factors. The category "Priority Pollutants" is listed, but as previously noted, there is no definition or list of substances under that heading present in the proposed Rule or Purple Book. If this refers to Table 12-1, that should be made clear. The noted monitoring once per permit cycle is inadequate; at a minimum monitoring for priority pollutants should be annually for Class B and quarterly - ideally monthly - for Class A and direct groundwater discharge. For all substances in the table, required limits of detection should be included.