

130 Adelaide St. W., Suite 1901, Toronto, ON M5H 3P5 Tel: (416) 364-4938 Fax: (416) 364-5162 ir@avalonraremetals.com www.avalonraremetals.com

## **NEWS RELEASE**

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No. 12-07

### Avalon Announces Initial Definition of Measured Mineral Resources in Latest Resource Estimate for the Nechalacho Rare Earth Elements Deposit, Thor Lake, NWT

Toronto, ON -- <u>Avalon Rare Metals Inc.</u> (<u>TSX</u> and <u>NYSE MKT</u>: AVL) ("Avalon" or the "Company") is pleased to announce an updated resource estimate for the Nechalacho Rare Earth Elements Deposit, Thor Lake, NWT (the "Nechalacho Deposit"). The estimate was prepared by Roscoe Postle Associates Inc. ("RPA") based on the assays from all drilling completed up to November, 2011. The updated resource estimate is highlighted by the initial definition of mineral resources in the Nechalacho Deposit at the key <u>Measured</u> level of confidence.

RPA has estimated Measured Mineral Resources of **8.90 million tonnes grading 1.64% TREO<sup>1</sup>** and 21.7% HREO/TREO using the base case \$260/tonne Net Metallurgical Return ("NMR") cutoff for the key Basal Zone part of the Nechalacho Deposit (see Table 1). Furthermore, within the Measured Mineral Resources, there are an estimated **8.42 million tonnes at the \$400/tonne** NMR cut-off grading 1.69% TREO and 21.82% HREO/TREO. This demonstrates that the Measured Mineral Resources continue to be robust at higher cut-off grades (see Table 3). Grades for individual rare earth element oxides are listed in Table 2.

The updated resource estimate for the Basal Zone has also resulted in an increase in the total Indicated Mineral Resources in the deposit to **63.76 million tonnes grading 1.52% TREO with 21.41% HREO/TREO** at the \$260/tonne NMR base case cut-off (Table 1). The total Measured and Indicated Resources of 72.66 million tonnes of 1.53% TREO and 21.5% HREO/TREO compares with the Indicated Mineral Resources of 57.49 million tonnes grading 1.56% TREO with 20.72% HREO/TREO reported previously for the Basal Zone in the news release dated January 27, 2011.

<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.

President and CEO, Don Bubar commented, "The initial definition of Measured Mineral Resources is an important milestone for the Nechalacho Project. This will lead to increased confidence in the Mineral Reserves, a key component for the Feasibility Study, and increased confidence in the continuity of the Basal Zone mineralization as we prepare for mine development."

The drilling programs on the Nechalacho Deposit carried out since January 2011 have focused on three main objectives:

- Detailed definition of the resources within the previously estimated Indicated Mineral Resources in order to refine the mine plan,
- Provision of a 40 tonne bulk sample for metallurgical testing, which was largely dependent on recovery of large diameter PQ core, and
- Geotechnical drilling of the planned ramp route, underground crusher location, tailings area and surface infrastructure locations.

All three objectives have been accomplished, although additional definition drilling is planned for this summer to further augment the inventory of Measured Mineral Resources for inclusion in the Mineral Reserves for the Feasibility Study. Once all the assays from this program are available this fall, a final update of the Mineral Resources and Reserves will be prepared for the Feasibility Study.

The summer drill campaign is planned to begin in early July with one HQ core drill focused on the southern margin of the deposit in the Long Lake area, where some of the highest grade resources in the Nechalacho Deposit are situated. The main objective of this program is to bring these higher grade resources (where the first mining stopes are planned) into the Measured category.

The mineral resource estimates were prepared by Tudorel Ciuculescu, P.Geo., Senior Geologist, RPA. 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 Tudorel Ciuculescu, P.Geo. (RPA) and William Mercer, P.Geo., VP-Exploration (Avalon).

The resource estimation procedure employed by RPA was similar to that of the NI 43-101 compliant resource disclosed in the Company's News Release dated <u>June 14, 2010</u> and resource update of <u>January 27, 2011</u>. The base case cut-off grade was unchanged, and the composite methodology, estimation method (Inverse Distance Squared), block size, domains and estimation parameters were similar. Metal price assumptions were updated to match those used for the Updated Pre-Feasibility Study (as detailed in the news release of <u>July 7, 2011</u>).

#### **NEW TECHNICAL STAFF ADDITIONS**

Avalon is pleased to announce additions to the Company's technical staff. Mr. Benjamin Webb has joined the company as Senior Resource Geologist as of May 28, 2012. Mr. Webb has an M.Sc. in Geological Sciences from Brown University. He has six years of mine production experience with Freeport-McMoRan Copper & Gold Inc., first at the Morenci Mine in Arizona, and more recently at the Grasberg mine in Indonesia during commissioning of stope mining. Mr. Webb will be responsible for managing resource estimation on all of the Company's mineral development projects, with the first priority being the Nechalacho Deposit.

