

1 May 2019

Environmental Assessment & Stewardship Branch
Ministry of Environment
3211 Albert Street
Regina, SK S4S 5W6
Attn: Mr. Brady Pollock, Director

Comments: CanPacific Potash- Project Albany – Environmental Assessment

The extension of the review period to 15 May 2019 is appreciated, given the complexity of the proposed project and the scale and time frame of the environment impacts involved.

The Environmental Assessment as submitted should not be approved by Saskatchewan Environment & Stewardship, and the Proponent required to conduct a meaningful Residual and Cumulative Effects analysis, so that a proper evaluation of the long term effects of this project can be realized.

The following issues are brought to the attention of review team of Saskatchewan Environment & Stewardship, and to CanPacific Potash Corporation, and SNC-Lavalin Inc., concerning the planning, design, operation and abandonment of the proposed Project.

The residual and cumulative impacts of the proposed mine, and of the potash mining sector, are not meaningfully presented, assessed nor reviewed and include:

- Consumption almost one billion cubic meters of high quality fresh water,
- Generation of hundreds of millions of cubic meters of brine,
- The operation of a brine injection system in perpetuity,
- The abandonment of millions of cubic meters of waste salt on the land surface.

Thus the proposed project design and the assessment do not address future hazards and the long term impacts to:

- Native grasslands; these ecosystems are poorly protected in Saskatchewan, are the fastest disappearing ecosystem in Canada at risk in SK from agriculture, industrialization, urbanization and other land uses;
- Natural wetlands and riparian ecosystems; particularly in the arid southern portions of the province, are under protected, disappearing and at risk from agriculture practices, unregulated drainage, industrialization, urbanization, and other land uses;
- Furthermore, comments in the Technical Review (page 10), the Proponent ascribing the study area terrain as having agricultural limitation is inappropriate for an environmental impact assessment. This assessment of terrain must consider the role and value of the natural ecosystem's sustainability, and in particular it's resilience and capability to adapt to or mitigate climate change events, particularly in arid southern SK;
- Altered natural landscapes, particularly cultivated lands are at higher risk of salinization through exposure to brine and waste solid salt, post project, forever;
- Almost one billion cubic meters of high quality fresh water will be lost forever by the proposed mining and extraction processes;

- Surface water and shallow groundwater will be at risk of salt contamination, through exposure to brine and waste solid salt pile, post project, forever,
- The prairie landscape altered forever by another massive abandoned waste salt storage pile, forever, as already demonstrated by all the potash mines in the province.

Residual and Cumulative and Effects:

The weak and narrow analysis of Residual and Cumulative Effects by the Proponent, and the acceptance of same by Technical Review is unacceptable. The Environmental Assessment process must evaluate the risks of the long term effects of a project.

To quote, ‘Given the uncertainties associated with predicting cumulative impacts, particularly for activities undertaken by individuals or companies other than CanPacific, reviewers are satisfied with the assessment of cumulative effects presented in the EIS.’ and, ‘satisfied by the assessment of the potential for the environment to impact the Project and the mitigations proposed to prevent or minimize impacts.’ (page 19, Technical Review)

To evaluate the long term risks of this Project, the Saskatchewan Environment should require the Proponent to meaningfully research and provide information on the following:

1. The EA has no meaningful Residual or Cumulative Effects analyses of the Project on the incremental and long term effects of the destruction of native grasslands and vulnerable wetland habitats, the threats to surface and shallow groundwater, cultivated lands, and, the consumption of fresh water used for the potash extraction and treatment processes, particularly in view of ecosystem sustainability, and historical and projected climate change effects in southern SK.
2. The Proponent proposes no alternatives to avoiding the Residual Effects of the loss of and impacts to native grasslands, riparian areas and wetlands; are vague about ‘offsets’ to these impacts, and provide no evidence that such ecosystems can be reclaimed post project. The Technical Review blandly agrees that these complex ecosystems can and will be recreated post-project, where no evidence has been provided in the EA that any Potash Mine in the province has restored damaged areas to sustainable natural grassland, riparian or wetland ecosystems
3. The legacy of yet another massive abandoned Salt Storage Pile for our province, for this project possibly reaching 260,000,000 m³ (400ha x 65m) in size by the termination of mining. From the EA ... ‘It is estimated that in excess of 500 years will be required to naturally dissolve and inject the brine to the point where a sustainable vegetation cover can be established..’ Who will operate the ‘deep injection disposal wells for the next 500 years? The Proponent speculates that at least 280ha underlying the SSA will be permanently lost. Yet, the Technical Review judges that waste salt pile is does not have a ‘Residual Effect’, nor considered a threat to the quality and integrity of the landscape, vegetation, soils or shallow groundwater.
4. The impact of the Salt Storage Pile has not been addressed in a Cumulative Effects analysis for this project for its’ incremental addition on the total volume of waste salt

extant at potash mines in the province, nor for inclusion in the total volume of waste salt that will be abandoned by the Potash industry in this province. The legacy of this Project is yet another abandoned, massive waste salt pile to threaten and contaminate vegetation, soils and shallow groundwater.

The EA process must assess the long term effects and impacts of the amount of precious fresh water this project will consume, and the true threat to the grasslands, wetlands, and cultivated lands it will place at risk.

The Residual and Cumulative Effects of the design, operation and abandonment of this Project have not been adequately identified nor assessed, and the EA should be rejected.

Yours truly,
John C.M. Patterson

A handwritten signature in black ink, appearing to read 'John C.M. Patterson', written in a cursive style.

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