RIO ALTO INCREASES MINERAL RESOURCES AT LA ARENA

For Immediate Release ***January 5, 2012***

Rio Alto Mining Limited ("Rio Alto" or the "Company") (TSXV & BVL: **RIO**, OTCQX: **RIOAF,** DB Frankfurt: **MS2**) is pleased to announce that it has received updated mineral resource estimates for its 100% owned La Arena Project. The updated oxide mineral resource estimate is limited to the Calaorco and Ethel deposits and a zone of oxide material containing 300ppm – 1000ppm copper to the east of Calaorco. The updated mineral resource estimate for the La Arena sulphide project incorporates an additional 3,879 meters of diamond drilling ("DD") and 21,904 meters of reverse circulation ("RC") drilling when compared to the previous resource estimate. As part of the feasibility study for the La Arena sulphide deposit, the Company expects to drill an additional 28,122 meters of DD and 11,412 meters of RC drilling that will complete the database for the sulphide feasibility study resource estimate which is due to be updated in Q3, 2012.

Both oxide and sulphide mineral resource estimates significantly increase the gold and copper resources previously described in the Company's La Arena Project Technical Report with an effective date of July 31, 2010 prepared on behalf of the Company by Coffey Mining Pty Ltd (the "July 2010 Report"). The July 2010 Report may be referenced within Rio Alto's SEDAR profile at www.sedar.com.

Highlights of the updated mineral resource estimates are as follows:

Oxide Mineral Resource (0.1 g/t gold cut-off)

- 100.7 million tonnes grading 0.46 g/t gold in the measured and indicated categories containing 1,484,000 ounces of gold representing an increase of 434,000 gold ounces (41.33%) from the oxide mineral resource estimate in the July 2010 Report.

- 10.4 million tonnes grading 0.27 g/t gold in the inferred category containing 90,000 ounces of gold representing an increase of 33,000 gold ounces (57.89%) from the oxide mineral resource estimate in the July 2010 Report.

The updated oxide mineral resource is based on drilling completed by Cambior and IAMGOLD (the "Previous Owners") and drilling completed by Rio Alto during 2011. The oxide mineral resource remains open to the north-west and at depth. The Company intends to further explore the oxide mineralization with an RC drill program during 2012.

Sulphide Mineral Resource (0. 18% copper equivalent cut-off)

- 312.7 million tonnes grading 0.29% copper per tonne and 0.24 g/t gold in the indicated category containing 2.0 billion pounds of copper and 2,422,000 ounces of gold representing an increase of 285 million pounds of copper (16.55%) and 490,000 gold ounces (25.36%) from the sulphide mineral resource estimate in the July 2010 Report.

- 319.7 million tonnes grading 0.30% copper per tonne and 0.20 g/t gold in the inferred category containing 2.1 billion pounds of copper and 2,075,000 ounces of gold representing

an increase of 963 million pounds of copper (82.24%) and 859,000 gold ounces (70.64%) from the sulphide mineral resource estimate in the July 2010 Report.

Drilling in the sulphide resource completed by the Previous Owners prior to 2006 was to an average depth of 450 meters. During the past 6 months, Rio Alto has drilled 12 DD holes to a depth of 800 meters and has received assay results for 5 of these deep DD holes, which are incorporated in the updated sulphide mineral resource estimate. A total of 40 RC holes drilled in the gap zone between the Calaorco oxide resource and the La Arena sulphide mineral resource and an additional 22 RC holes drilled in sulphides were also incorporated in the updated sulphide mineral resource estimate.

Significant sulphide drill hole intercepts are as follows:

Hole_ID	Interval	Au g/t	Cu %	Ag g/t	Mo ppm
LA-D11-001A	328	0.26	0.41	0.34	71
LA-D11-004	623	0.22	0.45	0.71	85
Including	135	0.38	0.82	2.23	287
LA-D11-008	635	0.30	0.48	0.54	82
Including	101	0.42	0.63	0.53	56
LA-D11-013	416	0.20	0.35	0.83	103
LA-D11-013	126	0.23	0.52	1.20	90
LA-D11-014	576	0.22	0.38	0.39	38
GAP-R11-015	360	0.23	0.26	0.30	40
GAP-R11-022	156	0.20	0.37	0.25	109
GAP-R11-030	334	0.35	0.31	0.46	22
GAP-R11-033	382	0.19	0.23	0.58	69
LA-R11-002	388	0.22	0.26	0.27	26
LA-R11-003	360	0.30	0.29	0.72	33
LA-R11-004	380	0.22	0.26	0.73	40
LA-R11-005	322	0.19	0.21	0.59	71
LA-R11-011	204	0.19	0.35	0.50	35
LA-R11-015	264	0.15	0.23	0.02	85
LA-R11-016	346	0.21	0.27	0.21	23
LA-R11-017	266	0.44	0.39	0.98	30
Including	98	0.88	0.78	1.69	18
LA-R11-	190	0.39	0.52	0.41	43