In addition, Avalon has hired two junior metallurgists, recent graduates from the University of Toronto Department of Chemical Engineering. Both Ms. JiaYi Guan and Mr. Sami Khan will be assisting the senior metallurgists in advancing the metallurgical testwork and engineering for the Feasibility Study on the Nechalacho Deposit.

#### About Avalon Rare Metals Inc.

Avalon Rare Metals Inc. (<u>TSX</u> and <u>NYSE MKT</u>: AVL) is a mineral 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.

Shares Outstanding: 103,611,986. Cash resources: approximately \$41 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 Don Bubar, President 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 Resources 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 an Inferred Mineral Resources are also cautioned not to assume that all or any part of an Inferred Mineral Resource site investors are also cautioned not to assume that all or any part of an Inferred Mineral Resource site investors are also cautioned not to assume that all or any part of an Inferred Mineral Resource site investors are also cautioned not to assume that all or any part of an Inferred Mineral Resource site, or is economically or legally mineable.

Table 1: Nechalacho Deposit Mineral Resources at the Base Case \$260/tonne NMR Cut-Off									
Category	Zone	Tonnes (millions)	TREO (%)	HREO (%)	HREO/TREO (%)	ZrO₂ (%)	Nb <sub>2</sub> O <sub>5</sub> (%)	Ta₂O₅ (%)	
Measured	Basal	8.90	1.64	0.36	21.7	3.11	0.40	0.038	
	Upper	Nil							
Total Measured		8.90	1.64	0.36	21.7	3.11	0.40	0.038	
Indicated	Basal	63.76	1.52	0.32	21.4	3.07	0.40	0.039	
	Upper	88.56	1.17	0.12	10.0	1.71	0.26	0.017	
Total Indicated		152.32	1.32	0.20	15.5	2.28	0.32	0.026	
Measured and Indicated	Basal	72.66	1.53	0.33	21.5	3.07	0.40	0.039	
	Upper	88.56	1.17	0.12	10.0	1.71	0.26	0.017	
Total Measured and Indicated		161.21	1.33	0.21	15.9	2.33	0.32	0.027	
Inferred	Basal	77.17	1.29	0.25	19.4	2.84	0.37	0.034	
	Upper	254.51	0.98	0.10	9.8	1.86	0.28	0.016	
Total Inferred		331.67	1.05	0.13	12.5	2.09	0.30	0.020	

Notes:

1) CIM definitions were followed for Mineral Resources.

2) The Qualified Person for this Mineral Resource estimate is Tudorel Ciuculescu, M.Sc., P.Geo., RPA Senior Geologist.

3) HREO (Heavy Rare Earth Oxides) is the total concentration of: Y<sub>2</sub>O<sub>3</sub>, Eu<sub>2</sub>O<sub>3</sub>, Gd<sub>2</sub>O<sub>3</sub>, Tb<sub>2</sub>O<sub>3</sub>, Dy<sub>2</sub>O<sub>3</sub>, Ho<sub>2</sub>O<sub>3</sub>, Er<sub>2</sub>O<sub>3</sub>, Tm<sub>2</sub>O<sub>3</sub>, Yb<sub>2</sub>O<sub>3</sub> and Lu<sub>2</sub>O<sub>3</sub>.

- 4) TREO (Total Rare Earth Oxides) is HREO plus: La<sub>2</sub>O<sub>3</sub>, Ce<sub>2</sub>O<sub>3</sub>, Pr<sub>2</sub>O<sub>3</sub>, Nd<sub>2</sub>O<sub>3</sub> and Sm<sub>2</sub>O<sub>3</sub>.
- 5) Rare earths were valued at an average net price of US\$41/kg, ZrO<sub>2</sub> at US\$3.77/kg, Nb<sub>2</sub>O<sub>5</sub> at US\$56/kg, and Ta<sub>2</sub>O<sub>5</sub> at US\$256/kg. Average REO price is net of metallurgical recovery and payable assumptions for a mixed rare earth concentrate, and will vary according to the proportions of individual rare earth elements present. This average price is based on the price set used in the Updated Pre-Feasibility Study, applied to the Measured & Indicated Basal Zone resources.
- 6) An exchange rate of US\$1.00 = C\$1.05 was used.
- 7) A cut-off NMR value of C\$260 per tonne was used. NMR is defined as "Net Metal Return" or the in situ value of all payable metals, net of estimated metallurgical recoveries and off-site processing costs.

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.

- 9) See Table 2 for TREO details.
- 10) See Table 3 for tonnes and TREO grades at higher NMR cut-off values.

