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## **NEWS RELEASE**

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No. 11-01

### Avalon Reports Increase in Indicated Resources in the Nechalacho Rare Earth Elements Deposit, NWT

Toronto, ON -- Avalon Rare Metals Inc. (TSX and NYSE-Amex: AVL) ("Avalon" or the "Company") is pleased to provide an update on development work on the Nechalacho Rare Earth Elements ("REE") deposit, Thor Lake, NWT. In particular, all the data from the 2010 summer definition drilling program has now been compiled into the deposit block model and the 43-101 compliant resource estimates have been updated accordingly (Tables 1a and b). As expected, this resulted in a significant increase in the proportion of Mineral Resources in the Nechalacho deposit that can be classified as Indicated.

The updated resource estimate for the key Basal Zone part of the deposit has resulted in an increase in Indicated Mineral Resources to **57.49 million tonnes grading 1.56% TREO<sup>1</sup> with 20.72% HREO/TREO** using the base case \$260 Net Metallurgical Return (NMR) cut-off. This compares with the Indicated Resources of 20.45 million tonnes grading 1.75% TREO with 23% HREO/TREO reported for the Basal Zone in the September 2010 update (for the Tardiff Lakes and West Long Lake areas combined). It should be noted that this increase will not necessarily influence the decision on production rate, which will ultimately be determined by sales volumes estimates rather than resource size.

More significantly, the proportion of Indicated Mineral Resources estimated at the much higher \$600 NMR cut-off, now total **14.67 million tonnes at 2.19% TREO and 24.68% HREO/TREO.** This tonnage is similar to the total Indicated Mineral Resources estimated for the prefeasibility study at the \$260 NMR but with a 20% higher TREO grade and a 35% higher HREO content. This confirms, as predicted, that the Basal Zone resource contains high grade sub-zones of sufficient size and continuity to allow for selective mining at higher cut-off grades during the early years of production. At the 2,000 tonnes per day production rate contemplated in the prefeasibility study, this would be sufficient tonnage, once converted to mining reserves, to support a mine life of 20 years.

<sup>&</sup>lt;sup>1</sup> Total Rare Earth Oxides (TREO) refers to the elements lanthanum to lutetium, plus yttrium, expressed as oxides. See Avalon's website for conversion factors from elements to 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. HREO/TREO refers to the proportion of heavy rare earth oxides as a percentage of the total rare earth oxide content of the rock.

Don Bubar, President and CEO, stated "The definition of high grade sub-zones for selective mining will certainly have a beneficial effect on the project economics by increasing revenues during the early years of production. In addition, the increase in total Indicated Mineral Resources in the Basal Zone will extend the mine life used in the prefeasibility study financial model." Further, "The results also confirm the high rate of conversion of inferred resources to indicated resources, and the excellent internal continuity of the Basal Zone mineralization."

Total Inferred Mineral Resources for the Upper and Basal Zones combined now stands at an estimated **226.88 million tonnes grading 1.30% TREO with 14.33% HREO/TREO** compared with 182.56 million tonnes grading 1.40% TREO with 15% HREO/TREO in the September 2010 resource estimate (Table 1b). This increase in inferred resources is mainly due to the inclusion of extensions of the deposit identified from exploration holes located to the southwest of Long Lake and to the reinterpretation of the upper limit of the Basal Zone. Avalon's mine plan is concentrated on the Basal Zone, as this portion of the deposit is generally of higher overall grade, but also has higher levels of the more valuable heavy rare earths.

Table 1 includes (for comparative purposes) a column for "TREO equivalent %" which essentially treats the zirconium, niobium and tantalum as if they were also rare earth elements. TREO equivalent is estimated by calculating a weighted average NMR per kilogram for the rare earths and the rare metals (Zr, Nb, Ta) in a given interval, and re-estimating the interval assuming that all the value was in the rare earths only. The NMR includes the value attributable to  $ZrO_2$ ,  $Nb_2O_5$ , and  $Ta_2O_5$  in the rock after metallurgical recoveries.

