From: BNICKEL
To: June.Bergquist@deq.idaho.gov
Subject: Fw: Sandpoint Design flow (corrected TP calcs)
Date: Thursday, January 17, 2013 12:11:40 PM
Attachments: TP_Limit_25_50_MZ_3_62 mgd_Corrected.xlsx

June:

I made a mistake in the TP calculations. The concentrations were correct, but the loads were wrong because I didn't set up the spreadsheet so that the changed design flow propagated all the way through like it should have.

Attached is a correction.

Thanks,

Brian Nickel, E.I.T.

Environmental Engineer

US EPA Region 10 | Office of Water and Watersheds | NPDES Permits Unit

Voice: 206-553-6251 | Toll Free: 800-424-4372 ext. 6251 | Fax: 206-553-0165

Nickel.Brian@epa.gov

http://epa.gov/r10earth/waterpermits htm

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----- Forwarded by Brian Nickel/R10/USEPA/US on 01/17/2013 12:11 PM -----

From: Brian Nickel/R10/USEPA/US

To: <June.Bergquist@deq.idaho.gov>

Date: 01/16/2013 04:10 PM

Subject: RE: Sandpoint Design flow

June:

I assume you meant "a new preliminary draft permit," not "a new preliminary cert," but you can correct me if I'm wrong.

As requested. I have recalculated TP limits based on both a 25% and a 50% mixing zone, with the effluent flow set to the design flow (as we now understand it) of 3.62 mgd.

As I explained in an e-mail on January 8th, if your goal is to "cap" Sandpoint's TP load at the existing level (without requiring a reduction), my best guess as to an average monthly TP limit that would accomplish that is about 87 lb/day. That limit would require a 31.5% mixing zone, and there's also a tab in the spreadsheet for this scenario.

In other words, I think a25% mixing zone would require a reduction in TP, while a 50% mixing zone would allow them to increase their load.

Thanks,

Brian Nickel, E.I.T.

Environmental Engineer

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[attachment "TP_Limit_25_50_MZ_3_62 mgd.xlsx" deleted by Brian Nickel/R10/USEPA/US]

From: <June.Bergquist@deq.idaho.gov>

To: Brian Nickel/R10/USEPA/US@EPA

Cc: <June.Bergquist@deq.idaho.gov>

Date: 01/16/2013 02:51 PM

Subject: RE: Sandpoint Design flow

Hi Brian,

I agree. A new preliminary cert. We are doing some Cormix modeling of the plume and based on the results from the current TP effluent limits and the 50% mixing zone, we would like to run the model on the new revised TP effluent limits before you finalize a revised draft. Could you run the new TP effluent limits for both a 25% mixing zone and one for a 50% mixing zone? I could do it with your spreadsheet but in the interest of getting the correct answers it would be better if you did it! Thanks for your help on this.

June

From: Nickel.Brian@epamail.epa.gov [Nickel.Brian@epamail.epa.gov]

Sent: Tuesday, January 15, 2013 3:20 PM

To: June Bergquist

Subject: RE: Sandpoint Design flow

June:

How would you prefer to handle this change in design flow, from a process point of view? Do you want me to prepare a revised preliminary draft permit with limits recalculated based on 3.62 mgd, or do you want to just say in the draft cert that the design flow should be 3.62 mgd and ask us to recalculate the limits at that point?

Personally, I think it would be a better for us to send a new preliminary draft based on 3.62 mgd.

Thanks,

Brian Nickel, E.I.T.

Environmental Engineer

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