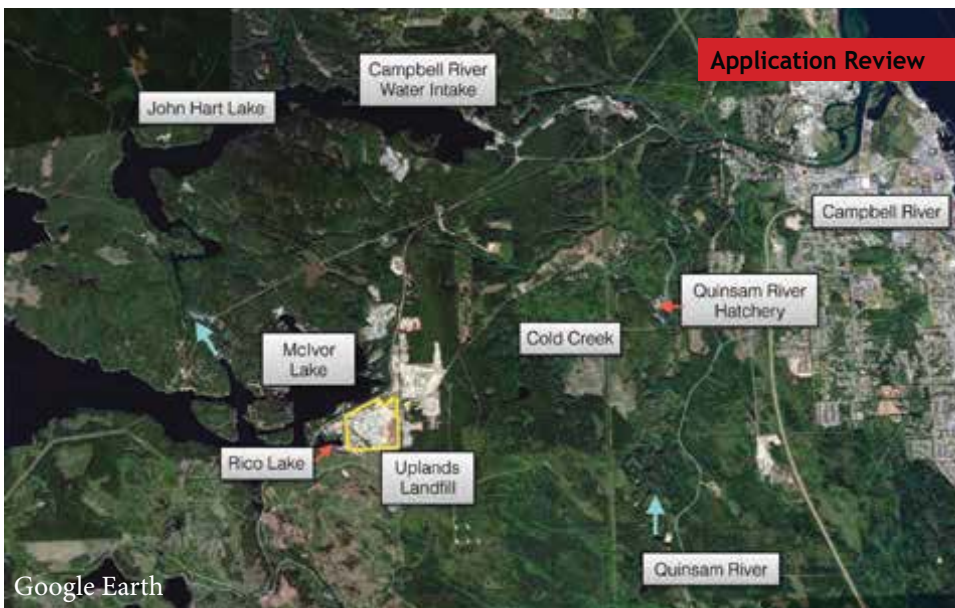


Landfill Déjà Vu

Campbell River gravel pit applies to hold toxic wastes



Ask Minister of Environment George Heyman to protect BC's drinking water at www.crecweb.com/reports

by Leona Adams

Campbell River's drinking water and salmon habitat may be at risk from a gravel-pit-turned-landfill, owned by Upland Excavating Ltd. (Upland). The Campbell River Environmental Committee (CREC) is ringing alarm bells about the recent, possibly unpermitted, dumping of toxic creosoted timbers and medical waste there. CREC is also concerned about plans to use the site, which sits next to the community's drinking water supply, for long-term storage of potentially contaminated construction and demolition waste and contaminated soils.

Upland has applied to the Ministry of Environment (MOE) for an Operational

Certificate to upgrade their site to a landfill and to store contaminated soil as well as demolition waste which can be contaminated (including with hydrocarbons). The application is similar to the one for the Operational Certificate at Shawnigan Lake landfill that MOE gave and finally cancelled due to contaminants leaving the site, causing a do-not-use-water advisory.

The proposed landfill is located at 7295 Gold River Highway, Campbell River, BC. It is adjacent to Rico Lake to the west, which drains to McIvor Lake, Campbell River's drinking water supply, during the rainy season.

The final elevation of the proposed landfill is above Rico Lake and McIvor lakes. Proposed ditches and swales rated for a 1-in-100-year rainfall will not handle Campbell River's precipitation, which BC Hydro identified as having two 1-in-150-year rain events in November 2016.

Upland's site sits over a large sand and gravel high-vulnerability class IIA aquifer, with west groundwater drainage to Rico Lake and east groundwater drainage to Quinsam River and to Cold Creek, which feeds the DFO Quinsam River Fish Hatchery.

Although background sediment sampling should be a basic application requirement, no sediment sampling in Rico Lake or McIvor Lake has been required for comparison in future years. Also, sampling in small creeks to the east has not been required.

Leachate could exceed Contaminated Sites Regulations. Sulphate, chloride and manganese are identified as untreatable. Parameters are proposed to meet drinking water CSR guidelines, but not the BC aquatic guidelines.

The response from the MOE points out that under the Regional District Waste Plan, Upland is required to upgrade to satisfy current ministry guidelines, including upgrading to an engineered lined landfill with leachate collection and treatment. That is correct, but the upgrade should not increase the quantity of waste from 3,200 cubic metres a year to 25,000 cubic metres a year, nor from inert waste

Once the timbers were removed from the dam they were stockpiled and then moved to a disposal site

to waste that may be contaminated and to contaminated soil, as Upland's application proposes. Liners have been known to fail. A 2001 Environment Canada publication stated: "It is now accepted that all landfills will eventually release leachate to the surrounding environment...."

