

**MATERIAL CHANGE REPORT
UNDER SECTION 7.1 OF NATIONAL INSTRUMENT 51-102**

ITEM 1 **NAME AND ADDRESS OF COMPANY**

EMC Metals Corp.
1430 Greg Street, Suite 501
Sparks, Nevada 89431

ITEM 2 **DATE OF MATERIAL CHANGE**

September 20, 2012

ITEM 3 **NEWS RELEASE**

News release dated September 20, 2012 was disseminated via wire service.

ITEM 4 **SUMMARY OF MATERIAL CHANGE**

EMC Metals Corp. receives positive preliminary economic assessment and updated resource estimate for the Springer Tungsten Mine.

ITEM 5 **FULL DESCRIPTION OF MATERIAL CHANGE**

See attached news release.

ITEM 6 **RELIANCE ON SUBSECTION 7.1(2) OF NATIONAL INSTRUMENT 51-102**

N/A

ITEM 7 **OMITTED INFORMATION**

N/A

ITEM 8 **EXECUTIVE OFFICER**

George Putnam, President and CEO; Telephone: (775) 355-9500

ITEM 9 **DATE OF REPORT**

Dated at Reno, Nevada, this 20th day of September, 2012.



NEWS RELEASE
TSX: EMC
September 20, 2012
NR 12-15
www.emcmetals.com

EMC Receives Positive Preliminary Economic Assessment and Updated Resource Estimate for the Springer Tungsten Mine, Nevada USA

Reno, Nevada – September 20, 2012 – EMC Metals Corp. (the “Company” or “EMC”) (TSX: EMC) is pleased to announce the results of a positive, National Instrument (NI) 43-101 compliant Preliminary Economic Assessment (“PEA”), including an updated resource estimate, for the Company’s 100% owned Springer Tungsten Mine project (“Springer”), located in Imlay, Nevada. The PEA was prepared for EMC by Associated Geosciences LTD. of Calgary, Alberta, Canada, and Practical Mining LLC. of Elko, Nevada, USA, both independent mining industry consultants.

The PEA provides the first NI 43-101 compliant economic analysis on Springer, and was commissioned as part of EMC’s planned restart of the mining and milling operations that were originally constructed in 1979-1981 and operated in 1982.

Highlights from the PEA/Resource Update:

- Project restart is economic, feasible, and supported by current tungsten prices, based on a five year NI 43-101 production resource;
- Five year mine life NPV of \$22.8 million (8% discount, constant dollar, after tax);
- IRR of 47% on restart capital of \$30 million;
- Indicated resource increase of 81,000 tons (+29.6 %) over previous resource estimate;
- Inferred resource increase of 837,600 tons (+76.3 %) over previous resource estimate;
- New resource added on western side of the property, no previous resource estimate; and
- Average annual tungsten (WO₃) production of 134,960 MTU (total 674,790 MTU).

Discussion:

The PEA updates the resource estimate published in a prior NI 43-101 Technical Report titled, “NI 43-101 Technical Report on Resources, EMC Metals Corp., Springer Facility- Sutton Beds, Nevada, USA” prepared by SRK Consulting of Lakewood, Colorado, filed on SEDAR in May, 2009. The PEA both increases the resource tonnage and also adds an economic estimate to the project in restart. The resource update also adds tonnage on the western side of the property, where no resource had previously been established, despite having been the site of historic tungsten production. The western resource has exciting potential for Springer, because the historic production records and current NI 43-101 drilling confirm superior tungsten grades, albeit at narrower vein widths.



The financial analysis of the mine restart, based on the current NI 43-101 resource, defines a 5 year mine life. The overall financial results, as presented in the PEA, are as follows:

Key Performance Measures Summary	Financial
	Result (US\$)
Capital Cost (millions)*	\$29.8
Average Annual Revenue (millions)	\$43.2
Average Annual Operating Cost (millions)	\$25.0
Average Operating Cost (\$/MTU)	\$186
Average Annual EBITDA (millions)	\$17.8
Constant Dollar NPV (8%)	\$22.8
Constant Dollar NPV (10%)	\$20.1
internal Rate of Return (IRR)	47%
Price Assumption - APT Equivalent/MTU (Euro Quote)	\$400
*NOTE: Includes working capital and contingency	

NOTE: A metric ton unit (MTU) is the standard unit of measure for tungsten in trading markets. One MTU equals 22.04 pounds of contained WO₃, or 100th of a tonne of WO₃.