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LA-R11-022	302	0.23	0.34	0.31	37

Sulphide Drilling Results

The results of the additional 3,879 meters of DD holes and 21,904 meters of RC drilling completed by Rio Alto prior to the September 30, 2011 effective date for the updated sulphide mineral resource are as follows:

Hole_ID	From	To	Interval	Au g/t	Cu %	Ag g/t	Mo ppm
LA-D11-001A	86	414	328	0.26	0.41	0.34	71
Including	120	192	72	0.35	0.49	0.15	21
Including	240	356	116	0.28	0.50	0.69	126
LA-D11-001A	452	508	56	0.14	0.29	0.56	33
LA-D11-001A	570	785	215	0.17	0.40	0.77	85
Including	576	680	104	0.24	0.55	1.19	64
Including	764	785	21	0.22	0.54	0.42	73
LA-D11-004	188	811	623	0.22	0.45	0.71	85
Including	419	470	51	0.36	0.56	0.54	112
Including	590	724	135	0.38	0.82	2.23	287
LA-D11-008	20	36	16	0.28	0.27	0.28	54
LA-D11-008	94	125	31	0.24	0.24	1.17	54
LA-D11-008	174	809	635	0.30	0.48	0.54	82
Including	424	474	50	0.48	0.64	0.63	65
Including	570	670	101	0.42	0.63	0.53	56
Including	686	750	64	0.32	0.55	0.32	171
LA-D11-013	164	580	416	0.20	0.35	0.83	103
Including	500	569	70	0.49	0.77	2.30	109
LA-D11-013	614	740	126	0.23	0.52	1.20	90
Including	672	726	54	0.30	0.65	1.39	83
LA-D11-013	768	794	26	0.38	0.73	1.29	52
LA-D11-014	19	88	70	0.20	0.22	0.09	68
LA-D11-014	104	680	576	0.22	0.38	0.39	38
Including	218	248	30	0.40	0.55	0.75	17
Including	495	572	77	0.29	0.60	0.71	27
GAP-R11-006	316	354	38	0.09	0.16	0.01	36
GAP-R11-010	188	366	178	0.15	0.16	1.00	22
GAP-R11-011	44	122	78	0.22	0.10	0.38	23
GAP-R11-011	150	362	212	0.19	0.19	0.57	23
GAP-R11-	60	258	198	0.14	0.17	0.31	66

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Including	174	204	30	0.30	0.33	0.60	49
GAP-R11-014	302	334	32	0.11	0.14	0.18	54
GAP-R11-015	48	408	360	0.23	0.26	0.30	40
Including	112	262	150	0.29	0.32	0.37	32
GAP-R11-016	20	402	382	0.21	0.18	0.43	26
Including	66	90	24	0.34	0.44	0.63	33
GAP-R11-017	322	402	80	0.21	0.21	0.53	34
GAP-R11-020	314	360	46	0.09	0.14	0.01	31
GAP-R11-021	8	310	302	0.14	0.21	0.14	31
Including	50	80	30	0.20	0.53	0.07	20
GAP-R11-022	0	156	156	0.20	0.37	0.25	109
Including	36	138	102	0.22	0.47	0.30	118
GAP-R11-026	32	146	114	0.17	0.23	0.01	71
GAP-R11-027	0	150	150	0.12	0.17	0.22	72
Including	28	56	28	0.14	0.26	0.41	83
GAP-R11-028	50	76	26	0.17	0.21	0.42	42
GAP-R11-030	22	60	38	0.24	0.18	0.51	56
GAP-R11-030	68	402	334	0.35	0.31	0.46	22
Including	140	234	94	0.39	0.36	0.05	26
Including	322	392	70	0.64	0.53	1.30	13
GAP-R11-031	6	120	114	0.22	0.28	0.35	115
Including	76	120	44	0.27	0.45	0.09	164
GAP-R11-031	176	300	124	0.25	0.33	0.87	69
GAP-R11-032	190	300	110	0.20	0.20	0.01	40
GAP-R11-033	20	402	382	0.19	0.23	0.58	69
Including	42	72	30	0.19	0.47	0.14	44
GAP-R11-034	108	276	168	0.12	0.18	0.61	66
GAP-R11-035	272	286	14	0.52	0.49	13.61	25
GAP-R11-035	250	402	152	0.23	0.22	3.36	27
GAP-R11-036	256	300	44	0.12	0.14	0.65	26

