

May 11, 2017 Reference No. 088877

Mr. Joseph Baratta Environmental Health Officer Health Protection and Environmental Services #200 – 1100 Island Highway Campbell River, BC V9W 8C6

Dear Mr. Baratta:

Re: Response to Letter dated January 27, 2017
Upland Landfill – Waste Discharge Application
7295 Gold River Highway, Campbell River, British Columbia

GHD Limited (GHD) has prepared this letter on behalf of Upland Excavating Ltd. (Upland) to respond to a letter dated January 27, 2017 to the Ministry of Environment (MOE) from Island Health (Vancouver Island Health Authority) (VIHA). The letter is provided in Attachment A.

Upland and GHD have reviewed the VIHA letter and would like to thank you for your interest in the project. Upland and GHD understand you have been following the project through the two Public, Agency, and First Nation Consultation programs implemented by Upland and have reviewed the hydrogeological review completed by GW Solutions.

In this letter, we attempt to provide you with some additional information that is responsive to your comments in your January 27 letter.

Background

GHD and Upland have completed an extensive field work program to characterize the site hydrogeological, hydrological, and geologic conditions. This program included advancing 16 boreholes, installing 13 monitoring wells, logging nine test pits, completing three environmental monitoring events, a survey of the topographical surface, a surface water biological assessment, and six ground water level monitoring events. The data collected from this field work was compiled and analyzed to characterize the site conditions, which is reported in the updated Hydrogeological and Hydrology Characterization Report. In addition a detailed Design, Operation and Closure Plan was prepared to present the conceptual design of the landfill including the base liner and cover systems, the leachate and surface water management plans, environmental monitoring plan, contaminating lifespan assessment, and other plans, as required by the MOE's Landfill Criteria for Municipal Solid Waste Landfill, Second Edition (June 2016).

Stakeholder Comments

All comments received from the Campbell River Environmental Committee, the City of Campbell River, and other stakeholders have been reviewed by GHD and in some cases, additional information was collected to supplement the investigations and support the design. For example, a biologist was retained to complete a field level aquatic receiving environment assessment.





Response to Island Health Letter

Your January 27 letter references an October 17 review by Dr. Wendling, of GW Solutions. Dr. Wendlings concerns have been addressed through development of additional information including additional hydrogeological, geologic, and hydrologic investigation. The results of the additional investigations and studies are provided in updated technical reports that will be provided to the MOE. The landfill design and ancillary operations have been developed to be protective of the receiving environment, including the Quinsam River Watershed.

Our hydrogeological and hydrological investigations have shown that groundwater and surface water from the vicinity of the landfill do not flow to the Campbell River Watershed (ie. Rico Lake, McIvor Lake, John Hart Lake).

We hope this letter is of assistance. The MOE has advised it will be reviewing your letter and our response as part of its review of the application and supporting reports. Should you have any additional questions please do not hesitate to contact us.

Shauna Sturgeon, P. Eng.

Sincerely,

GHD

Gregory D. Ferraro, P. Eng.

SS/sz/01

Encl.

cc: Allan Leuschen – Ministry of Environment

Terry Stuart – Upland Excavating Ltd. Mark Stuart – Upland Excavating Ltd. Brian Fagan – Upland Excavating Ltd

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Attachment A <u>Island Health Letter</u>



January 27, 2017

BC Ministry of Environment Environmental Protection Division Al Leuschen - Authorizations Environmental Protection Officer 2080-A Labieux Road Nanaimo, BC V9T 6J9

Dear Mr. Leuschen:

Re: Upland Landfill – Proposed Operational Certificate for Solid, Non-Hazardous Waste Landfill. 7295 Gold River Hwy. Campbell River, BC. Authorization #: 107689

Our office is contacting to follow up the October 17, 2016 Review of Upland Excavating Landfill Application Technical Assessment Reporting by GW Solutions, Gilles Wendling, Ph.D, P.Eng.

The Report by Dr. Wendling indicates a number of potential issues around information to make an informed decision on the proposal, most notably related to site hydrology. In terms of watershed protection our office is in support of addressing these potential issues before granting or altering the proposed Operational Certificate.

Please continue to keep our office informed of the status of this development project.

If there any questions please feel free to contact me at (250)850-2106.

Sincerely,

Joseph Baratta

Environmental Health Officer

c.c.:

- Charlene Mackinnon Island Health, Senior Environmental Health Officer (Email copy)
- Brian Fagan Upland Excavating Ltd., 7295 Gold River Hwy, Campbell River, BC V9H 1P1
- Jennifer Peters City of Campbell River, Utilities Manager (Email copy)