

Lynn (Fairall) Perrin BGS, MPP

3938 Caves Court

Abbotsford, B.C. V3G 0A1

contactus@fairallconsulting.ca

(604) 309-9369 Cell

Re: Ammonia in sewer effluent from JAMES Treatment Plant

I have heard that fish will actually jump out of water that has been treated with chloramines. Such is the case in the Abbotsford-Mission Water and Sewer Commission treatment of the drinking water for consumers in Abbotsford and Mission. The JAMES sewage treatment plant dumps effluent into the Fraser River just west of the mission Bridge. I am concerned that this may play a role in the drastic reduction of salmon in the Fraser River.

Here are a couple of reports from the Abbotsford-Mission Water and Sewer Commission regarding ammonia levels:

WSC 019-2010 Ammonia levels from James Treatment Plant

<https://abbotsford.civicweb.net/Documents/DocumentList.aspx?ID=14003>

Ammonia (NH3) (Appendix D)

| Parameter | Regulation | Feb. 2010 | Feb. 2009 | Feb. 2009/2010 Variance | Jan. 2009/2010 Variance | Dec. 2008/2009 Variance |
|--------------|------------|-----------|-----------|-------------------------|-------------------------|-------------------------|
| NH3 Influent | n/a | 18.4 mg/l | 24.1 mg/l | -5.6 mg/l | -2.3 mg/l | +2.3 mg/l |
| NH3 Effluent | ** | 7.8 mg/l | 21.2 mg/l | -13.4 mg/l | -13.1 mg/l | -4.7 mg/l |

** Acute Toxicity threshold chart Appendix E

The Ammonia concentration on the effluent was lower than the same three months last year. All tests done for the month of February were well below the toxicity curve.

WSC 036-2010 Ammonia in water going into the Fraser River:

<https://abbotsford.civicweb.net/Documents/DocumentList.aspx?ID=17715>

Stage VII: Trickling Filter / Solids Contact Tank (TF/SC) #3 and Site Piping

Since the award of Stage VII project in 2009, the WSC has seen the following changes to the JAMES Plant:

- Ammonia in effluent has decreased to an acceptable level, likely due to the aeration upgrade in the Solids Contact Tanks;

Lynn Perrin BGS MPP