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February 03, 2021

CIAR: 80123

Jennifer Howe Project Manager Impact Assessment Agency of Canada Canada Place Suite 1145, 9700 Jasper Avenue Edmonton, AB T5J 4G3

Sent by email to: Jennifer.howe@canada.ca

## Subject: Health Canada's Review of Draft Environmental Assessment Report and Potential Conditions for the Springbank Off-Stream Reservoir Project

Dear Jennifer Howe:

Health Canada (HC) is participating in the environmental assessment of Alberta Transportation's (the Proponent) proposed Springbank Off-Stream Reservoir Project (the Project), as a federal authority under the *Canadian Environmental Assessment Act, 2012* (CEAA 2012).

As requested on January 4, 2021, HC has reviewed the draft Environmental Assessment Report (the Report) and draft potential conditions for the Project as it relates to HC's following areas of expertise: human health risk assessment, as well as human health impacts from noise, contamination of country foods, water quality and air quality health effects. HC has provided comments on the Report and draft potential conditions in the attached table (Attachment 1: Health Canada's Comments on the Draft EA Report and Potential Conditions for the Springbank Off-Stream Reservoir Project).

Should you have any questions regarding HC's comments, please contact Graham Irvine who can be reached at <u>graham.irvine2@canada.ca</u> or (780) 278-4906.

Sincerely, <orginal signed by>

Brenda Woo Regional Manager Health Canada Phone #: 780-288-3541





Email: <u>brenda.woo@canada.ca</u>

CC:

Melissa Gorman, A/Senior Environmental Health Specialist, HC Hsin-Ming Yeh, Environmental Assessment Coordinator, HC Graham Irvine, Regional Environmental Assessment Specialist, HC



ID	Reference	Comment
HC-1	Draft Environmental Assessment (EA) Report Section 6.1.1 pp. 46	The draft EA report states: "…that may be above the federal guidelines (Health Canada Mitigation Noise Level)."
		This sentence refers to noise generated during the construction period. The mitigation noise level calculation found in Health Canada's noise guidance (Health Canada 2017) may not be appropriate as it refers to short-term construction noise lasting less than 1 year. While some areas of construction have a shorter than 1 year period, the entire construction period of this project will be greater than 1 year and should therefore be considered operational noise. In this case, the percentage change in highly annoyed (%HA) was used appropriately by the proponent. Thus, the EA report should remove reference to the Health Canada Mitigation Noise level and federal guidelines. Exceedances of either the Mitigation Noise Level standard or the percentage change in %HA may result in widespread complaints from the community.
		Health Canada recommends revising the previous sentence to:
		"that may <del>be above the federal guidelines (Health Canada Mitigation</del> Noise Level) exceed thresholds within Health Canada noise guidance where widespread complaints may occur."
		Reference: Health Canada 2017. Guidance for Evaluating Human Health Impacts in Environmental Assessment: Noise. Available at: <u>https://www.canada.ca/en/health-canada/services/publications/healthy-living/guidance-evaluating-human-health-impacts-noise.html</u>
HC-2	Draft EA Report Section 6.1.2 pp. 47	The draft EA report lists the following as a mitigation measure:



		"Dust generating construction activities will be suspended during periods of excessive wind should dust suppression measures not be working adequately."
		Health Canada suggests that the Agency define the term <i>excessive wind</i> in the final EA report or provide a condition that requires the proponent to develop a wind speed metric where construction activities are to be suspended.
HC-3	Draft EA Report Section 6.1.3	Under Views Expressed, the draft EA report states:
	pp. 49 Section 6.1.4 pp. 51	"Health Canada also recommends that in addition to the mitigation measures proposed by the Proponent, a formalized complaint-response protocol be implemented with monitoring and mitigation measures defined in the event of complaints."
		The recommendation made by Health Canada was specific to noise. Additionally, the following section includes a formalized complaint response protocol as a key mitigation measure with no mention of the protocol referring to noise. Both of these statements should refer specifically to noise. Health Canada recommends that the statement be specified as a noise complaint-response protocol and suggests the following revision:
		"Health Canada also recommends that in addition to the mitigation measures proposed by the Proponent, a formalized noise complaint- response protocol be implemented with monitoring and mitigation measures defined in the event of complaints."
HC-4	Draft EA Report Section 6.1.3 pp. 49	Under Views Expressed, the draft EA report states:



	& Section 6.1.4 pp. 50	"Health Canada also stated that the Alberta Ambient Air Quality Objectives or the Canadian Ambient Air Quality Standards should not be used as triggers to implement mitigation measures as human health risks exist below these levels."
		However, the following section, Analysis and Conclusion, includes these mitigation measures:
		• "The plan will include Canadian Ambient Air Quality Standards as targets, mitigation and monitoring of several criteria air contaminants identified as being of potential concern or importance to the Project."
		• "It will describe mitigation measures that will be implemented, monitoring methods, and adaptive management methods if criteria air contaminants exceed targets, based on the Canadian Ambient Air Quality Standards."
		This mitigation measure differs from the view expressed by Health Canada, as Canadian Ambient Air Quality Standards (CAAQS) should not be viewed as levels to pollute-up-to or used specifically as targets, as risks exist below those levels. Health Canada recommends that the proponent develop mitigation targets (i.e. trigger levels) that are informed by pre-project baseline concentrations and other considerations, including the air zone management levels (refer to comment HC-5).
HC-5	Draft Potential Conditions Section 6 pp. 14	The CAAQS are the main reference point for air quality, however, analysis of local air quality in relation to the air zone management levels for each pollutant would provide additional context in evaluating the impact of a project and developing an air quality management plan. It is important to note that the

statistical form of the CAAQS (3-year average) may not be appropriate for developing trigger levels for risk mitigation. Trigger levels should be informed by pre-project baseline concentrations and other considerations. Nevertheless, Health Canada is of the opinion that the air zone management levels can still be useful as guidance to inform the selection of trigger levels.
Health Canada recommends that the wording on condition 6.4.5 is changed to the following:
Consider the use of the Canadian Council of Ministers of the Environment' Canadian Ambient Air Quality Standards management levels for nitrogen dioxide and fine particulate matter (PM2.5) and the Canadian Ambient Air Quality Standards Air Zone Management Framework as general guidance to determine if modified or additional mitigation measures are required based on the results of monitoring conducted in accordance with conditions 6.4.2 and 6.4.3.