



9 April 2018

Companies Announcement Office
Via Electronic Lodgement

LOW PH PERMIT AMENDMENT REQUEST SUBMITTED

Peninsula Energy Limited (**Peninsula or Company**) is pleased to advise that its wholly owned subsidiary, Strata Energy Inc, has formally submitted a request to the Wyoming Department of Environmental Quality (**WDEQ**) to amend its existing Permit to Mine (**PTM**) to allow for the use of a low-pH recovery solution in the Ross Permit Area of the Lance Projects in Wyoming, USA (**Lance Projects**).

The WDEQ PTM for the Lance Projects currently authorises the use of alkaline and oxidant solutions in the in-situ recovery (**ISR**) process. Those solutions are generated by mixing native groundwater with carbon dioxide and/or sodium bicarbonate and gaseous oxygen. Since uranium recovery efforts commenced in December 2015, the ore deposit at the project has proven only moderately amenable to these alkaline solutions. Despite improved production rates over the last year, the overall uranium recovery rates of the active ISR operational areas in the Ross Permit Area continue to be below targeted levels.

The Company conducted a series of bench-scale tests in 2017, which showed a significantly increased recovery rate using low concentrations of sulfuric acid (1.5% or less). In November 2017, a White Paper was issued for public review summarising those test results. The White Paper also examined the effectiveness of in-situ recovery of uranium using low-pH systems, summarised the history and use of low-pH ISR globally. The White Paper also evaluated low-pH uranium ISR within Wyoming's regulatory program and provided recommendations for its future use at the Lance Projects. This information, together with additional data from laboratory testing and geochemical modelling conducted in 2018 was incorporated into the amendment request submitted to the WDEQ.

A successful transition to low pH operations could align the operating performance and cost profile of the Lance Projects with current industry leading global uranium production projects. Of the 77 million pounds of uranium produced by ISR methods worldwide in 2015, ninety-six percent (96%) or 74 million pounds came from facilities using low pH lixivants. The proposed change to low pH operations at the Lance Projects is also projected to require no oxidant and improve groundwater restoration. Laboratory test results and modelling indicate that groundwater can be fully restored to currently approved values after using low-pH solutions. No changes have been requested to the target restoration values previously approved for each mine unit.

Wayne Heili, Peninsula's Managing Director and CEO commented; "The submission of the PTM amendment request is the culmination of many months of research, extensive test work and analysis aimed at greatly enhancing the uranium recovery process at Lance and marks an important milestone in the pathway to low pH ISR operations".

WDEQ will now undertake a comprehensive review of the amendment request, analysing the test results and inviting public review and comment on the proposed change.

Further information will be provided over the remainder of 2018 as the WDEQ progresses their evaluation of the amendment request.

Yours Sincerely,



Wayne Heili
Managing Director/CEO

For further information, please contact our office on +61 8 9380 9920
during normal business hours.