Engineer and expert hydrogeologist Dr. Gilles Wendling finds that critical data is missing from the reports from Upland's consultant, GHD. Upland's own third-party hydrologist agrees with Dr. Wendling that more investigation is needed to the west and east of the site Rico Lake and Campbell River's water supply are still at risk.

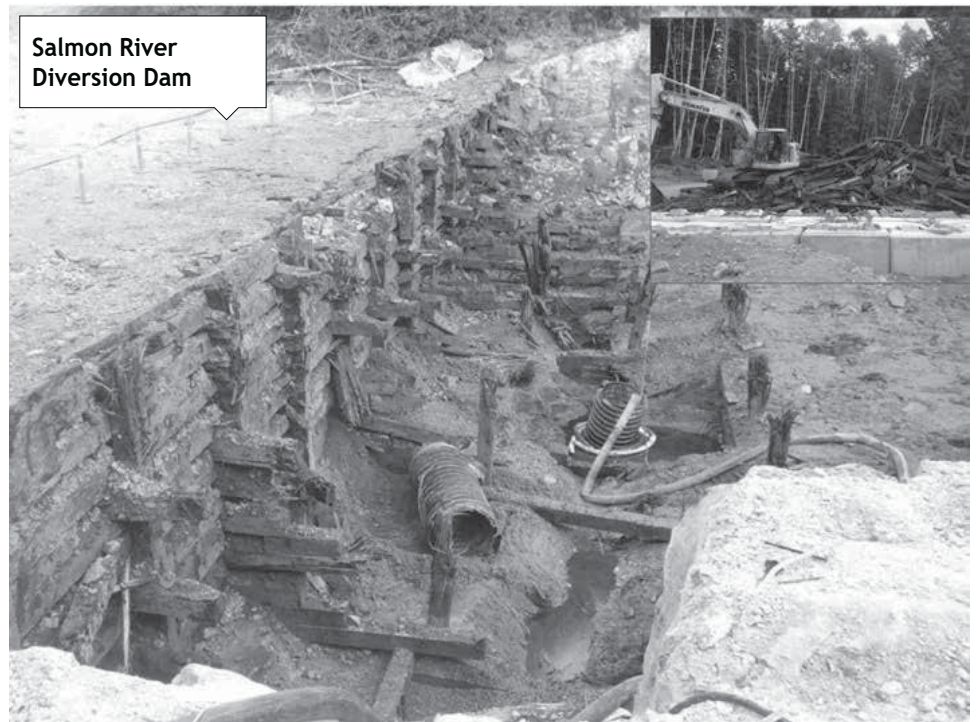
Creosote and medical waste

In August 2017, Upland deposited contaminated coal-tar creosoted timbers from the decommissioning of BC Hydro's Salmon River Dam into the upper level of their site.

When CREC notified the MOE of this non-compliance, we were informed that similar waste has been allowed at Upland's site regardless of Upland's existing permit that waste must be inert and also only deposited in the centre of their gravel pit. (We were also told that similar sites in BC have been allowed to deposit similar waste – so if you have a private landfill in your community you may wish to check it out.)

CREC was then informed by the Minister's office that "inert" meant that the waste will not leach to any significant extent. However, it was reported in the local paper that workmen became ill when removing those timbers.

BC Hydro tested the pools of contamination, seen in a decommissioning picture, to be hydrocarbons (creosote). Also, giv-



en the date the timbers were installed, there would be 40 years worth of creosote left in the timbers to continue to leach. The MOE accepted Upland's consultant's testing of the creosoted timbers to be significantly below acceptable standards.

The MOE compliance team inspected Upland's site and labelled the deposit of the creosoted timbers "compliance to be determined." While the inspector was there, the deposit of medical waste was observed and even though a picture in the Compliance Inspection Report showed medical waste with needles, MOE compliance called it "possible medical waste" with "compliance to be determined."

Professional reliance

When we had a change of government in BC, we thought nothing like the Shawnigan Lake landfill's risk to our drinking water would happen again. Sad-

ly, it looks like we may be wrong. I fear we still have to fight for the protection of our drinking water and salmon habitat and that the MOE will approve Upland's application, even though told by two out of three hydrogeologists that more investigation is needed.

This is a good example where the professional reliance model has failed, and continues to fail. Errors have been found in the Uplands and GHD application process, not by MOE, but rather by CREC. Risks to the only source of drinking water for Campbell River are real, and if fears prove true, there is no mitigation.

Leona Adams was born in Campbell River, BC. She has been the president of the Campbell River Environmental Committee since 2011 and was awarded the City Stewardship for Environmental Excellence award in 2013. Sal