

ADEX ANNOUNCES LAB SCALE PRODUCTION OF INDIUM

Toronto – January 12, 2010 – Adex Mining Inc. (“Adex” or the “Company”) (TSX-V: ADE) is pleased to announce it has successfully developed a process for the production of a high purity indium at its Mount Pleasant Mine Property (“Mount Pleasant” or the “Property”), located in southwestern New Brunswick Canada.

Adex overcame a major hurdle at the close of 2009 by producing the first few grams of indium in its bench scale hydrometallurgical process (the “hydromet process”) development program. “I am very optimistic,” stated Errol Farr, Adex President and CEO. “It doesn’t seem like much when you hold it in your hand, but this little nugget sized piece of indium represents the promise of Adex’s success at Mount Pleasant. The potential to produce and direct market a high grade indium product would put Adex in a unique position amongst junior mining companies.”

The bench scale process development work completed to date indicates that the unique hydromet process technology is capable of producing indium in excess of 88% purity. Bench scale optimization of process chemistry to confirm design parameters for the hydromet pilot plant testwork is ongoing.

The hydromet process, developed by Thibault & Associates Inc. of Fredericton, an Adex consultant, involves leaching base metal sulphide concentrate containing approximately 4500 ppm indium and recovering the indium and zinc through a series of solvent extraction and solution purification processes. Adex is considering patent applications with respect to certain aspects of this hydromet process technology.

Indium production potential at Mount Pleasant is about 40 tonnes per year (“tpy”) based on processing 850 tpd of mill feed. Adex is considering two commercial production scenarios for Mount Pleasant. Under the tin concentrate, indium and zinc metal production model, there is also potential to produce about 4,000 tonnes of zinc metal and 3,200 tonnes of tin concentrate per year from the North Zone (“NZ”). Under the tin concentrate and zinc-indium concentrate production model, there is potential to produce about 8,500 tonnes of indium rich zinc concentrate and 3200 tonnes of tin concentrate from the NZ.

With successful scoping/preliminary economic studies behind it as disclosed in the Company’s press release dated January 7, 2010, the Company is now focused on piloting indium-zinc concentrate and tin concentrate production and on piloting its innovative hydromet process to produce indium and zinc metal. Successful pilot test programs will lead to a definitive feasibility study. Positive results from the definitive feasibility study will lead to applications for necessary regulatory approvals and efforts to secure financing to fund engineering, equipment purchase and construction, resulting finally in production.

Adex believes it will be well positioned to begin mine development and process equipment purchase and installation assuming positive results from its definitive feasibility study, government regulatory approvals and project financing by early 2011. Concentrator production is targeted for October/November 2011.

In addition to the tin-indium-zinc-copper bearing NZ, Mount Pleasant hosts the tungsten-molybdenum bearing Fire Tower Zone (“FTZ”). The FTZ is the site of a tungsten-molybdenum underground mining operation that was only in production between 1983 and 1985.

Mineral resources that are not mineral reserves do not have demonstrated economic viability

Dean Thibault, P. Eng., Senior Process Chemical Engineer of Thibault & Associates Inc., a consultant to Adex and an independent qualified person as defined by National Instrument 43-

101 ("NI 43-101") supervised the preparation of the technical information contained in this press release in compliance with NI 43-101.

ABOUT ADEX

Adex Mining Inc. is a Canadian junior mining company with an experienced management team. The Company is focused on developing its flagship Mount Pleasant Mine property, a multi-mineral project that is host to promising tungsten-molybdenum and tin-indium-zinc-copper mineralization. Located in Charlotte County, New Brunswick, the Mount Pleasant Mine property is situated approximately 80 kilometres south of Fredericton, the provincial capital, and is 65 kilometres from the United States border. The common shares of Adex trade on the TSX Venture Exchange under the stock symbol "ADE." Technical and business information regarding Adex's Mount Pleasant property is available on SEDAR at www.sedar.com and the Company's website at www.adexmining.com.

FOR FURTHER INFORMATION PLEASE CONTACT:

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Certain statements in this press release may constitute "forward-looking" statements which involve known and unknown risks, uncertainties and other factors which may cause actual results, performance or achievements of Adex, its subsidiary or the industry in which they operate to be materially different from any future results, performance or achievements expressed or implied by such forward-looking statements. When used in this press release, the words "estimate", "believe", "anticipate", "intend", "expect", "plan", "may", "should", "will", the negative thereof or other variations thereon or comparable terminology are intended to identify forward-looking statements. Such statements reflect the current expectations of the management of Adex with respect to future events based on currently available information and are subject to risks and uncertainties that could cause actual results, performance or achievements to differ materially from those expressed or implied by those forward-looking statements. These risks and uncertainties are detailed from time to time, including, without limitation, under the heading "Risk Factors", in reports filed by Adex with the Alberta, British Columbia and Ontario Securities Commissions which are available at www.sedar.com and to which readers of this press release are referred for additional information concerning Adex, its prospects and the risks and uncertainties relating to Adex and its prospects. New risk factors may arise from time to time and it is not possible for management to predict all of those risk factors or the extent to which any factor or combination of factors may cause actual results, performance and achievements of Adex to be materially different from those contained in forward-looking statements. Although the forward-looking statements contained in this press release are based upon what management believes to be reasonable assumptions, Adex cannot assure investors that actual results will be

consistent with these forward-looking statements. Given these risks and uncertainties, investors should not place undue reliance on forward-looking statements as a prediction of actual results.

The forward-looking information contained in this press release is current only as of the date of the press release. Adex does not undertake or assume any obligation to release publicly any revisions to these forward-looking statements to reflect events or circumstances after the date hereof or to reflect the occurrence of unanticipated events, except as required by law.