



Environment Canada **Environnement Canada**

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Via Email

RE: NWB2HIG – Wolfden Resources Inc. – High Lake Project – Amendment – Type B

On behalf of Environment Canada (EC), I have reviewed the above mentioned application. The following specialist advice has been provided pursuant to Environment Canada's mandated responsibilities for the enforcement of the *Canadian Environmental Protection Act*, Section 36(3) of the *Fisheries Act*, the *Migratory Birds Convention Act*, and the *Species at Risk Act*.

Wolfden Resources Inc. is applying for an amendment to its High Lake Project licence to allow drilling within 30 m of the high water mark of water bodies and to increase the maximum allowable depths of these drill holes from 20 m to 300 m. The proponent intends to analyze the subsurface conditions of potential dam-sites and as a result, requests that the terms and conditions stated in Part F of its licence which relate to its geotechnical program be revised.

Environment Canada finds the proponent's proposal to drill within 30 m of water bodies for the purpose of acquiring geotechnical data to be acceptable so long as certain terms and conditions are followed. Given that drilling operations will likely be subjected to permafrost conditions and that salts may be required to prevent the freezing of drill water, the proponent should adopt mitigation measures which address the full management of this material so that any receiving waters will not be impacted. Surface and sub-surface movement of any drill fluid should be addressed. Furthermore, the proponent should take measures to ensure that sedimentation and/or erosion does not occur as a result of drilling operations or the discharge of drill water.

Environment Canada considers the proponent's request to increase the allowable depths of drill holes used for geotechnical purposes within 30 m of the high water mark of water bodies to be acceptable. The proponent is reminded that there is no depth restriction for exploratory drilling because such operations must occur beyond 30 m of the ordinary high water mark of any water body. If the NWB decides to approve the amendment, Wolfden Resources Ltd. is reminded that all project activities must comply with Section 36(3) of the *Fisheries Act* at all times. This section states that the deposition of deleterious substances of any type in water frequented by fish, or in any place under any conditions where the deleterious substance, or any other deleterious substance that results from the deposit of the deleterious substance, is prohibited.



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Environment Canada also recommends that if the NWB approves the request, the terms / conditions outlined in Part F. Item 3 be applied to this amendment. It is also recommended that the proponent be required to submit a map outlining the location of any boreholes drilled within 30 m of any water bodies. This will allow the NWB to track the number of boreholes being drilled in close proximity to water bodies.

If there are any changes in the proposed project, EC should be notified, as further review may be necessary. Please contact Colette Spagnuolo should you have any questions or comments with regards to the foregoing at (867) 975-4639 or by email via colette.spagnuolo@ec.gc.ca.

Sincerely,

David W. Abernethy
Environmental Assessment Technician

CC. Colette Spagnuolo – Environmental Assessment / Contaminated Sites Specialist, Environment Canada, Iqaluit