GAP-R11-040	170	234	64	0.13	0.29	0.31	34
Including	202	224	22	0.15	0.47	0.18	33
LA-R11-002	14	402	388	0.22	0.26	0.27	26
Including	20	54	34	0.50	0.58	0.26	17
Including	306	342	36	0.44	0.54	1.06	39
LA-R11-003	42	402	360	0.30	0.29	0.72	33
Including	328	374	46	0.50	0.58	1.12	37
LA-R11-004	22	402	380	0.22	0.26	0.73	40
LA-R11-005	80	402	322	0.19	0.21	0.59	71
LA-R11-006	4	44	40	0.16	0.21	0.34	50
LA-R11-006	120	300	180	0.17	0.20	0.45	46
LA-R11-007	0	76	76	0.20	0.25	0.61	43
LA-R11-007	124	168	44	0.15	0.18	0.21	13
LA-R11-007	196	300	104	0.14	0.14	0.04	14
LA-R11-008	6	82	76	0.18	0.16	0.05	42
LA-R11-008	154	296	142	0.15	0.17	0.46	28
LA-R11-009	140	282	142	0.16	0.20	0.31	64
LA-R11-010	184	300	116	0.18	0.20	0.34	42
LA-R11-011	24	228	204	0.19	0.35	0.50	35
Including	52	120	68	0.26	0.46	0.58	48
LA-R11-012	48	136	88	0.20	0.29	0.66	78
LA-R11-012	228	402	174	0.12	0.17	0.66	53
LA-R11-013	76	124	48	0.24	0.33	0.13	353
LA-R11-014	34	104	70	0.32	0.57	0.48	17
LA-R11-015	124	388	264	0.15	0.23	0.02	85
Including	276	388	112	0.26	0.35	0.01	77
LA-R11-016	26	372	346	0.21	0.27	0.21	23
Including	26	82	56	0.28	0.44	0.08	55
Including	260	300	40	0.36	0.46	0.40	29
Including	330	346	16	0.41	0.55	0.91	14
LA-R11-017	34	300	266	0.44	0.39	0.98	30
Including	60	158	98	0.88	0.78	1.69	18
LA-R11-018	36	122	86	0.25	0.29	0.51	65
LA-R11-019	50	132	82	0.33	0.38	0.10	19
LA-R11-019	320	348	28	0.11	0.13	0.01	47
LA-R11-020	0	190	190	0.39	0.52	0.41	43
Including	8	134	126	0.48	0.69	0.35	55
LA-R11-020	250	402	152	0.12	0.19	0.45	36
LA-R11-021	14	154	140	0.37	0.42	0.55	38
Including	52	104	52	0.59	0.62	0.68	48
LA-R11-021	174	214	40	0.20	0.46	1.10	10
LA-R11-022	48	350	302	0.23	0.34	0.31	37

A map of drill hole locations and selected drill hole cross sections related to this press release maybe viewed at http://media3.marketwire.com/docs/Resource_Update_Graphics.pdf.

The Company will release assay results for the additional and future drill holes once the results have been compiled. The 5 deep DD holes drilled, by Rio Alto, to date have all ended in mineralization. The sulphide mineral resource is open at depth and in all directions. In addition to completing the sulphide feasibility study drill program, the Company intends to begin testing the extension of the sulphide mineralization during 2012.

Resource Development Drilling

There are 2 RC and 4 DD rigs operating at the La Arena Project. The current work program is to complete an additional 21,904 meters of DD drilling and 11,412 meters of RC drilling in the sulphide, for an estimated total of 32,000 DD meters and 34,000 RC meters related to the ongoing sulphide feasibility study. A total of 22,612 meters of RC drilling within the oxide mineral resource was completed during 2011 and results of that drilling were announced during the year.

Oxide Mineral Resource Estimate

The following tables outline the updated oxide mineral resource estimate for the La Arena Project.

