

From: [Justin Hazenberg](#)
To: [Heather Scott](#); [Christine Wenman](#); [Jessica Jumbo \(Sambaa K'e - Environment\)](#); [Erica Janes](#); [Greg Hamann](#)
Subject: RE: SKFN and aluminum measurements in backwash at water treatment plant
Date: Monday, February 11, 2019 1:33:56 PM

There was a typo in Greg's email, but see below for his response:

Hi Heather,

I can confirm that the coagulant dosage does not change throughout the year and is set to 5ml/hr. While on site I tested the backwash coming directly from the overland discharge pipe at the start of the backwash cycle and it was 0.137 mg/L.

Let me know if you need any more info on this, if I don't have it handy I have Terry's cell number and can call him directly rather than trying to catch him at the plant or the office.

Have a good day

Greg

From: Heather Scott [mailto:heather.scott@mvlwb.com]
Sent: Monday, February 11, 2019 9:13 AM
To: Christine Wenman; Jessica Jumbo (Sambaa K'e - Environment); greg_hamman@gov.nt.ca; Erica Janes; Justin Hazenberg
Subject: RE: SKFN and aluminum measurements in backwash at water treatment plant

Thanks Christine-

Can Greg or Justine clarify if the dosage of coagulant is consistent throughout the year?

Heather

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From: Christine Wenman <christine@planitnorth.ca>
Sent: February 8, 2019 3:56 PM
To: Jessica Jumbo (Sambaa K'e - Environment) <environment@sambaakefn.com>; greg_hamman@gov.nt.ca; Erica Janes <ejanes@mvlwb.com>; Heather Scott

<heather.scott@mvlwb.com>; Justin Hazenberg <Justin_Hazenberg@gov.nt.ca>

Subject: SKFN and aluminum measurements in backwash at water treatment plant

Hi all,

I thought I would write an e-mail about this so that everybody is sharing (and developing) the same understanding about SKFN measuring aluminum in the backwash water of the water treatment plant.

I spoke with Terry, Jessica and Greg each today very briefly on this question of the measurement of measuring aluminum in the backwash water.

Apparently Terry doesn't measure anything in the backwash now but Greg says it's the same protocol he uses on the treated water, so he's familiar with it and adding it in will be an additional 20 minutes per month. Jessica, you would need to ensure Terry's keeping clear records in a consistent spot so that you could hand those in once a year for the annual reporting.

So, it doesn't sound like a big deal and if it's needed, sounds like it won't be onerous.

Nonetheless, Greg has confirmed that *he* has measured the aluminum in the backwash in the past and it's very low (Greg, could you share the measurement amount please?) and that he wouldn't expect variations in the concentration. Justin expressed the same - that variations in the concentration wouldn't be expected. I'm not sure where Erica's understanding that we thought that it backwashed into the reservoir - this has never been anyone's understanding - we know it flows to the environment. The point that I understood from Justin was that *because* the raw water comes from the reservoir as opposed to a natural environment, the raw water is not subject to the same variations in colour seasonally that it might if in a lake or river. Therefore, because coagulant is added based on colour (which stays relatively consistent) the anticipated byproduct of aluminum from the coagulant also stays consistent. While I think we've realized that the extra measurement won't be onerous, I'm still having trouble understanding, based on these points, why a monthly measurement would be necessary. I would still be grateful to understand that rationale and to be corrected if I'm misunderstanding something (which is quite possible!).

Perhaps a related question is, can the license have any flexibility in this? For instance, if in one year, Terry measures aluminum in the backwash every year, and there's little to no variation, is it easy to remove the requirement to do it? It would seem silly to keep doing it just because it's in there as a requirement if we confirm, over time, that there's no change in concentration.

Huge thanks to you all for your patience and help on this one,
Christine

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