The mine plan in the PEA calls for the conversion of the existing Sutton Mine from a cut and fill operation, as designed by the prior operator, the General Electric Company ("GE"), to a modern longhole mining operation---more properly termed end-slicing. Sutton will be re-developed with ramps connecting drifts at various levels, modern rubber-tired equipment, and production and mine access utilizing both the existing shaft/hoist house and a new mine adit entry approaching mineralized beds from lower elevation ground to the south.

The mine plan also calls for a second independent mining operation at O'Byrne, on the western side of the granite intrusion, utilizing the same mining techniques and equipment, with twin adit access. The hilly topography in the western beds lends itself to declined adit entry techniques that achieve sufficient depth to make for economic development.

The updated NI 43-101 resource provides for 4.8 years of mining from Sutton, and only 1.5 years from O'Byrne, but at substantially higher grades.

This updated resource, included in the PEA, is as follows:

Springer Mine- Mineral Resource Statement of Resources					
Resource Category	Cut-Off Grade	Resource	Grade	Contained Tungsten Units	
	WO ₃	Tons	WO ₃	STU's	MTU's
Indicated Total (Sutton only)	0.20%	355,000	0.537%	190,635	172,990
Inferred (by location)					
Sutton Resource	0.20%	1,616,000	0.459%	741,744	673,089
George Resource	0.20%	143,950	0.423%	60,863	55,230
O'Byrne Resource	0.20%	173,670	0.862%	149,719	135,861
Inferred Total	0.20%	1,933,620	0.493%	952,326	864,180
Note: a short ton unit (STU) = 20 lbs. WO ₃ ; a metric ton unit (MTU) = 22.04 lbs. WO ₃					

The effective date of each estimate of mineral resources above is August 20, 2012.

The existing mill at Springer has benefitted from considerable investment since the purchase from GE in 2006, although there is still important change and investment left to make prior to restart. The process flowsheet calls for the production of a 65% WO₃ scheelite concentrate, using modern gravity separation techniques and traditional flotation circuits. There are no plans to utilize the digester system or the APT (ammonium paratungstate) plant on site at this time.

Permitting and environmental matters are largely in place, although the Company is currently seeking a right of way from the US Bureau of Land Management for rights to re-install a tailings pipeline to an existing tailings pond, planned to be put into service to secure mill tailings not backfilled into the mine.

Project economics assume a two year trailing average constant dollar \$400/MTU APT price, and derive a concentrate price from that benchmark tungsten price, which is publically quoted. All dollar amounts for costs are also considered to be constant dollar—no escalation for inflation has been considered, and thus the 8% discount rate applied to cash flows to generate Net Present Values ("NPV's") should also be considered a constant dollar rate.

Economics do not assume any economic recovery on molybdenum disulphide (MoS₂). There is no molybdenum resource established for the property which corresponds to the mineable tungsten resource, therefore no co-product credit in the PEA. There is capital included in the \$30 million total restart estimate to separate (float) molybdenum, because it has historically been present in the resource and must be removed from concentrates to meet customer product specifications.

First concentrate production is expected in December 2013, or Q1 2014.



Mr. George Putnam, CEO of EMC Metals comments:

“This resource update and PEA keep us on track to restart the Springer Tungsten Mine in 2013. The positive economics in the PEA reflect healthy market conditions for tungsten producers. They also reflect favorably on this mining asset, recognizing the limited resource that has been included. We now intend to turn our attentions to funding this business to production, and to making Springer the second operating tungsten mine in North America, and the only one in the US.”

NI 43-101 Disclosure

Keith McCandlish, P. Geol., P. Geo of Associated Geosciences LTD. of Calgary, Alberta, Canada, and Mark Odell, P.E., of Practical Mining LLC. of Elko, Nevada, USA, both independent mining industry consultants, prepared the PEA. Mr. McCandlish and Mr. Odell are both “qualified persons” under NI 43-101. Willem Duyvesteyn, the Chief Technical Officer of the Company, is a qualified person for the purposes of National Instrument 43-101 and has reviewed and approved the technical content of this press release.