Oxide Mineral Resource – Low Copper (Cu <300ppm ; Au >= 0.1 g/t)

Resource Classification	Mt	Au (g/t)	Cu (%)	Ag (ppm)	Mo (ppm)	Au ('000 Oz)
Measured	9.8	0.67	0.01	0.6	6.9	210
Indicated	76.9	0.46	0.01	0.5	6.5	1,136
Measured + Indicated	86.7	0.48	0.01	0.5	6.6	1,346
Inferred	9.0	0.28	0.01	0.5	6.7	82

Oxide Mineral Resource – High Copper (Cu 300ppm – 1000ppm ; Au >= 0.1 g/t)

Resource Classification	Mt	Au (g/t)	Cu (%)	Ag (ppm)	Mo (ppm)	Au ('000 Oz)
Measured	0.5	0.66	0.06	0.7	36.0	11
Indicated	13.5	0.29	0.06	0.6	41.4	127
Measured + Indicated	14.0	0.31	0.06	0.6	41.2	138
Inferred	1.4	0.18	0.06	0.6	55.7	8

Oxide Mineral Resource – Total

Resource Classification	Mt	Au (g/t)	Cu (%)	Ag (ppm)	Mo (ppm)	Au ('000 Oz)
Measured	10.3	0.67	0.01	0.6	8.3	221
Indicated	90.4	0.43	0.02	0.5	11.7	1,263
Measured + Indicated	100.7	0.46	0.02	0.5	11.4	1,484

Inferred	10.4	0.27	0.01	0.5	13.1	90

The updated oxide mineral resource estimate was based on a total of 22,612 meters of RC drilling and 24,658 meters of DD holes in a total of 427 holes. The Previous Owners completed 183 DD holes totalling to 24,658 meters. Rio Alto completed the balance of 22,612 meters of RC drilling during 2011.

The updated oxide mineral resource estimate was generated from drill hole sample assay results and the interpretation of a geological model that relates to the spatial distribution of gold, copper and silver within the deposit. Mineralized oxide material containing copper amounts in excess of 1000 ppm per tonne was considered to be waste material. As a result of limited test work conducted during 2011, Rio Alto believes there is potential to either blend or separately leach the Oxide – High Copper material with Oxide – Low Copper resource material. A metallurgical laboratory is under construction at the La Arena mine site and once completed will test the viability and economics of leaching the Oxide – High Copper material.

Grade estimates for the oxide mineral resource were made using ordinary kriging with parental block sizes measuring 20 meters long, 10 meters wide and 6 meters in height. The resource is confined within an optimized undiscounted pit shell based on US$ 1,600/oz gold, US$ 3.00/lb copper and US$ 30/oz silver and also constrained by anticipated metallurgical recovery, costs to produce and sell potential metal production as well as estimated leach pad expansion costs.

Sulphide Mineral Resource Estimate

The following table outlines the updated sulphide resource estimate for the La Arena Project.

Resource Classification	Mt (millions)	Au (g/t)	Cu (%)	CuEq[(1)] (%)	Ag (ppm)	Mo (ppm)	Au ('000 Oz)	Cu (000's lbs)
Indicated	312.7	0.24	0.29	0.48	0.7	42.9	2,422	2,007,000
Inferred	319.7	0.20	0.30	0.46	0.6	46.1	2,075	2,134,000

Note:

(1) Copper equivalent calculated using US$ 1600/oz Au and US$ 3.00/lb Cu and is not adjusted for metallurgical recoveries.

The updated sulphide mineral resource estimate was based on 148 DD holes totalling 34,688 meters and 62 RC holes totalling 21,904 meters, including 72 holes totalling 25,783 meters drilled by Rio Alto and 143 DD holes totalling 30,737meters drilled by the Previous Owners. Prior to the generation of the updated sulphide mineral resource estimate, Rio Alto´s geologists re-logged all the holes drilled by the Previous Owners and revised the geological model for the sulphide deposit.

The sulphide mineral resource estimate was generated from drill hole sample assay results and the interpretation of a geological model relating to the spatial distribution of copper and gold mineralization within the deposit. Grade estimates were made using ordinary kriging with a parental block size of 20 meters long, 10 meters wide and 6 meters in height. The resource is confined within an optimized undiscounted pit shell based on US$ 1,600/oz gold, US$ 3.00/lb copper, US$ 30/oz silver and US$ 12.00/lb molybdenum and also constrained by estimated metallurgical recoveries, costs to mine, process and sell copper and gold in the form of copper concentrate.