# Table 2: Nechalacho Deposit Measured, Indicated and Inferred Rare Earth Oxide Grades at the Base Case \$260/tonne NMR Cut-Off

Category	Zone	Tonnes (millions)	La <sub>2</sub> O <sub>3</sub> (%)	Ce <sub>2</sub> O <sub>3</sub> (%)	Pr <sub>2</sub> O <sub>3</sub> (%)	Nd <sub>2</sub> O <sub>3</sub> (%)	Sm <sub>2</sub> O <sub>3</sub> (%)	Eu <sub>2</sub> O <sub>3</sub> (%)	Gd <sub>2</sub> O <sub>3</sub> (%)	Tb <sub>2</sub> O <sub>3</sub> (%)	Dy <sub>2</sub> O <sub>3</sub> (%)	Ho <sub>2</sub> O <sub>3</sub> (%)	Er <sub>2</sub> O <sub>3</sub> (%)	Tm <sub>2</sub> O <sub>3</sub> (%)	Yb <sub>2</sub> O <sub>3</sub> (%)	Lu <sub>2</sub> O <sub>3</sub> (%)	Y <sub>2</sub> O <sub>3</sub> (%)
Measured	Basal	8.90	0.262	0.589	0.075	0.293	0.065	0.008	0.059	0.009	0.044	0.008	0.020	0.003	0.016	0.002	0.188
	Upper	Nil															
Total Measured		8.90	0.262	0.589	0.075	0.293	0.065	0.008	0.059	0.009	0.044	0.008	0.020	0.003	0.016	0.002	0.188
Indicated	Basal	63.76	0.246	0.546	0.069	0.271	0.058	0.007	0.052	0.008	0.040	0.007	0.018	0.002	0.014	0.002	0.174
	Upper	88.56	0.222	0.493	0.061	0.235	0.044	0.005	0.032	0.003	0.013	0.002	0.004	0.001	0.003	0.000	0.053
Total Indicated		152.32	0.232	0.515	0.064	0.250	0.050	0.006	0.040	0.005	0.025	0.004	0.010	0.001	0.008	0.001	0.104
		70.00	0.040	0.554	0.070	0.074	0.050	0.007	0.050	0.000	0.044	0.007	0.010	0.000	0.014	0.000	0.170
Measured and Indicated	Basal	/2.66	0.248	0.551	0.070	0.274	0.059	0.007	0.053	0.008	0.041	0.007	0.018	0.002	0.014	0.002	0.1/6
	Upper	88.56	0.222	0.493	0.061	0.235	0.044	0.005	0.032	0.003	0.013	0.002	0.004	0.001	0.003	0.000	0.053
Total Measured and Indicated		161.21	0.234	0.519	0.065	0.252	0.051	0.006	0.041	0.005	0.026	0.004	0.011	0.001	0.008	0.001	0.108
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Inferred	Basal	77.17	0.216	0.473	0.062	0.242	0.049	0.006	0.044	0.006	0.031	0.005	0.013	0.002	0.010	0.001	0.131
	Upper	254.51	0.180	0.411	0.053	0.204	0.036	0.004	0.026	0.003	0.011	0.002	0.004	0.000	0.003	0.000	0.043
Total Inferred		331.67	0.188	0.426	0.055	0.213	0.039	0.004	0.030	0.004	0.015	0.002	0.006	0.001	0.005	0.001	0.064

Table 3: Nechalacho Deposit Measured, Indicated and Inferred Mineral Resources for Basal								
and Upper Zones by NMR Cut-Off Value (\$260/tonne is the base case)								
Zone	MMR Cut-Off			HREO	HREO/TREO			
Maggurad	(\$CAD)	(millions)	(%)	(%)	(%)			
	> -1000	1.00	2.20	0.01				
BASAL	>=1000	1.90	2.38	0.61	25.77			
BASAL	>=800	3.93	2.08	0.51	24.52			
BASAL	>=600	6.48	1.86	0.42	22.59			
BASAL	>=400	8.42	1.69	0.37	21.82			
BASAL	>=260	8.90	1.64	0.36	21.72			
Indicated								
BASAL	>=1000	9.63	2.32	0.59	25.47			
BASAL	>=800	22.96	2.00	0.48	24.22			
BASAL	>=600	44.89	1.72	0.39	22.43			
BASAL	>=400	60.88	1.55	0.33	21.51			
BASAL	>=260	63.76	1.52	0.32	21.41			
UPPER	>=1000	0.50	4.53	0.39	8.53			
UPPER	>=800	1.94	3.05	0.30	9.76			
UPPER	>=600	8.80	2.18	0.22	10.25			
UPPER	>=400	39.20	1.53	0.15	10.08			
UPPER	>=260	88.56	1.17	0.12	9.96			
Inferred								
BASAL	>=1000	2.65	2.27	0.54	24.00			
BASAL	>=800	13.33	1.87	0.41	22.12			
BASAL	>=600	42.75	1.55	0.32	20.54			
BASAL	>=400	70.57	1.35	0.26	19.54			
BASAL	>=260	77.17	1.29	0.25	19.40			
UPPER	>=1000	0.81	2.91	0.23	7.94			
UPPER	>=800	2.47	2.55	0.22	8.50			
UPPER	>=600	12.15	1.98	0.18	9.09			
UPPER	>=400	88.05	1.32	0.13	9.65			
UPPER	>=260	254.51	0.98	0.10	9.76			