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## Fwd: Proposed Nutrient Limit Comments

1 message

UWQ Comments EQ &lt;uwqcomments@utah.gov&gt;

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From: Mike Chandler <mchandler@bowencollins.com>  
 Date: Thu, Jul 17, 2014 at 10:39 PM  
 Subject: Proposed Nutrient Limit Comments  
 To: "uwqcomments@utah.gov" <uwqcomments@utah.gov>

This evening I attended the public information meeting in Price, Utah. I appreciate the strong representation from the State and the positive, receptive atmosphere of the meeting.

After the initial presentation, the discussion turned to the number of trickling filter plants in the state. These plants, by design, efficiently remove BOD and Ammonia, the constituents previously targeted by the EPA. However, these plants struggle with the ability to meet both current proposed phosphorus rules and anticipated nitrogen restrictions. Between the implementation of the TBL on phosphorus and the establishment of a TIN limit on the plants, it appears that the State intends to take an interim step encouraging optimization at each of the plants. Many of the Activated sludge plants in the state can meet both the phosphorus and nitrogen proposed limits of 1 and 10 respectively. However, the trickling filter plants will struggle with implementation of both limits at potentially higher cost. I would propose that the State consider postponing implementation of the 5 year compliance window by implementing an immediate (See January 2015) program encouraging optimization at all plants. Compliance with numeric criteria is obviously the ultimate desire of both the State and the EPA. However, by establishing the TBL for phosphorus in the first phase, all trickling filters will be forced into process conversion or addition of chemical precipitation processes. If the trickling filter plants elect to only consider phosphorus they will likely postpone undertaking process conversions which would be necessary to comply with ultimate goals of both phosphorus and nitrogen. This means undertaking conversion when future financing options may be limited and at bonding/borrowing rates that are likely to be higher the longer conversion is postponed.

If each mechanical plant was first encouraged to "optimize" their plants they could have a two to three year window permitting operation through several cold and warm seasons with an aim of optimizing nitrogen and phosphorus removal biologically within the natural limitations of their existing process. Many existing plants would have a chance to refine their process and "pilot" BNR processes as well as facilitating collection of critical nutrient data for future process planning.

Those mechanical plants that could meet the TBL through optimization would naturally have their UPDES limits reduced to those levels without further issue. Conversely, those plants that demonstrated that their existing process is incapable of meeting the TBL through optimization could, at the end of their pilot period, be given 5

years to come into compliance with the TBL for both phosphorus and nitrogen.

Typically when a facility plan is filed for process expansion or conversion the State requires the POTW to look at a twenty year planning horizon. Professional prudence would dictate that process expansion/conversion should take into account both phosphorus and nitrogen, although they are being proposed for separate implementation.

Additionally, by beginning rule implementation with optimization you put activated sludge plants at an advantage. They will reach compliance ahead of their trickling filter counterparts. This allows an extended window of compliance for the plants that will require the most intense modifications, while still making significant progress toward overall compliance. A minor benefit may be staggering funding applications over several years as plants will be on separate tracks based on optimization outcomes, intensity of process conversion, individual compliance agreements/orders, and availability of funding.

I appreciate the State's efforts to seek input on these issues as well as the time someone takes to read this comment. I support the State's goals and hope that we can work together as an environmental community to change the "waste"-water mindset from pollution prevention to system optimization, cooperative management, and resource recovery to the mutual benefit of all stake holders.

Sincerely,

**Mike Chandler, P.E.**

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