The updated oxide and sulphide mineral resource estimates were prepared and classified in accordance with the guidelines set out in the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves of December 2004 as prepared by the Joint Ore Reserves Committee of the Australasian Institute of Mining and Metallurgy, Australian Institute of

Geoscientists and Minerals Council of Australia ("JORC"). The resource classification is also in accordance with the classification standards of National Instrument 43-101 *Standards for Disclosure for Mineral Projects* ("NI 43-101") and the reporting classification standards on Mineral Resources and Reserves of The Canadian Institute of Mining, Metallurgy and Petroleum. These estimates will be incorporated in a National Instrument 43-101 Technical Report with an effective date of September 30, 2011 to be filed on the Company's SEDAR profile within 45 days.

Quality Control and Assurance

Sampling of RC drilling and sample preparation for holes drilled by the Company were performed by Rio Alto personnel and carried out under strict protocols recommended in the July 2010 Report. Samples were taken every two meters and split in half to yield seven to ten kilogram samples. Drill sample recovery was generally in excess of 90%.

Sampling of DD holes and sample preparation for holes drilled by the Company were performed by Rio Alto personnel. In the case of each DD hole, an average depth of 450 to 500 meters was drilled with a HQ bit (63.5 mm core size), and the remainder of the hole drilled with a NQ bit (47.6 mm core size). Drill core sample recovery was generally in excess of 90%. The core boxes were washed and photographed. The sample intervals are every two meters, except where sampling is broken up on specific geological contacts. The core is split in half using a rock saw with half of the core sent for laboratory analysis and half of the core remaining in storage.

The QA/QC procedures employed for sampling and assaying of holes drilled by the Previous Owners is described in the July 2010 Report and was considered satisfactory. There is a rigorous QA/QC program over the chain-of-custody of samples and the insertion of blanks, duplicates and certified reference standards in each batch of samples. This procedure was implemented based on a recommended protocol from Coffey Mining in 2011.

Samples were shipped to CIMM-Peru, in Lima, where they were processed and assayed. All gold assays were obtained by standard 50g fire assaying with AAS finish. All silver assays were obtained by Aqua-Regia dissolution followed by ICP measurement. All Cu and Mo assays were obtained by Aqua-Regia dissolution followed by ICP. Cu values over 10,000 ppm are assayed by Atomic Absorption. The Induced Coupled Plasma (ICP) technique provides assays for 35 elements. CIMM-Peru is an ISO 9001:2000 certified laboratory.

Mr. Enrique Garay, M Sc. P. Geo (AIG Member), Vice President Geology of Rio Alto, is the Qualified Person (as defined by NI 43-101) responsible for managing the Company's exploration programs and disclosure of drilling results. Mr. Ian Dreyer, B.App. Sc.(AUSIMM 305241,CP), a Qualified Person (as defined by NI 43-101), formerly of Coffey Mining Pty Ltd, designed and reviewed the Quality Control and Assurance Program of the Company and prepared the resource estimates. Mr. Garay and Mr. Dreyer have read and verified the scientific and technical information in this press release.

For additional information regarding La Arena Project please refer to the July 2010 Report prepared by Coffey Mining Pty Ltd, a copy of which is available on the Company's SEDAR profile at www.sedar.com.

Certain statements contained herein constitute forward-looking statements, most particularly the estimated mineral resources, the viability of leaching the oxide-high copper material, metal prices and metal production for the La Arena Project and the timing for the completion of a feasibility study for the La Arena copper/gold sulphide project. All statements included herein, other than statements of historical fact, are forward-looking information and such information involves various risks and uncertainties. Rio Alto believes the expectations reflected in these forward looking statements are reasonable but no assurance can be given that these expectations will prove to be correct and such forward-looking statements in this press release should not be unduly relied upon. A description of

assumptions used to develop such forward-looking information and a description of risk factors that may cause actual results to differ materially from forward-looking information can be found in Rio Alto's disclosure documents on the SEDAR website at www.sedar.com. Forward-looking statements included in this press release are made as of the date of this press release and Rio Alto disclaims any intention or obligation to update or revise any forward-looking statements, whether as a result of new information, future events or otherwise, except as expressly required by applicable securities legislation.

To learn more about Rio Alto Mining Limited, please visit: www.rioaltomining.comorRio Alto's SEDAR profile atwww.sedar.com.

ON BEHALF OF THE BOARD OF
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