

THE CRITICAL ELEMENT

## PRESS RELEASE

## AMERICAN VANADIUM FILES A PATENT ON ITS VANADIUM PURIFICATION PROCESS

**September 24, 2012- AMERICAN VANADIUM CORP.** ("American Vanadium" or the "Company") (TSX.V: AVC) (OTCQX: AVCVF) has filed a patent application entitled, "VANADIUM OXIDE PURIFICATION PROCESS" with the US Patent and Trademark Office. This invention will allow the refinement of vanadium oxide for use as an electrolyte for mass storage batteries as well as other higher margin product lines such as aluminum and titanium vanadium master alloys.

American Vanadium has now conducted three sets of independent testing of the process and the average of these tests showed that no impurity was above 10 parts per million. It is anticipated that the actual operating plant being designed will provide better results than those attained in the laboratory.

"I cannot overstate the significance of this confirmation that our proprietary process will produce high purity, low cost vanadium electrolyte at our Gibellini Project in Nevada," stated Bill Radvak, President & CEO of American Vanadium. "Combined with having the only vanadium mine in development in the US, this greatly enhances our ability to build joint venture partnerships in the vanadium flow battery business. In addition, we believe we will have the opportunity to use this proprietary process globally in other vanadium projects where the cost of purifying electrolyte using conventional methods is prohibitive and, in many cases, impossible."

## About American Vanadium Corp.

American Vanadium is developing the only primary vanadium mine in the United States. The Company's Gibellini Project, located in Nevada, is being designed to economically produce vanadium products for the chemical and titanium alloying industries, as well as vanadium electrolyte for the energy storage industry.

This strategic asset gives American Vanadium the opportunity to vertically integrate into the highest value market, mass energy storage. The Company will focus on producing vanadium electrolyte, powders, crystals and oxide pellets for premium markets such as grid scale flow battery systems, chemical and pollution control applications as well as for the aerospace and defense industry.





A positive Feasibility Study and updated National Instrument 43-101 on the Gibellini Project were completed by AMEC E&C Services in 2011.

American Vanadium trades on the TSX Venture Exchange as a tier-one company under the symbol "AVC", the OTCQX Market under the symbol "AVCVF" and the Frankfurt Stock Exchange under the symbol "OUA".

ON BEHALF OF THE BOARD

Bill Radvak, President and CEO

For further information, please contact: Bill Radvak, President & CEO

Phone: (604) 488-5417

Email: <u>bradvak@americanvanadium.com</u>

or

Mike Hyslop, *Director*, *Corporate Development* 

Phone: (604) 488-8795

Email: <a href="mailto:mhyslop@americanvanadium.com">mhyslop@americanvanadium.com</a>

Web site: www.americanvanadium.com

NEITHER TSX VENTURE EXCHANGE NOR ITS REGULATION SERVICES PROVIDER (AS THAT TERM IS DEFINED IN POLICIES OF THE TSX VENTURE EXCHANGE) ACCEPTS RESPONSIBILITY FOR THE ADEQUACY OR ACCURACY OF THIS RELEASE.

Forward-Looking Statements: This press release contains "forward-looking information" within the meaning of applicable Canadian securities laws, including statements regarding the expected use of proceeds from the Private Placement, and future plans and objectives for the Gibellini Project. Such forward-looking statements involve known and unknown risks, uncertainties and other factors, which may cause the actual results, performance or achievements of American Vanadium to be materially different from any future results, performance or achievements expressed or implied by the forward-looking information. Forward-looking information includes estimates of mine production rates and mine life, revenues from future mining operations, capital and operating costs, and pay-back period. Factors that may cause actual results to vary include, but are not limited to, actual results of current exploration activities; conclusions of economic evaluations; changes in project parameters as plans continue to be refined; future prices of vanadium; possible variations in reserves, grade or recovery rates; changes to capital and operating cost estimates; and delays in obtaining governmental approvals or financing or in the completion of development or construction activities. Although American Vanadium has attempted to identify important factors that could cause actual results to differ materially from those contained in forward-looking statements, there may be other factors that cause results not to be as anticipated, estimated or intended. There can be no assurance that such statements will prove to be accurate, as actual results and future events could differ materially from those anticipated in such statements. Accordingly, readers should not place undue reliance on forward-looking statements. American Vanadium does not undertake to update any forward-looking statements, except in accordance with applicable securities laws.