

**Date:** June 25, 2013      **File:** 20132344.00.A.04.01

**Time:** 1:00 - 4:00 p.m.      **Page:** 1 of 6

**Project:** Port Alberni Wastewater Upgrades

**Subject:** Wastewater Advisory Committee Meeting #2

**Client:** City of Port Alberni

**Location:** City Hall, Port Alberni, BC

**Present:** Rick Avis (RA) - Somass Estuary Management  
Plan Committee / Alberni Valley  
Enhancement Association (AVEA)  
Phil Edgell (PE) – AVEA  
Sheena Falconer (SF) – West Coast Aquatic  
Guy Cicon (GC) - City of Port Alberni  
Scott Smith (SS) – City of Port Alberni  
Ken Watson (KW) – City of Port Alberni  
Brad West (BW) – McGill & Associates Eng.  
Larry Cross (LC) – Catalyst Paper  
Kelly Bush (KB) – Associated Engineering (AE) (by  
phone)  
Quinn Crosina (QC) – AE  
Hugh Hamilton (HH) – AE / Summit Environmental  
Tom Robinson (TR) - AE  
Jana Tondou (JT) – AE / Summit (by phone)  
Kirsten White (KW) – Ministry of Environment (MOE)

**Distribution:** Those Present  
James Arnott – Environment Canada  
Jeanine Bond – Ducks Unlimited  
Stephanie Bruvall – Ministry of Health  
Bill Collette – AV Chamber of Commerce  
Andy Daniel – Alberni-Clayoquot Regional District  
Robert Duncan – Hupacasath First Nation  
Elysha Gordon – Dept. of Fisheries and Oceans  
Joe Holmes – Western Forest Products  
Kim Hyatt – Dept. of Fisheries and Oceans  
Baljeet Mann – MOE  
Dave McCormick – Port Alberni Port Authority  
Ashley Popovich – Catalyst Paper  
Dean Shiskowski – Associated Engineering  
Lisa Gallic – Tseshah First Nation  
Deb Foxcroft – Tseshah First Nation  
Ivy Whitehorne – Ducks Unlimited

## RECORD OF MEETING

This Record of Meeting is considered to be complete and correct. Please advise the writer within one week of any errors or omissions, otherwise this Record of Meeting will be considered to be an accurate record of the discussions

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**Action By:**

**Discussion:**

**1 INTRODUCTIONS**

Info

Introductions were made around the table. The meeting was the second of the combined Technical Advisory Committee (TAC) and Public Advisory Committee (PAC), referred to in this case as the Wastewater Advisory Committee (WAC), as required by the Liquid Waste Management Plan (LWMP) process. The LWMP will form the basis for future wastewater collection, treatment and disposal for the next 40 years.

Info

The key objectives of the meeting were noted, as follows:

- To provide a brief overview of the project background and history (for those who were not at the first meeting).
- To review the alternative locations for effluent return to environment.
- To present preliminary environmental sampling results.

Info

PowerPoint slides were presented throughout the discussion. AE indicated that the slides would be appended to this ROM.

*[Post Meeting Note: In lieu of the slides AE will circulate Discussion Papers 2-1 and 2-2 which will provide more comprehensive information.]*

**2 ALTERNATIVE LOCATIONS**

**2.1 INTERTIDAL ZONE (ALTERNATIVE 3)**

Info

HH put forth the recommendation that the Intertidal location (Alternative 3) for effluent return to environment not be pursued. The main reason is the high environmental sensitivity of this location, which was discussed during the previous meeting. In addition, discharge to this location would not be considered beneficial reuse under the Municipal Wastewater Regulation (MWR).

Info

It was agreed that this option would not be considered further.

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**2.2 SOMASS RIVER (ALTERNATIVE 1)**

Info The current side-bank discharge into the Somass River was discussed. It was noted that there are tidal influences on the river level and side channels, which sometimes appear to convey effluent.

**2.2.1 Discharge Ratios**

Info HH spoke about the MWR dilution ratio calculations as a screening tool. He noted that the resultant discharge ratio for the river varies depending on effluent flows used (i.e. average, maximum, etc.) but generally hover around 100:1, which indicates that additional investigations into environmental effects are required.

**2.2.2 Field Sampling**

Info JT and HH presented the preliminary field sampling results (refer to appended slides). HH noted that chloride and caffeine were measured as tracers for wastewater effluent. He also noted that they sampled far upstream at the request of the Tseshah First Nation and to determine how far upstream the effluent travels and/or influences water quality on the flood tide. TR noted that the Fecal Coliform graph presented has a log-scale. HH commented that values below 10 CFU/100 mL are approaching background (naturally occurring) levels in the Somass River. For reference, HH also noted that background fecal coliform levels in other rivers in developed areas are typically in the 10-100 CFU/100 mL range.

JT It was agreed that some of the sampling points would be relabeled to reflect corrections and/or local landmarks.

