

News Release

Alexco Announces Amendment of Water Use Licence at Keno Hill and Other Developments

December 28, 2017 – **Alexco Resource Corp.** (NYSE-American:AXU, TSX:AXR) ("Alexco" or the "Company") is pleased to announce that it has received an amendment to its Water Use Licence from the Yukon Water Board for the development and operation (and eventual closure) of the Flame & Moth mine. The Flame & Moth underground mine, located adjacent to the existing Keno Hill District mill, comprises a potentially mineable 683,000 tonnes of 666 grams per tonne ("g/t") silver and is anticipated to be the primary production source for mine operations in the Keno Hill Silver District (RPA, 2017¹).

Clynt Nauman, Alexco CEO and Chairman commented, "The receipt of the Flame & Moth Water Use Licence amendment is the final permit and regulatory authorization required for production from the Flame & Moth mine. Receipt of this licence amendment is a milestone in our journey toward mine operations and has involved the cooperation and support of our many stakeholders and partners, including the First Nation of Nacho Nyak Dun."

In addition to Flame & Moth, the Bellekeno, Lucky Queen and Onek mines are also fully permitted for operations in the Keno Hill Silver District. In November 2017, the Company submitted a further Project Proposal to the Yukon Environmental Socioeconomic Assessment Board for environmental assessment of the development, operations and eventual closure for the Bermingham mine. Bermingham is anticipated to contribute approximately 220,000 tonnes of 1,276 g/t silver toward the approximately one million tonne and more than 27 million silver ounce mine production stream outlined over eight years in the PEA mine plan¹. Approximately 5,000 meters ("m") of underground exploration and in-fill drilling of the Bermingham deposit will commence later in Q1 2018 upon completion of the currently active 580 m Bermingham exploration decline. Results of the drilling along with other work will contribute to a pre-feasibility study anticipated to be completed in Q3 2018.

In other business, Alexco announces that it has restructured its US environmental division. In this restructuring, Alexco's wholly-owned subsidiary, Alexco Environmental Group Inc. ("AEG Canada") has entered into a share purchase agreement with Arete Property Holdings LLC ("Arete") for the purchase by Arete of all of the issued shares of Alexco Environmental Group (US) Inc. ("AEG US") and its wholly-owned subsidiary, Alexco Financial Guaranty Corp. (collectively with AEG US, the "AEG US Group") for nominal consideration. Arete is wholly-owned by Mr. James Harrington, Senior Vice President and Chief Technical Officer of AEG Canada.

As a result of this transaction, a new Colorado affiliate of AEG Canada, Alexco Water and Environment Inc. will seamlessly continue current and future environmental work in the United States. AEG US Group, together with initial funding provided by AEG Canada required for ongoing administrative and corporate responsibilities, will become subsidiaries of, and will be directly managed by Arete to pursue certain property negotiation rights and further capital opportunities.

Mr. Nauman commented, "The restructuring of Alexco's US environmental division is merely an initial step in facilitating AEG's ability to pursue significant opportunities for new brownfields-related environmental work and revenue while also prudently managing the parent company balance sheet."

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The participation of Mr. Harrington (through his ownership of Arete) in the proposed sale of the AEG US Group from AEG Canada (the "Proposed Transaction") causes the Proposed Transaction to be considered to be a "related party transaction" as defined under Multilateral Instrument 61-101 ("MI 61-101"). However, the Proposed Transaction will be exempt from the formal valuation and minority shareholder approval requirements of MI 61-101 as neither the fair market value of the assets acquired by, or the consideration paid by, the related party, Mr. Harrington, will exceed 25% of the Company's market capitalization. The Proposed Transaction has been reviewed and approved by a special committee of the Board of directors of the Company and the Board of directors of the Company.

¹ "Technical Report Preliminary Economic Assessment of the Keno Hill Silver District Project, Yukon Territory, Canada." NI 43-101 Report. RPA, March 29, 2017.

Qualified Persons

The disclosure in this news release of scientific and technical information regarding exploration projects on Alexco's mineral properties has been reviewed and approved by Alan McOnie, FAusIMM, Vice President, Exploration who is a Qualified Person as defined by National Instrument 43-101 - Standards of Disclosure for Mineral Projects.

About Alexco

Alexco holds the historical high grade Keno Hill Silver District located in Canada's Yukon Territory. Employing a unique business model, Alexco also provides mine-related environmental services, remediation technologies and reclamation and mine closure services to both government and industry clients.

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Some statements ("forward-looking statements") in this news release contain forward-looking information concerning Alexco's anticipated results and developments in Alexco's operations in future periods, planned exploration and development of its properties, plans related to its business and other matters that may occur in the future, made as of the date of this news release. Forward-looking statements may include, but are not limited to, statements with respect to the restructuring of Alexco's US environmental division, the future remediation and reclamation activities, future mineral exploration, the estimation of mineral reserves and mineral resources, the realization of mineral reserve and mineral resource estimates, future mine construction and development activities, future mine operation and production, the timing of activities and reports, the amount of estimated revenues and expenses, the success of exploration activities, permitting time lines, requirements for additional capital and sources and uses of funds. Forward-looking statements are subject to a variety of known and unknown risks, uncertainties and other factors which could cause actual events or results to differ from those expressed or implied by the forward-looking statements. Such factors include, among others, risks related to the implementation of the restructuring implementation, risks related to actual results and timing of exploration and development activities; actual results and timing of mining activities; actual results and timing of environmental services activities; actual results and timing of remediation and reclamation activities; conclusions of economic evaluations; changes in project parameters as plans continue to be refined; future prices of silver, gold, lead, zinc and other commodities; possible variations in mineable resources, grade or recovery rates; failure of plant, equipment or processes to operate as anticipated; accidents, labour disputes and other risks of the mining industry; First Nation rights and title; continued capitalization and commercial viability; global economic conditions; competition; and delays



in obtaining governmental approvals or financing or in the completion of development activities. Forward-looking statements are based on certain assumptions that management believes are reasonable at the time they are made. In making the forward-looking statements included in this news release, Alexco has applied several material assumptions, including, but not limited to, the assumption that Alexco will be able to implement the restructuring without negative consequences, Alexco will be able to raise additional capital as necessary, that the proposed exploration and development will proceed as planned, and that market fundamentals will result in sustained silver, gold, lead and zinc demand and prices. There can be no assurance that forward-looking statements will prove to be accurate and actual results and future events could differ materially from those anticipated in such statements. Alexco expressly disclaims any intention or obligation to update or revise any forward-looking statements whether as a result of new information, future events or otherwise, except as otherwise required by applicable securities legislation.