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NEWS RELEASE

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Avalon Provides Progress Report on Metallurgical Testwork, Nechalacho Rare Earth Elements Deposit, Thor Lake, Northwest Territories, Canada

Toronto, ON -- Avalon Rare Metals Inc. (TSX and NYSE-Amex : AVL) ("Avalon" or the "Company") is pleased to provide an update its progress on the Nechalacho deposit, Northwest Territories, Canada.

METALLURGICAL TESTWORK

Avalon is continuing to conduct metallurgical testwork toward proving its proposed process for concentration of the Nechalacho ore minerals. This process is designed to produce rare earths, niobium (Nb), tantalum (Ta), and zirconium (Zr) products from those minerals.

The process begins with froth flotation in a Flotation Plant to concentrate the ore minerals. This is followed by a leaching process to chemically break down the ore minerals in a Hydrometallurgical Plant which brings the rare earths and by-product rare metals into solution. The final stage will be rare earth separation in a Separation Plant to produce refined individual rare earth oxides.

Overall, the various metallurgical test programs to prove these processes are progressing steadily and close to original projected timelines, except that the hydrometallurgical pilot plant work is now forecast to take up to four months longer to complete than originally estimated, in order to achieve the highest level of confidence in the process design. The forecast completion date for the Bankable Feasibility Study (BFS) in mid 2012 could be delayed until the fourth quarter of 2012 if the time estimate to complete the hydrometallurgical pilot plant is accurate. Commented President Don Bubar, "We have been pleased with the progress achieved to date on our metallurgical test program and are now implementing measures to ensure that the hydrometallurgical pilot plant work does not significantly delay the completion of the bankable feasibility study."

The additional time and complexity of the hydrometallurgical pilot plant work, in addition to more updated cost information for other areas of the BFS, have resulted in an increase in the BFS budget to \$54 million, which is comprised of direct costs of \$46 million and administrative and overhead costs of \$8 million. This compares to the previous budget of \$47 million, which was comprised of \$40 million in direct costs and \$7 million in administrative and overhead costs. Approximately \$11 million of the BFS budget has been spent to date.

MINERALOGICAL STUDIES

Understanding the mineralogy is an important step to both developing and improving metallurgical processes. To this end, Avalon has carried out multiple mineralogical studies at SGS Minerals Services,

Lakefield, ON ("SGS"), Xstrata Process Support, Sudbury, ON ("XPS") and McGill University, Montreal, QC. The results to date have indicated that the light rare earths (LREE) in the Nechalacho deposit are contained in four minerals: allanite, monazite, bastnaesite and synchisite, and the heavy rare earths (HREE) are present in two minerals: fergusonite and zircon, the latter also being host to zirconium (Zr). niobium (Nb) and tantalum (Ta) are present in fergusonite and columbite¹.Mineralogical studies continue in all three research centres.

FLOTATION PROCESS

Extensive flotation tests, including many locked cycle tests, have been undertaken since 2008 at SGS and the basics of the process for concentration of the valuable minerals have been defined. The tests have utilized a number of representative composite samples of both the Basal and Upper Zones and from various geographic areas within the Nechalacho deposit.

The flotation process comprises crushing and grinding to a grain size of less than 38 μ m (microns), leading to de-sliming to remove particles less than 8 μ m, then the removal of barren magnetite through magnetic separation. The feed then passes through Rougher and Cleaner flotation stages, followed by gravity concentration, where the valuable minerals are separated from waste minerals.

This process has been refined through bench-scale testing, including locked cycle tests at SGS. Tests have been repeated and confirmed at XPS.

Subsequent to the completion of the bench-scale testing, Avalon commissioned XPS to conduct two minipilot plant ("MPP") tests. The MPP facility allows testing of flotation schemes at sample rates of about 8 kg/hour or, for a five day campaign, about one tonne, thus simulating an industrial scale plant. The utilization of a sample of about 1 tonne in weight means sufficient sample material can be readily obtained from diamond drill core sample material. Two such composite samples from Basal Zone have been tested to date.

The MPP runs comprised initial crushing of the sample at XPS in Sudbury with the next step being carried out at Process Research Ortech in Mississauga, Ontario, where the sample was ground to less than 38 μ m, de-slimed and the magnetic fraction removed. The prepared sample was then trucked to Sudbury on a daily basis for the remaining flotation processing. The MPP was a continuous operation from flotation feed conditioning through to concentrate with the prepared feed delivered in time to maintain continuous operation.