Two drill holes from the summer program are not included in the inferred mineral resources due to the distance from the existing resources. Drill holes L10-310 and L10-311 are about 500 metres north of the present northern limit of the Inferred Mineral Resources. Hole L10-310 intercepted Basal Zone style mineralization averaging **1.09% TREO and 25.3% HREO/TREO over 22 metres** and L10-311 intercepted Basal Zone style mineralization averaging **1.40% TREO and 25% HREO/TREO over 24.75 metres**. Assuming continuity, these holes will have extended the known limits of the Basal Zone some 500 metres further north.

The detailed results and plan for individual drill holes can be viewed on the Company's website at <a href="http://www.avalonraremetals.com/projects/thor\_lake/thor\_lake\_intro/">http://www.avalonraremetals.com/projects/thor\_lake/thor\_lake\_intro/</a> .

The mineral resource estimates were prepared by Finley Bakker, P. Geo., Senior Resource Geologist. Drilling operations are being performed by Foraco Drilling Ltd. of Yellowknife, NWT under the supervision of J.C. Pedersen, P.Geo. The Company's Vice-President, Exploration, William Mercer, Ph.D., P.Geo. (Ont), P. Geol (NWT) is providing overall direction on the project and monitors the QA/QC on the laboratory analyses. The qualified persons for the purposes of this news release are Finley Bakker, William Mercer and D.S. Bubar, P. Geo., President.

The resource estimation procedure employed by Mr. Bakker was similar to that of Scott Wilson Roscoe Postle Associates for the NI 43-101 compliant resource disclosed in the Company's News Release dated June 14, 2010. The base case cut-off grade and metal price assumptions were unchanged while the composite methodology, estimation method (Inverse Distance Squared), block size, domains and estimation parameters were essentially the same. Minor differences in estimation

methodology are noted in the footnotes to the tables below. Readers are referred to the Company's current NI 43-101 technical report entitled "Technical Report on the Thor Lake Project, Northwest Territories, Canada" dated July 29, 2010, as amended September 21, 2010, which is available on Sedar at <u>www.sedar.com</u>.

#### Winter Drilling Program Begins

The 2011 winter drill program commenced during the week of January 10th with mobilization of crews for both drill rigs, one producing HQ and the second producing very large size PQ core. The PQ drilling is designed to provide additional bulk sample material for the upcoming metallurgical pilot plant program, with the objective of collecting a total of 30 tonnes of Basal Zone ore. An estimated 29,000 metres of definition drilling will be required to achieve this objective. This drilling will also serve to further upgrade the confidence level of the Basal Zone resources, including converting a portion of the Indicated Resources to the "Measured" level of confidence.

#### Permitting and Community Engagement Progress

The permitting process is progressing steadily and by the end of October, 2010, scoping sessions related to the environmental assessment had been completed in the communities of Yellowknife, Dettah, Lutsel K'e, Fort Resolution and Hay River. On November 26, 2010, the Mackenzie Valley Environmental Impact Review Board ("MVEIRB") submitted its Draft Terms of Reference ("ToR") with the comment period extended through January 7, 2011. Avalon is now awaiting MVIERB's Final ToR which will serve as the basis for the Developers Assessment Report required for the environmental assessment process.

Since the signing of the Negotiation Agreement with the Yellowknives Dene First Nation, as disclosed in the Company's News Release dated December 8, 2010, discussions continue toward the completion of an accommodation agreement (similar to an "Impacts and Benefits" agreement) this year. Avalon is also in discussions with the other participating aboriginal communities towards signing similar agreements. Avalon remains committed to maximizing potential partnership and participation opportunities for the local First Nations communities through project development and throughout future operations.