A technical report on the Preliminary Economic Assessment of the Springer Tungsten Mine will be filed on SEDAR and the Company's website within the 45 days permitted under NI 43-101.

Results of the PEA represent forward-looking information. This economic assessment is preliminary in nature and it includes inferred mineral resources that are considered too speculative, geologically, to have the economic considerations applied to them that would enable them to be categorized as mineral reserves. There is no certainty that the preliminary economic assessment will be realized. Conditions and parameters of the project are subject to change based on the final filing of the PEA on SEDAR within 45 days of this release. Mineral resources are not mineral reserves as they do not have demonstrated economic viability.

All of the resource data verification work was completed before 2009 and is reported in the SRK Report. AGL has relied on this information for the purposes of the updated resource estimates used in the PEA. No additional exploration has been conducted on the property since the May 15, 2009 effective date of the SRK report. The mineralization and data of the Springer facility has been verified in two ways: (i) verification of the mineralization by re-sampling of cores drilled by GE and Utah International Inc.; and (ii) data verification conducted by SRK focusing entirely on the electronic database used to support the resource estimate.

About EMC Metals:

EMC owns a 100% interest in the Springer tungsten mine in Nevada, USA. Strong tungsten prices and tight supply conditions, combined with the refurbished mill and existing tungsten resource on the property, support the strategy to seek a near term restart of the Springer facility. EMC also owns a 100% interest in the Carlin Vanadium property near Carlin, Nevada. Both properties have current NI 43-101 compliant resource estimates, available on the Company website and on SEDAR.



On February 29th, 2012, EMC announced that its earn-in on the Nyngan Scandium Project was rejected by our JV partner, Jervois Mining Limited. We maintain that all project earn-in conditions outlined under the JV Agreement have been met, and we intend to take all lawful steps to secure our proprietary rights to a 50% joint venture interest.

For additional information please contact:

EMC Metals Corp.

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Caution with respect to Forward-Looking Statements: This press release contains forward-looking information that does involve various risks and uncertainties regarding future events. Such forward-looking information can include without limitation statements regarding long term prices for tungsten, our ability to find and retain qualified management and key technical persons to operate the tungsten project, our ability to raise the necessary capital to fund a restart of mining operations, the short term or long term economic feasibility of tungsten production at our Springer facility, and in general statements based on current expectations involving a number of risks and uncertainties and are not guarantees of future performance. Forward-looking information in this press release is based on estimates and opinions of management on the dates they are made and are expressly qualified in their entirety by this notice, and by other risk factors disclosed in our public filings. Except as required by law, EMC assumes no obligation to update forward-looking information should circumstances or management's estimates or opinions change.

Cautionary Note to U.S. Investors Regarding Resource Estimates: This press release uses the terms "indicated resources" and "inferred resources" which are defined by the Canadian Institute of Mining, Metallurgy and Petroleum, and are required to be disclosed in accordance with Canadian National Instrument 43-101. The disclosure standards in the U.S. Securities and Exchange Commission's (SEC) Industry Guide 7 normally do not recognize information concerning these terms or other descriptions of the amount of mineralization in mineral deposits that do not constitute "reserves" by U.S. standards in documents filed with the SEC. In addition, resource that are classified as "inferred mineral resources" have a great amount of uncertainty as to their existence and great uncertainty as to their economic and legal feasibility. It cannot be assumed that all or any part of an "inferred mineral resource" will ever be converted into reserves. Under U.S. standards, mineralization may not be classified as a "reserve" unless the determination has been made that the mineralization could be economically and legally produced or extracted at the time the reserve determination is made. Disclosure of "contained ounces" in a resource is permitted disclosure under Canadian regulations; however, the SEC normally only permits issuers to report mineralization that does not constitute "reserves" by SEC standards as in-place tonnage and grade without reference to unit measures. Accordingly, information concerning mineral deposits set forth herein may not be comparable with information presented by companies using only U.S. standards in their public disclosure.