

January 21, 2016

Sharon Chambers, CAO
Township of North Huron
P.O. Box 90, 274 Josephine Street
Wingham, ON
N0G 2W0

Re: Howson Dam – LRIA requirements

Dear Sharon,

Further to our meeting on October 16, 2015 to discuss the Howson dam, I committed to confirm the approval requirements under the *Lakes and Rivers Improvement Act* (LRIA) for any repairs that may be proposed for the dam and whether a stability analysis would be a requirement of that approval process.

Regulation 454/96 under the LRIA states that approval is required to make alterations, improvements or repairs to the dam, if the alterations, improvements or repairs may affect the dam's safety or *structural integrity*, the waters or natural resources.

The Ministry has created a procedure to assist in the administration of applications and approvals under the LRIA (see attached) which identifies minor works that are not subject to LRIA approval which includes:

“Minor concrete repair/spalling-isolated repair to area(s) less than 15m², have a penetration depth not exceeding 75mm, and/or involve exposure or replacement of reinforcing steel and have a total area(s) not to be comprised of more than 15% of the total concrete surface area of the dam”.

Concrete repairs exceeding these amounts require approval, since they may affect the dam's structural integrity.

Approval may be granted if an improvement to a dam meets or exceeds Ministry standards. The Ministry's current structural criteria for concrete dams are described in the “Technical Bulletin for Structural Design and Factors of Safety, MNRF, 2011. Addressing the structural requirements requires consideration of the Inflow Design Flood (IDF), which in turn requires consideration of the Hazard Potential Classification (HPC). These requirements are described in the Technical Bulletin for Classification and Inflow Design Flood Criteria, MNRF, 2011.

If the proposed repairs exceed the definition of minor works outlined in the procedure and approval is required under the LRIA, a stability analysis would be required to meet the requirements within the above listed technical bulletins.

If you have any further questions or concerns, please do not hesitate to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read 'Rose Whalen', with a long horizontal flourish extending to the right.

Rose Whalen
Lands and Waters Technical Specialist
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c. Stephen Jackson, Maitland Valley Conservation Authority

Encl.