



December 8, 2015

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Reference No.: 218965

Stephen Ricketts  
Manager of Construction  
Engineering and Public Works  
City of Nanaimo  
455 Wallace St  
Nanaimo BC V9R 5J6

Via Email: Stephen.Ricketts@Nanaimo.ca

Dear Mr. Ricketts:

**Re: Middle & Lower Chase River Dam – April 29, 2015 Order Compliance Update/Next Steps**

Thank you for your letter dated November 20, 2015, updating our office on the City of Nanaimo's ("the City") compliance to date with our April 29, 2015 Order ("Order") and requesting an extension to the Order's November 15, 2015 date for substantial completion of required remedial work on Middle and Lower Chase River Dams.

Your letter includes; the City's progress on Lower Chase River Dam's (Lower Dam) remediation (i.e., the Auxiliary Spillway), a list of further work required for completion of the Auxiliary Spillway, a preliminary construction schedule, mention of a planned OMS manual and EPP update, mention of a planned interim Emergency Plan and mention of a planned follow-up letter regarding the requirements for the Middle Chase River Dam (Middle Dam).

The Order requires the City to substantially complete remediation of Lower Dam's potential safety hazard by November 15, 2015. The remediation option accepted was the construction of an Auxiliary Spillway by that date. Your letter outlines steps taken by the City so far towards implementing that option and requests an extension of the Order's substantial completion date from November 15, 2015 to April 15, 2016 (dependent on weather).

Our office has reviewed your request for further time to complete the Auxiliary Spillway and, taking into account progress made to date towards completion, would be prepared to accede to the City's request provided the City continues making best efforts to meet the requirements of the Order on the schedule outlined in its letter. We recognize that this remediation option does not interfere with the capacity of the existing Lower Dam spillway and, as noted by the City, if necessary in the event of an emergency, steps can be taken to augment that capacity by widening the "fuse plug" installed by the City. The City must update this office on a monthly basis and continue to demonstrate progress on a best efforts basis towards meeting the construction schedule milestones and the other steps outlined in its letter.

Please also ensure that the conditions of the September 15, 2015 Approval, under Section 4 – *Alternation of a dam*, BC Dam Safety Regulation, continue to be followed including:

- *The licensee shall ensure that a professional engineer registered in the province of British Columbia supervises construction of the project;*

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- *An interim Operation, Maintenance and Surveillance Manual and Emergency Preparedness Plan must be prepared prior to the operation of the auxiliary spillway;*
- *A final Operation, Maintenance and Surveillance Manual and Emergency Preparedness Plan must be prepared and submitted to the Dam Safety Officer, Victoria BC, for acceptance within one year of the completion of the Auxiliary Spillway Project.*

Your letter states that a follow-up letter regarding the requirements for the Middle Dam conceptual plan and implementation plan can be expected soon. Please be reminded of the remaining conditions of the Order in reference to Middle Dam, namely:

2. *The City must undertake the following actions in relation to Middle Dam:*

- a) Prepare and submit to this office **by the end of 2015**, a revised conceptual plan that identifies and prioritizes any actions required to correct the potential safety hazard with Middle Dam, along with a timeline for taking those actions within a reasonably expeditious time frame, timed to follow after completion of actions to correct the potential safety hazard with Lower Dam; and*
- b) Implement the revised plan for Middle Dam, based on the priorities identified in the plan, within a reasonably expeditious time frame but **no later than the end of 2017**, and in accordance with Section 4 and 7.1 of the B.C. Dam Safety Regulation, as applicable to any alteration, improvement or replacement to all or any part of the dam intended to correct a potential safety hazard and which must be implemented in a timely manner.*

Finally, as referenced in your letter of November 20, 2015, we received from the City the technical memorandum prepared by Golder Associates describing the trigger levels for activation of the emergency fuse plug spillway at the Lower Chase River Dam on November 30, 2015. As stated in an email reply to you from Scott Morgan on December 1, 2015, the proposed emergency fuse plug spillway is an acceptable interim measure to prevent overtopping of the Lower Dam during an extreme flood event for the period prior to completion and commissioning of the auxiliary spillway, and the Interim Operation, Maintenance and Surveillance Manual and Emergency Preparedness Plan incorporating this interim measure is to be submitted to this office for review no later than end of day December 8, 2015.

Please note that the City must continue employing best efforts to complete the Auxiliary Spillway. This work is to address a potential safety hazard and time therefore remains of the essence. By extending the time allowed for substantial completion to April 15, 2016, I do not consent to any waiver of the other requirements of the Order.

Yours truly,



Glen Davidson, P.Eng.  
Comptroller of Water Rights

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