The MPP demonstrated that recovery targets outlined previously by Avalon should be achievable. In addition the results of the MPP tests provide important information for further enhancement of the flotation scheme. As a result, further bench-scale testing is underway at both XPS and SGS focused on specific aspects of the flotation process. Some of the tests will examine changes in reagent schemes. In addition, a pilot-scale multi-gravity separator that promises enhanced gravity separation of finely ground feed is being evaluated for use in future MPP tests and the larger scale flotation pilot plant.

¹ Total Rare Earth Oxides (TREO) refers to the elements lanthanum to lutetium, plus yttrium, expressed as oxides. Heavy Rare Earth Oxides (HREO) refers to the elements europium to lutetium, plus yttrium, expressed as oxides. Light rare earths (LREO) refers to the elements lanthanum to samarium, expressed as oxides. LREE refer to the light rare earths and HREE as the heavy rare earths as elements. See Avalon's website for conversion factors from elements to oxides.

The MPP testwork is an interim step designed to identify key design criteria for the larger scale flotation pilot plant trial and economize on the cost and the size of the bulk sample required for the large scale trial. Additional MPP testwork is planned for completion by the end of the June, 2011.

LARGE SCALE FLOTATION PILOT PLANT

Avalon is planning to run a larger scale flotation pilot plant trial, processing between 20 and 30 tonnes of ore, late in the third quarter or early in the fourth quarter of 2011. The timing of this is partially dependent on the availability of equipment and personnel at SGS. The objectives of the larger scale test are:

- Provide adequate mineral concentrate for hydrometallurgical pilot testing.
- Confirm the flotation scheme on a larger scale for the BFS.

Since June, 2010, the Company's drilling program has included one drill rig equipped to recover large diameter PQ core. This core weighs in excess of 15 kg per metre, and consequently the Company's geologists estimate that sufficient mineralized core will have been acquired by the end of this winter drill program to provide the bulk sample for the large scale pilot plant trial.

HYDROMETALLURGICAL PROCESS DEVELOPMENT

Avalon has previously disclosed the outline of its planned hydrometallurgical process to extract the rare earths and other valuable rare metals from the Basal Zone ore minerals (News Releases 10-05, March 29, 2010 and 10-09, June 21, 2010). The purpose of the hydrometallurgical plant is to decompose or "crack" the ore minerals, bring the metals into solution and separate the rare earths from the Zr, Nb and Ta. The mixed rare earths concentrate would then be further processed in a Separation Plant, as announced in the Company's News Release 10-24 dated October 21, 2010.

To achieve the hydrometallurgical processing in the most efficient and economical way, Avalon has developed a two stage process to crack the ore minerals. The first step is heating the sample to 200°C with sulphuric acid ("Acid Bake") which breaks down most of the LREE minerals and fergusonite. Through this stage of the process, the LREE and about half the HREE can be brought into solution. This process has now been successfully demonstrated at the bench-scale numerous times at SGS. On-going work is concentrating on refining the details of the process and the optimum process for separating the rare earth elements from impurities such as iron.

The Acid Bake has been shown to solubilize about 80% of the light rare earths and about 40-50% of the heavy rare earths along with very limited quantities of Zr, Nb and Ta. The residue from this process contains the remaining 20% of the light rare earths, 50-60% of the heavy rare earths and the bulk of the Zr, Nb and Ta. This residue is largely comprised of zircon (zirconium silicate) and columbite (niobium and tantalum mineral) along with any silicate gangue minerals that have not broken down during the acid bake process.

The residue, containing the zircon, is then broken down in caustic decomposition which involves sodium hydroxide at about 600°C ("Caustic Crack"). This is a common process for producing zirconium chemicals from zircon, such as zirconium oxychloride ("ZoC"), and utilized presently in China and other countries for this purpose. The difference in this case is that the process will yield heavy rare earths, Nb and Ta, as well as Zr. The Caustic Crack process has also been successfully demonstrated at the bench scale numerous times at SGS.