#### **Metallurgical Testing Program Progess**

The metallurgical testing program continues with both flotation and hydrometallurgical testwork underway under the supervision of consulting metallurgist, John R. Goode, P. Eng. Two pilot plant trials of the flotation flowsheet have been completed at Xstrata Process Support (XPS) in Sudbury, Ontario, and the data generated are still being analysed to determine next steps. Additional bench scale flotation testwork and mineralogical studies are underway both to further optimize the process and map mineralogical variability across the Basal Zone part of the deposit. Further flotation pilot plant tests are planned once the data from the first two pilot plant runs and bench testwork have been completely evaluated. Bench scale hydrometallurgical testwork is continuing at SGS Minerals in Lakefield, Ontario.

Avalon is also evaluating the results from a series of tests relating to flotation plant tailings disposal. These were done to further assess environmental impacts and study how the tailings can be utilized as paste backfill in the mine.

#### 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 green energy 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: 93,288,523. Cash resources: approximately \$37 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 William Mercer, Ph.D., P.Geo., VP Exploration, 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.

CAUTIONARY NOTE TO U.S. INVESTORS CONCERNING ESTIMATES OF MEASURED, INDICATED AND INFERRED MINERAL RESOURCES: This news release uses the terms "Measured", "Indicated" and "Inferred" Mineral Resources. United States investors are advised that while such terms are recognized and required by Canadian regulations, the United States Securities and Exchange Commission does not recognize them. "Inferred Mineral Resources" have a great amount of uncertainty as to their existence, and as to their economic and legal feasibility. It cannot be assumed that all or any part of an Inferred Mineral Resource will ever be upgraded to a higher category. Under Canadian rules, estimates of Inferred Mineral Resources may not form the basis of feasibility or other economic studies. United States investors are cautioned not to assume that all or any part of Measured or Indicated Mineral Resources will ever be converted into Mineral Reserves. United States investors are also cautioned not to assume that all or any part of an Inferred Mineral Resource exists, or is economically or legally mineable.

#### Table 1a: Nechalacho Indicated and Inferred Mineral Resources for Basal and Upper Zones by Net Metal Return ("NMR") Cut-off Value. \$260 is the base case NMR

INDICATED									
ZONE	NMR CUTOFF	Tonnes (millions)	TREO %	HREO %	HREO/TREO %	ZrO2 %	Nb2O5 %	Ta2O5 ppm	TREO equiv
BASAL	≥\$260	57.49	1.56	0.33	20.72	2.99	0.40	396	2.01
BASAL	≥\$400	39.79	1.77	0.39	22.15	3.41	0.45	448	2.28
BASAL	≥\$600	14.67	2.19	0.54	24.68	4.22	0.53	552	2.80
BASAL	≥\$700	7.26	2.43	0.62	25.97	4.64	0.58	621	3.10
						-	-		
UPPER	≥\$260	30.64	1.48	0.15	10.26	2.10	0.31	192	1.86
UPPER	≥\$400	6.25	2.20	0.21	10.38	2.95	0.40	243	2.73
UPPER	≥\$600	0.61	4.31	0.36	9.47	3.87	0.51	286	5.06
UPPER	≥\$700	0.27	6.11	0.45	8.06	3.93	0.52	260	6.92
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TOTAL	≥\$260	88.13	1.53	0.26	17.08	2.68	0.37	325	1.96
TOTAL	≥\$400	46.04	1.83	0.37	20.55	3.34	0.44	420	2.34
TOTAL	≥\$600	15.28	2.27	0.53	24.07	4.21	0.53	541	2.34
TOTAL	≥\$700	7.52	2.56	0.62	25.33	4.61	0.58	608	3.24