Info JT and HH noted that the specific conductivity measurements indicate little tidal influence at points far upstream of the effluent discharge point, with some influence seen at midway sampling points.

Info KW pointed out that there are stormwater outfalls that might also impact midway sampling point results.

Info JT noted that the channel sampling location was at a point close to the lagoon because it was too deep to easily sample at the confluence with the river. She noted that the channel experiences tidal influences.

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**Discussion:**

- Info The highest specific conductivity reading was measured in the river near the outfall location during low-tide.
- Info JT and HH noted that during the next round of sampling, a boat will be utilized so that samples can be taken on a cross-section of the river.
- JT/HH The project team is still waiting for the remainder of the laboratory analysis results and will then finish summarizing and interpreting the results, which will be made available as part of a forthcoming discussion paper.

**2.2.3 Diffusers**

- Info HH presented some typical diffuser design-types for discussion purposes. Some typical engineering challenges and considerations were briefly discussed, including longevity, low flows, navigable waters, and interference with fish netting.
- BW, LC McGill and Catalyst both have river profile data that they will provide to AE.

**2.3 ALBERNI INLET (ALTERNATIVE 2)**

- Info There was some discussion about the final alternative effluent discharge location: Alberni Inlet. TR noted that one of the key challenges previously identified for this option is constructability.
- HH This is the current location of the mill's outfall. LC noted that the mill's outfall is unusual in that it's a tidal surface discharge and that there were reasons for deciding to locate it closer to the surface than at depth. PE noted that from a fisheries perspective, the preference may be for a deeper discharge because fish are less likely to be present at lower depths. It was agreed that HH would follow-up directly with Kim Hyatt at DFO.
- Info There was some discussion about the small islands in the inlet, near the outlet of the Somass River. RA noted that Oregon Ash (a red-listed species) is present on these islands.

**3 OTHER ITEMS**

**3.1 EXISTING FORCE MAIN PIPES**

- Info BW noted that there are two existing pipelines crossing under the Somass River connected to the inlet and outlet of the Catalyst lagoon (installed in the 1970s). LC noted that although they

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might not be suitable for current use, they could serve as a conduit. GC commented that this may aid in mitigating disturbance at the site. RA noted that just west of the southernmost corner of the industrial lagoon is a previously disturbed site, and that closer to the river are some Oregon Ash (red-listed species), which have not yet been registered.

**3.2 FORTHCOMING PHOSPHORUS OBJECTIVE**

KW There was some discussion about the Province's forthcoming in-situ phosphorus objective for Vancouver Island streams. KW noted that it will need to be met at the end of the dilution zone for a freshwater discharge. It was agreed that further discussions with Deb Epps, MOE Environmental Quality Section Head (West Coast Region), would be required to determine whether the objective will apply here, given the unique tidal influences; an examination of the salinity profile and other characteristics may be required. KW will follow-up with Deb Epps and set-up a meeting between her and AE project personnel, to be held as soon as possible.

**3.3 LONG-TERM PLANNING**

Info SF asked about whether there are plans to ultimately eliminate the lagoon in favour of a mechanical plant and how that might influence the short-term plans and/or design. It was noted that prior work had considered mechanical treatment alternatives, but this alternative was deemed to be cost-prohibitive. There was also some discussion about potential reuse of infrastructure, such as conveyance systems and equipment, should a mechanical plant be built in the future.

**3.4 INDUSTRIAL LAGOON UPGRADES**

Info RA asked about current plans to reconfigure and/or dredge the industrial lagoon as part of the implementation plan. GC confirmed that it will be dredged, likely in the near future, but not likely reconfigured.

**3.5 OTHER REGULATORY CONSIDERATIONS**

Info It was agreed that combined sewer overflows (CSOs) are to be addressed as part of the LWMP.

HH/KW KW indicated that she is concerned about regulatory non-compliance should the current discharge channel be perceived as a natural stream rather than a man-made channel; the integrity of the current man-made channel is in question, especially because of tidal influences. This is another topic for discussion with the MOE's biologist.

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Info

KW agreed that a simple mixing model combined with some field measurements will provide adequate comparison between a side-channel versus middle-channel discharge, for regulatory purposes.

**3.6 LOW-FLOW SAMPLING**

JT/HH

LC noted that it should be possible to sample during low flows in the Somass River this year as the snowpack is already melted. He also noted that the low flow level is controlled/set by the dam on Great Central Lake. It was agreed that low-flow sampling would be conducted, likely in late August or early September.

**3.7 MILESTONES**

QC/TR

It was agreed that AE would identify tentative milestone dates and provide these to the MOE. KW requested that these include completion of the LWMP Stage 2 and Stage 3 documents, as well as presentation to Council and the public.

**3.8 NEXT MEETING**

It was agreed that the next WAC meeting would tentatively be planned for early September.

Prepared by:

Reviewed by:



Quinn Crosina, M.A.Sc., P.Eng.  
Environmental Engineer



Tom Robinson, M.A.Sc., P.Eng.  
Project Manager

QC/TR/lp