

OSISKO AND EMSE SIGN AGREEMENT FOR DEVELOPMENT OF FAMATINA PROJECT IN ARGENTINA

(Montreal, August 31, 2011) Osisko Mining Corporation (the "Corporation" or "Osisko") (OSK: TSX, EWX: Deutsche Boerse) and Energía y Minerales Sociedad Del Estado ("EMSE"), the La Rioja state mining corporation, are pleased to announce that they have entered into a binding agreement regarding the development of the Famatina gold project ("Famatina" or the "Project") in La Rioja Province, Argentina. The Famatina project area covers a 40 square kilometre zone hosting various gold-enriched epithermal and porphyry targets.

Terms of the agreement include:

- US\$500,000 cash payment to EMSE within 15 days of signing the agreement
- A first-year US\$10M commitment in exploration expenditures during the initial 4 years term ("Initial Term") of the Agreement
- Osisko may earn a 70% interest in the Project by completing a feasibility study within the Initial Term, as said Initial Term may be extended at Osisko's discretion for an additional term of 4 years if required to complete said feasibility study
- Osisko commits to financing 100% of the Project's development and construction costs, with repayment of EMSE's portion from 25% of its attributable project cash flows
- EMSE will be responsible for gaining all required permits throughout the life of the Project

The Famatina Project is characterized by intense hydrothermal alteration produced by a number of Upper Miocene dacite porphyry stocks intruding low grade, metamorphic sedimentary (Cambrian-Ordovician) and granitic rocks (Ordovician). Known mineral occurrences include at least five Cu-Mo-Au porphyries, three associated gold epithermal high sulfidation systems and one higher grade structurally controlled epithermal vein system. None of the mineral systems at Famatina currently have NI 43-101 compliant resources.

Mr. Sean Roosen, President and Chief Executive Officer of Osisko stated: "In Famatina, Osisko has identified an ideal project with which to enter one of the best mining jurisdictions in South America. We are very excited at the addition of another high quality project to our current portfolio of properties. We believe Famatina hosts very promising targets with excellent potential for future development. We have assembled a highly experienced team to oversee the work and we look forward to an intensive exploration program on the property over the coming year."

About Osisko Mining Corporation

Osisko Mining Corporation operates the Canadian Malartic Gold Mine in Malartic, Quebec and is aggressively pursuing resource definition on the Hammond Reef Gold Project in Northern Ontario, as well as exploration on a number of additional properties in Canada.

Forward Looking Statements

Certain statements contained in this press release may be deemed "forward-looking statements". All statements in this release, other than statements of historical fact, that address events or developments that the Corporation expects to occur, are forward looking statements. Forward looking statements are statements that are not historical facts and are generally, but not always, identified by the words "expects", "plans", "anticipates", "believes", "intends", "estimates", "projects", "potential", "scheduled" and similar expressions, or that events or conditions "will", "would", "may", "could" or "should" occur including, without limitation, the obtaining by EMSE of all rights and authorizations including the social license from surrounding communities, the availability of skilled labour force, and the discovery of a deposit which would warrant commercial production of the Famatina project. Although the Corporation believes the expectations expressed in such forward-looking statements are based on reasonable assumptions, including, without limitation that the diligent ongoing optimizing of its operations will be achieved and will, accordingly, improve its operating performance, such statements are not guarantees of future performance and actual results may differ materially from those in forward looking statements. Factors that could cause the actual results to differ materially from those in forward-looking statements include gold prices, the Corporation's limited experience with production and development stage mining operations, uninsured risks, regulatory changes or sanctions, defects in titles, availability of personnel, materials and equipment, timeliness of government approvals, actual performance of facilities, equipment and processes relative to specifications and expectations, unanticipated environmental impacts on operations costs, continued availability of capital and financing and general economic, market or business conditions. These factors are discussed in greater detail in the Corporation's most recent Annual Information Form filed on SEDAR, which also provides additional general assumptions in connection with these statements. The Corporation cautions that the foregoing list of important factors is not exhaustive. Investors and others who base themselves on the Corporation's forward-looking statements should carefully consider the above factors as well as the uncertainties they represent and the risk they entail. The Corporation believes that the expectations reflected in those forward-looking statements are reasonable, but no assurance can be given that these expectations will prove to be correct and such forwardlooking statements included in this press release should not be unduly relied upon. These statements speak only as of the date of this press release.