INFERRED									
ZONE	NMR CUTOFF	Tonnes (millions)	TREO %	HREO %	HREO/TREO %	ZrO2 %	Nb2O5 %	Ta2O5 ppm	TREO equiv
BASAL	≥\$260	107.59	1.35	0.26	18.97	2.83	0.37	354	1.77
BASAL	≥\$400	62.31	1.55	0.32	20.65	3.23	0.42	404	2.03
BASAL	≥\$600	9.30	2.16	0.54	24.76	4.53	0.55	564	2.79
BASAL	≥\$700	4.37	2.50	0.68	27.09	5.22	0.61	658	3.20
						-	-		
UPPER	≥\$260	115.99	1.27	0.12	9.57	2.37	0.34	196	1.67
UPPER	≥\$400	18.96	1.71	0.16	9.40	3.21	0.46	259	2.24
UPPER	≥\$600	0.93	2.48	0.24	9.85	4.62	0.65	447	3.26
UPPER	≥\$700	0.07	3.48	0.29	8.60	4.88	0.69	472	4.38
						-	-		
TOTAL	≥\$260	223.57	1.31	0.19	14.10	2.59	0.36	272	1.72
TOTAL	≥\$400	81.27	1.59	0.28	18.02	3.22	0.43	370	2.08
TOTAL	≥\$600	10.22	2.19	0.51	23.40	4.54	0.56	553	2.83
TOTAL	≥\$700	4.44	2.51	0.67	26.80	5.22	0.61	655	3.22

# Table 1b. Total Combined Upper and Basal Zones Indicated and InferredMineral Resources at the \$260 base case NMR Cut-off value

AREA	Tonnes (millions)	TREO %	HREO %	HREO/TREO %	ZrO2 %	Nb2O5 %	Ta2O5 ppm	TREO equiv		
TOTAL COMBINED INDICATED										
UPPER AND BASAL	88.13	1.53	0.26	17.08	2.68	0.37	325	1.96		
TOTAL COMBINED INFERRED										
UPPER AND BASAL	226.88	1.30	0.19	14.33	2.61	0.36	278	1.71		

Notes:

1. CIM definitions were followed for Mineral Resources.

- 2. HREO (Heavy Rare Earth Oxides) is the total concentration of:  $Y_20_3$ ,  $Eu_20_3$ ,  $Gd_20_3$ ,  $Tb_20_3$ ,  $Dy_20_3$ ,  $Ho_2O_3$ ,  $Er_20_3$ ,  $Tm_20_3$ ,  $Yb_20_3$  and  $Lu_20_3$ .
- 3. TREO (Total Rare Earth Oxides) is HREO plus: La<sub>2</sub>0<sub>3</sub>, Ce<sub>2</sub>0<sub>3</sub>, Pr<sub>6</sub>0<sub>11</sub>, Nd<sub>2</sub>0<sub>3</sub>and Sm<sub>2</sub>0<sub>3</sub>
- 4. Mineral Resources are estimated using price forecasts for 2014 for rare earth oxides prepared early in 2010. Some of these prices are higher and some are lower than current prices. The prices used are the same as in the June 14, 2010 disclosure.
- 5. Mineral Resources are undiluted.
- 6. A cut-off NMR grade of \$260 Can was used for the base case. NMR is defined as "Net Metal Return" or the *in situ* value of all the payable rare metals in the ore net of estimated metallurgical recoveries and processing costs.
- 7. An exchange rate of 1.11 was used.
- 8. ZrO<sub>2</sub> refers to Zirconium Oxide, Nb<sub>2</sub>O<sub>5</sub> refers to Niobium Oxide, Ta<sub>2</sub>O<sub>5</sub> refers to Tantalum Oxide, Ga<sub>2</sub>O<sub>3</sub> refers to Gallium Oxide.
- 9. TREO equivalent is estimated by calculating a weighted average NMR per kg for the rare earths and rare metals (Zr, Nb, Ta) in an given interval, and re-estimating the interval assuming that all the value was in rare earths only.
- 10. The two main differences to previous estimates were that 8 composites were used per block, versus 15 in the estimate released in July 19<sup>th</sup>, 2010 and the Basal Zone was not flattened onto the lower contact prior to block estimation. All other parameters were thesimilar.

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