

Campbell River Environmental Committee Concerns with Upland Excavating Ltd. Application

Upland Excavating Ltd. has applied to the Ministry of Environment to landfill 25,000 cubic meters a year of solid non-hazardous waste (including construction and demolition waste, land clearing debris and contaminated soil) and to collect and treat the leachate at its site at 7295 Gold River Highway, Campbell River. The site is located within the Campbell River and Quinsam River Watersheds, and sits over a large sand and gravel High Vulnerability IIA Class Aquifer. This classification means that the aquifer has high vulnerability to contamination from surface sources.

An Environment and Climate Change Canada Publication from 2010 states, "Among the more significant point sources [of groundwater contamination] are municipal landfills and industrial waste disposal sites. When either of these occur in or near sand and gravel aquifers, the potential for widespread contamination is the greatest."

The proposed landfill is in an area sensitive to our drinking water, the Quinsam River Hatchery water supply and the Quinsam/Campbell Rivers fishery values. Given the importance of maintaining and protecting Campbell River's domestic water supply, this proposal must be subject to the Precautionary Principle .

Rico Lake, abuts Upland's west border and drains west into McIvor Lake. Rico Lake, with a full reservoir, is higher than McIvor Lake, the source of Campbell River's drinking water. Rico Lake is only 66 feet away from McIvor Lake with a natural groundwater pathway through permeable geology.

Upland's Operational Report identifies western drainage and, "A contrast in site topography is observed along the western property boundary and at the south east corner of the site." "A portion of the western property boundary dips steeply west towards Rico Lake."

Upland's site is a gravel pit excavated to 20 or 30m. Rico Lake elevation is currently higher than the bottom of their gravel pit, but the contaminated waste and soil would fill up their site by 28m.

Eastward groundwater flow is identified in Upland's reports. Upland stated that it will take 5 3/4 years for the groundwater to reach the Quinsam River, 4km away. Groundwater will also flow to Cold Creek, 2km away, which feeds the \$100 million Quinsam River Hatchery. This could, over time, impact the pink salmon and steelhead Quinsam River fishery.

Upland's report identifies parameters that are forecast to exceed BC Contaminated Sites Regulation Criteria in untreated leachate, such as Ammonia, Chloride, Phenols, Sulphate, LEPH, Arsenic, Boron, Copper, Iron, Magnesium, Manganese, Sodium and Zinc. The report also states that treatment of some of these parameters may prove ineffective.

Upland's Design, Operation and Closure Plan (DOC) provides that common contaminants in contaminated soil include metals, PAHs (polycyclic aromatic hydrocarbons) VOHs (Volatile organic compounds) and PHCs (Petroleum Hydrocarbons). Some hydrocarbons are not compatible with the HDPE liner, depending on their strength.

This application requires Upland to apply for re-zoning from the City of Campbell River. CREC is asking the City for an independent professional risk assessment. For further information see www.crecweb.com