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Companies Announcement Office
Via Electronic Lodgement

PENINSULA TO IMPLEMENT OPTIMISED PRODUCTION PLAN AHEAD OF LOW PH TRANSITION

Peninsula Energy Limited (**Peninsula or Company**) advises that, in alignment with its planned transition to low pH operations at the Lance Projects in Wyoming USA (**Lance Projects**), existing alkaline operations will be streamlined in order to preserve in-situ U_3O_8 pounds for future low pH extraction, and to reduce cash expenditure over the low pH permitting and transition period.

During the course of May, the Company will initiate a suspension of alkaline based production activity within the first mining unit at the Lance Projects (**MU1**). This action follows the Company's submission of an application which seeks to amend its Wyoming Department of Environmental Quality Permit to Mine to allow for the use of a low-pH recovery solution in the Ross Permit Area of the Lance Projects. Based on discussions with the regulatory authorities, Peninsula has a reasonable expectation that the required approvals to commence low pH operations will be received by mid-2019. Meanwhile, alkaline ISR based production operations will continue in the second mining unit (**MU2**) at the Lance Projects where head grades are higher.

As a result of this decision, the Company revises its current production guidance levels from between 30,000 and 40,000 pounds U_3O_8 per quarter (an annualised rate of 120,000 to 160,000 lbs) to between 22,500 and 27,500 pounds U_3O_8 per quarter (an annualised rate of 90,000 to 110,000 lbs).

The Company has flexibility under its product sales agreements to make on-market purchases which complement its revised production plan for alkaline based operations. Reducing current production rates will not affect the Company's ability to deliver into its near-term or mid-term sales obligations.

A successful transition to low pH operations could align the long term operating performance and cost profile of the Lance Projects with industry leading global uranium production projects. The Company has commissioned the preparation of a Feasibility Study which will define the expected life-of mine operation costs, recovery rates and other cost efficiencies under low pH operations. Suspending alkaline based production at MU1 will preserve the remaining fully developed MU 1 resource base for future planned operations using low pH ISR methods. It is also expected to result in gross cost savings of approximately US\$1 million over the next 12 months.

Wayne Heili, Peninsula's Managing Director and CEO commented, "The decision to suspend alkaline production at Mine Unit 1 aligns well with the Company's planned move to low pH mining operations at Lance. Thanks to the flexibility that we now have in certain offtake agreements, production from Mine Unit 1 is not necessary over the next 12 months, so it makes sense for us to buy on market as needed, save on operational expenditures and preserve the remaining MU1 resource for the more efficient low pH mining method."

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Yours Sincerely,

A handwritten signature in blue ink, appearing to read 'Wayne Heili', with a long horizontal flourish extending to the right.

Wayne Heili
Managing Director/CEO

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