Alberta Energy Regulator

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BY E-MAIL ONLY

December 18, 2017

Rose Ross
Athabasca Chipewyan First Nation

CANADIAN NATURAL RESOURCES LTD.
APPLICATION NO. 1869003
STATEMENT OF CONCERN NO. 30491

Dear Rose Ross:

You are receiving this letter because you filed a statement of concern (SOC) on behalf of the Athabasca Chipewyan First Nation (ACFN) concerning the subject application filed by Canadian Natural Resources Ltd. (Canadian Natural). The Alberta Energy Regulator (AER) is appreciative of ACFN's contributions during the review of the application, including your feedback on the draft approval conditions.

The Alberta Energy Regulator (AER) has reviewed your SOC and feedback, along with the application, the applicable requirements, and relevant materials constituting the record of the application. The AER notes that after reviewing the draft approval conditions, you identified certain outstanding concerns and provided a technical review. The AER's decision report on the application sets out the AER's views and findings on a number of issues, including many of the concerns you raised, such as the following:

- Canadian Natural's proposed future application for a northeast pit extension. The AER's views on the proposed extension is found in the Fluid Tailings Profiles and Project-Specific Thresholds - Profile for New Fluid Tailings section of the decision report, including the finding that concerns with the extension can be raised by filing an SOC in relation to that future application, if it is submitted.
- uncertainty associated with the use of non-segregated tailings (NST) technology, and CO_2 spiked NST technology. The AER's decision on these matters is found in the Fluid Tailings Treatment Technology - Technology Selection, NST and MFT-Spiked NST Technology, and CO_2 Injection sections of the decision report, which include specific reporting requirements.
- fluid tailings inventory and pace of management is not in alignment with *Directive 085*. The AER's decision regarding fluid tailings at end of mine life is set out in the Fluid Tailings Profiles and Project-Specific Thresholds - Profile for New Fluid Tailings section of the decision report.

- the use of End pit lakes (EPLs) as the final treatment for storage of mature fluid tailings (MFT). The AER's decision is found in the Fluid Tailings Treatment Technology - Water Capping section, which prohibits Canadian Natural from placing any water, including industrial wastewater, above treated or untreated tailings for the purpose of creating an aquatic closure landscape.
- the need for additional information regarding the return of process affected water to the environment, and holistic water management including salinity impacts. AER's decision is found in the Ready to Reclaim Criteria - Subobjective 2, the Fluid Tailings Treatment Technology -Capping Material Availability, and the Environmental Effects and Implications - Surface Water and Groundwater sections, which include reporting requirements and prohibits the release of process affected water.
- information regarding Ready-to-reclaim (RTR) criteria, including consolidation and settlement issues, and establishment of peat accumulating wetlands. ACFN asserts reclamation should be expedited, and timelines should be more aggressive. The AER's decision is found in the Ready to Reclaim Criteria - Deposit Milestones, Measurement and Averaging, Subobjective 1: Solids Content, Subobjective 1: Trajectory, and Deposit Settlement sections, which include a requirement for and an expectation regarding a capping research plan and a requirement for flux and consolidation modelling.
- the rationale for avoiding ore with high fines content, and details on how the Mature Fine Tailings Reduction Mine Plan (MFTRMP) will accelerate the approved reclamation plan. The AER decision is found in the Fluid Tailings Treatment Technology - Selective Mining (MFTRMP) section.
- the use of a layer of petroleum coke above placed tailings and placement of coke in DDA3. The AER decision regarding the use of petroleum coke as a capping material is found in the Environmental Effects and Implications – NST Revegetation and Other Capping Options section, and the management of fluid tailings to be placed in DDA3 is found in the Fluid Tailings Treatment Technology – Alternative to Water Capping section.
- clarification of the polymers used in NST. The AER decision is found in the Fluid Tailings Treatment Technology - NST and MFT-Spiked NST Technology section.
- long-term risks, including stability and post-closure dam monitoring, and how these risks will be managed. The AER's decision is in the Fluid Tailings Treatment - Capping Material Availability, and the Other Technical Issues - Dam Decommissioning sections.
- groundwater monitoring and sampling. The AER's decision on this is found in the Subobjective 2, and Environmental Effects and Implications - Surface Water and Groundwater sections.
- reclaimed ecosites and revegetation. The AER's decision on this is found in the Ready to Reclaim - Subobjective 2, Environmental Effects and Implications - NST Revegetation, and Other Technical Issues - TMP and EPEA Plan Alignment sections.
- ongoing engagement. The AER's decision on ongoing engagement is found in the Stakeholder Engagement section.

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In its SOC and feedback, ACFN also raised concerns or provided recommendations that are not part of the AER's decision on Canadian Natural's TMP application, and therefore are not be reflected in the attached decision report. For matters related to policies and programs administered by the Government of Alberta, the AER intends to provide these concerns to the Government.

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In particular, you raised concerns with impacts on traditional uses related to the approval and operation of the mine. Canadian Natural's TMP application does not change the footprint of the Horizon mine or create additional disturbance. The TMP application does not seek approval for new development activities that could create additional impacts on traditional land use practices.

ACFN also raised the importance of consistency between distinct AER decisions, notably the TMP application and the EPEA approval that relates to the mine. The AER has endeavoured to align the decisions, as reflected in the TMP and EPEA Plan Alignment section of the decision report.

ACFN requested the AER include a condition that specifically confirms the Crown's ongoing duty to consult prior to making any amendments that could affect ACFN's rights. The AER does not have authority to make decisions regarding Crown consultation as set out in section 21 of the *Responsible Energy Development Act*.

Finally, ACFN is concerned that the TMP does not address the former Dedicated Disposal Area (DDA) 1 location identified in its EPEA renewal application. Reclamation of the former DDA1 is not within the scope of the TMP decision, however this concern has been communicated to the appropriate groups within the AER and a letter will be issued to Canadian Natural notifying it of the need to reclaim this area.

Based on the foregoing, the AER is satisfied that the concerns outlined in ACFN's SOC have been addressed to the satisfaction of the AER.

The AER has decided that a hearing is not required. As indicated in the decision report, the AER has issued the applied-for approval. This is your notice of that decision. A copy of the approval and a copy of the AER decision report are attached.

Under the *Responsible Energy Development Act* an eligible person may file a request for a regulatory appeal on an appealable decision. Eligible persons and appealable decisions are defined in section 36 of the *Responsible Energy Development Act* and section 3.1 of the *Responsible Energy Development Act General Regulation*. If you wish to file a request for regulatory appeal, you must submit your request in the form and manner and within the timeframe required by the AER. You can find filing requirements and forms on the AER website, http://www.aer.ca/applications-and-notices/appeals.

If you have any questions, contact Lonny Olsen, phone 403-297-3513 or e-mail Lonny.Olsen@aer.ca.

Sincerely,

< original signed by >

Paul Ferensowicz
Senior Advisor, Operations

Enclosures (2): **(**TMP approval, AER Decision Report**)**

cc: Michelle MacDonald, Canadian Natural Resources Ltd.
AER SOC Coordinator
ACO
AER Indigenous Engagement
AER Fort McMurray Field Centre

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