The hydrometallurgical process steps following the Caustic Crack step are being investigated at present, to determine the optimum process for separating the rare earths from Zr, and from Nb and Ta. This will likely involve a combination of precipitation and solvent extraction.

The products from the Acid Bake and Caustic Crack will comprise:

- A mixed light and heavy rare earth precipitate as hydrated oxides or carbonates
- A mixed heavy rare earth precipitate as hydrated oxides or carbonates
- ZoC or other zirconium product
- Nb and Ta precipitates

The two rare earth products would be shipped to the Separation Plant to be separated into individual rare earth oxide products.

HYDROMETALLURGICAL PILOT PLANT

After the hydrometallurgical process is fully defined at the bench scale, pilot plant testing will be required. In order to secure access to the SGS facilities later this fall, a contract was signed with SGS for the design and operation of a hydrometallurgical pilot plant. The estimated cost for this work is \$7.5 million, approximately \$5.5 million higher than originally forecast by Avalon last year before the full scope of work was known.

Since the prefeasibility study was completed last year, it has become evident that this work will take longer than anticipated to complete to the high level of confidence required for a bankable feasibility study. The extra time and complexity of the process will result in considerable additional costs but will also ensure a more robust process is developed and reduced operational risk in the future. The whole operation is expected to take about 40 weeks to complete, finishing by mid-2012.

Preparation for the hydrometallurgical pilot plant work is commencing immediately with the design of the system and bench scale tests. Initiatives to accelerate the acquisition of sufficient concentrate are underway along with sourcing of the required equipment. It is also now clear that the hydrometallurgical pilot will require up to 4 tonnes of mineral concentrate feed.

SEPARATION PLANT

As described in the Company's News Release 10-23 dated October 13, 2010, following the prefeasibility study, Avalon commissioned a scoping study on the costs associated with building a Separation Plant in North America, to produce individual rare earth oxides and carbonates including the heavy rare earths. No such plant, with sufficient capacity to handle the large volume of heavy rare earth rich mixed rare earth oxide concentrates contemplated from Nechalacho, presently exists outside China.

The scoping study revealed that costs are highly sensitive to plant location as the delivered cost of the chemical reagents required for the separation process represents the majority of the operating costs. Subsequently, the Company has evaluated potential locations for this plant in North America and has identified a number of sites that meet the key criteria.

The Company intends to select a plant location within the next few months and is now in discussions with a number of engineering companies about carrying out a prefeasibility study on the separation plant. It is expected that this contract will be awarded and work initiated shortly after the plant site is determined.

UPDATE ON OTHER PROJECT ACTIVITIES

The 2011 winter drilling program commenced in January and 34 holes totaling 8291 metres have now been completed with 17 of these holes recovering the larger PQ core. An additional 10 short holes were drilled for purely geotechnical purposes. The smaller drill, equipped to recover HQ core, has been drilling holes to define additional Indicated Mineral Resources in the West Long Lake area, where previous drilling has identified a high grade sub-zone within the Basal Zone. Initial assay results from this drilling should be available in early May.

Simultaneously, the larger rig (equipped for PQ core) has been completing 50 metre spaced holes in areas of thicker Basal Zone intercepts in order to generate a bulk sample for metallurgical testwork, as well as upgrading Inferred resources to the Indicated level of confidence. Results from this drilling will be slower to arrive due to a lengthy sample preparation procedure designed to maximize the amount of sample available for future metallurgical testing.

A program of geotechnical drilling is commencing using the smaller drill, to test ground conditions in the proposed tailings area where berms would be required. This drilling is proceeding ahead of schedule and will finish within a few days when the drill will return to resource drilling. The larger drill will continue acquiring metallurgical sample until Spring break-up in May.

Avalon continues to hold discussions with potential customers for its rare earth products. Many industrial consumers in the US, Japan and Korea are very concerned about the future availability of heavy rare earths and neodymium. Some of these consumers have expressed interest in partnering with the Company in the development of the project and discussions in this regard are on-going.

On the permitting process, the Company received the final Terms of Reference ("TOR") for the environmental impact assessment from the Mackenzie Valley Environmental Impact Review Board ("MVEIRB") on February 15, 2011. Since then Avalon, along with EBA Engineering Consultants Ltd, have been working diligently on the Developers Assessment Report ("DAR"), commonly known as an Environmental Impact Statement utilizing the TOR as its foundation. Avalon anticipates the completion of the DAR by the end of April, 2011. Upon submittal of the DAR to MVEIRB, a work schedule will be developed by MVEIRB outlining the expected timeline for completion of the Environmental Assessment process.

Community engagement efforts continue with all of the Company's aboriginal partners in the Northwest Territories. Avalon has entered into Negotiation Agreements with the Yellowknives Dene First Nation and the Deninu K'ue First Nation and is presently working toward concluding a similar agreement with the Lutsel K'e Dene First Nation.

QUALIFIED PERSONS

The Company's Vice-President, Exploration, William Mercer, Ph.D., P.Geo. (Ont), P. Geol (NWT) is providing overall direction on the project. The qualified persons for the purposes of this news release are Dezhi Qi, P. Eng (Alberta), William Mercer and Donald Bubar, P. Geo., President.

About Avalon Rare Metals Inc. (TSX and NYSE-Amex: AVL)

Avalon Rare Metals Inc. is a mineral exploration and development company focused on rare metals deposits in Canada. Its flagship project, the 100%-owned Nechalacho Deposit, Thor Lake, NWT, is emerging as one of the largest undeveloped rare earth elements resources in the world. Its exceptional enrichment in the more valuable 'heavy' rare earth elements, which are key to enabling advances in clean technology and other growing high-tech applications, is one of the few potential sources of these critical

elements outside of China, currently the source of 95% of world supply. Avalon is well funded, has no debt and its work programs are progressing steadily. Social responsibility and environmental stewardship are corporate cornerstones. Avalon's performance on community engagement in the north earned it the 2010 PDAC Environmental and Social Responsibility Award.

Shares Outstanding: 93,618,265. Cash Resources: \$34 million.

To find out more about Avalon Rare Metals Inc., please visit our website at <u>www.avalonraremetals.com</u>. For questions and feedback, please e-mail the Company at <u>ir@avalonraremetals.com</u> or phone Donald S. Bubar, President and CEO, at 416-364-4938.

CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS:

This news release contains "forward-looking statements" within the meaning of the United States Private Securities Litigation Reform Act of 1995 and applicable Canadian securities legislation. Statements that are not historical fact are forward-looking statements that involve risks and uncertainties that could cause actual events or results to differ materially from estimated or anticipated events or results reflected in the forward-looking statements. Readers can identify forward-looking statements by the use of words such as "believe", "expects", "will", "intends", "projects", "anticipates", "estimates", "continues" or similar words or the negative thereof.

All forward-looking statements contained herein reflect management's plans, estimates, projections and views only as of the date hereof. Such forward-looking statements include, among other things, statements regarding targets, estimates and/or assumptions in respect of resources and potential reserves, and are or may be based on assumptions and/or estimates related to future economic, market and other conditions. Many factors could cause the Company's actual results, performance or achievements to be materially different from any future results, performance, or achievements that may be expressed or implied by such forward-looking statements, including, among others: the estimation or realization of mineral resources; recovery rates and production costs of the rare metals; the timing and amount of estimated future production; requirements for additional capital; future prices of rare metals and minerals; market demand for rare metals and minerals; the reliability of plant operations at production scale; energy costs; availability of required skilled labour, contractors and other human resources; accidents, labour disputes and other risks of the mining industry; delays in obtaining governmental approvals, permits or financing or in the completion of development or construction activities; currency exchange rate fluctuations; title disputes or claims limitations on insurance coverage and the timing and possible outcome of pending litigation; and the other factors described in the Company's annual Management's Discussion and Analysis and Annual Information Form filed with the applicable securities regulatory authorities in Canada and available at www.sedar.com.

Although the Company has attempted to identify important factors that could cause actual actions, events or results to differ materially from those described in forward-looking statements, there may be other factors that cause actions, events or results not to be as anticipated, estimated or intended. There can be no assurance that the plans, intentions or expectations upon which these forward-looking statements are based will occur. Most of such factors are beyond the Company's control.

The forward-looking statements contained herein are qualified in their entirety by this cautionary statement. Readers should not place undue reliance on the forward-looking statements. The forward-looking statements contained herein are presented for the purpose of assisting investors in understanding the Company's plans and expectations regarding operations and performance and may not be appropriate for other purposes.