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ASX: AOH, FSE: A2O

## LITTLE EVA TURNS ONE HUNDRED

**The Little Eva Resource has increased to 108 million tonnes at 0.52% copper, 0.09g/t gold, for 564,000 tonnes of contained copper and 305,000 ounces of contained gold**

**Altona Mining Limited** (Altona) today announced a further resource upgrade for the 100%-owned Roseby Project in Queensland, Australia.

**Global Resource:**

The global resource estimate for the Roseby Project has increased to:

**210 million tonnes at 0.6% copper and 0.06g/t gold for 1.2 million tonnes of copper and 395,000 ounces of gold.**

This compares to 177 million tonnes at 0.6% copper and 0.06g/t gold in the previous estimate of 26 July 2011.

**Little Eva Resource:**

The prior estimate for Little Eva was 74.7 million tonnes at 0.52% copper and 0.06g/t gold above a 0.2% cut-off grade. The revised Little Eva resource is:


**108 million tonnes at 0.52% copper and 0.09g/t gold for 564,000 tonnes of copper and 305,000 ounces of gold above a cut-off grade of 0.2% copper**

Some 63% of this estimate is in the Measured and Indicated categories. The new estimate is detailed in the attached tables and appendices. This resource upgrade is the final upgrade for Little Eva after the completion of 21,085m of RC drilling and 2,041m of diamond drilling at Little Eva this field season, resulting in the contained copper metal more than doubling. Total RC drilling at Little Eva is 64,256m and total diamond drilling 12,270m. The deposit was drilled to depths of 250–300m, is steeply dipping, is 1.3km long and ranges from 20–400m wide.

Little Eva is now a significant mineral deposit containing some 560,000 tonnes of copper equivalent metal.

Little Eva is a typical IOCG (iron-oxide copper-gold) deposit. It is a large and simple bulk tonnage copper-gold sulphide deposit which has excellent metallurgical recoveries of copper (96%) and gold (90%) to concentrate. Processing will be via an industry standard flotation plant to produce a copper-gold sulphide concentrate. A 15–30m thick cap of oxide copper mineralisation (goethite, malachite, etc) overlies primary mineralisation (feldspar-quartz- hematite-carbonate-chalcopyrite). Recovery of copper from oxide ore is being investigated via AmmLeach® Technology.

The increase in the resource estimate is largely due to the extension of prior boundaries to the west and at the base of the resource. The resource has been reported at a 0.2% copper cut-off after geological boundary analysis and consideration of marginal costs indicated that this was appropriate. A tabulation of the Resource at a 0.3% copper cut-off grade has been provided to allow comparison with prior estimates.



A description of the assessment and reporting criteria used in the estimation reflects those detailed in Table 1 of The Australasian Code for the Reporting of Exploration Results, Mineral Resources and Ore Reserves (The JORC Code, 2004) and is provided in detail in the release to ASX dated 26 July 2011.

Little Eva is also the stage name of Eva Boyd, the singer with the number one American hit in 1962, The Loco-Motion.

Further upgrades are expected at Altona's other deposits at Roseby.

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**About Altona**

Altona Mining Limited (ASX: AOH) has two major copper assets and a clear strategy to build a profitable copper business. The immediate priority is to take the Outokumpu Project in Finland into production through developing the Kylylahti mine and refurbishing the Luikonlahti processing hub. Growth will be delivered by expanding production and by developing other resources in the area.

The Roseby Copper Project near Mt Isa in Queensland is one of Australia's largest undeveloped copper projects. The Company's aim is to increase resources well beyond 1 million tonnes of contained copper and to upgrade the DFS to a production target of 40,000tpa copper. Altona will take Roseby to a development decision in parallel with developing the Outokumpu Copper Project.

**About Roseby**

The Roseby Copper Project is 100% owned by Altona Mining Limited and is one of Australia's largest undeveloped copper resources. A Definitive Feasibility Study (DFS) is underway on the Little Eva Deposit and scheduled for publication in the second quarter of 2012. The study envisages the production of 25,000-30,000 tonnes per annum of copper and approximately 7,500 ounces per annum of gold for 10 years from a 5Mtpa open-pit mining operation. Environmental and regulatory approvals for construction of this substantial mining operation are well advanced.

The Roseby Project is over 1,300km<sup>2</sup> in size and is a major strategic land holding being only 95km north-east of the major mining centre of Mt Isa in northwest Queensland.

The Mt Isa area is one of the world's foremost base metal mining provinces. It is estimated that the area hosts approximately 11% of the world's zinc, 5% of its silver and 1% of its copper.

Despite the large copper and gold Resources that have already been declared, the Project remains highly prospective and under-explored. In addition to excellent copper and gold exploration potential, the project is prospective for the discovery of uranium, molybdenum, rare earth elements (REE) and zinc deposits.



## About AmmLeach

The AmmLeach® process (patents pending) is a proprietary process developed by MetaLeach Limited (wholly owned subsidiary of Alexander Mining plc) for the extraction of base metals, especially copper, zinc and cobalt from ore deposits and concentrates. The process utilises ammonia based chemistry to selectively extract metals from ores under ambient temperature and pressure conditions. The target ores will typically be high acid consuming, although AmmLeach® is also a viable alternative to acid leach processes as it is far more selective for valuable metals whilst rejecting unwanted metals. This selectivity offers a considerable number of technical and economic benefits through simplification of the flow-sheet.

The technology consists of the same three major stages as acid processes i.e. leaching, solvent extraction (SX) and electro-winning (EW). The leaching occurs in two steps, an ore specific pre-treatment which converts the metals into a soluble form and the main leaching step, which uses recycled raffinate from the solvent extraction stage. Solvent extraction is used to separate and concentrate the metals, whilst also changing from ammoniacal media to acid sulphate media from which metals can be directly electro-won using industry standard unit operations. One of the key benefits of the AmmLeach® process is that, unlike some new technologies, it requires no special purpose built equipment.

Importantly, there are significant environmental benefits using the AmmLeach® process compared to the use of acid as a leaching reagent in a heap leaching operation. Decommissioning of the heap is extremely simple as no neutralisation is necessary and, unlike the use of acid, acid mine drainage is not a potential liability. After final leaching, the heap is simply washed to recover ammonia and then left to vegetate, with the residual ammonia acting as a fertiliser.

## Appendix 1

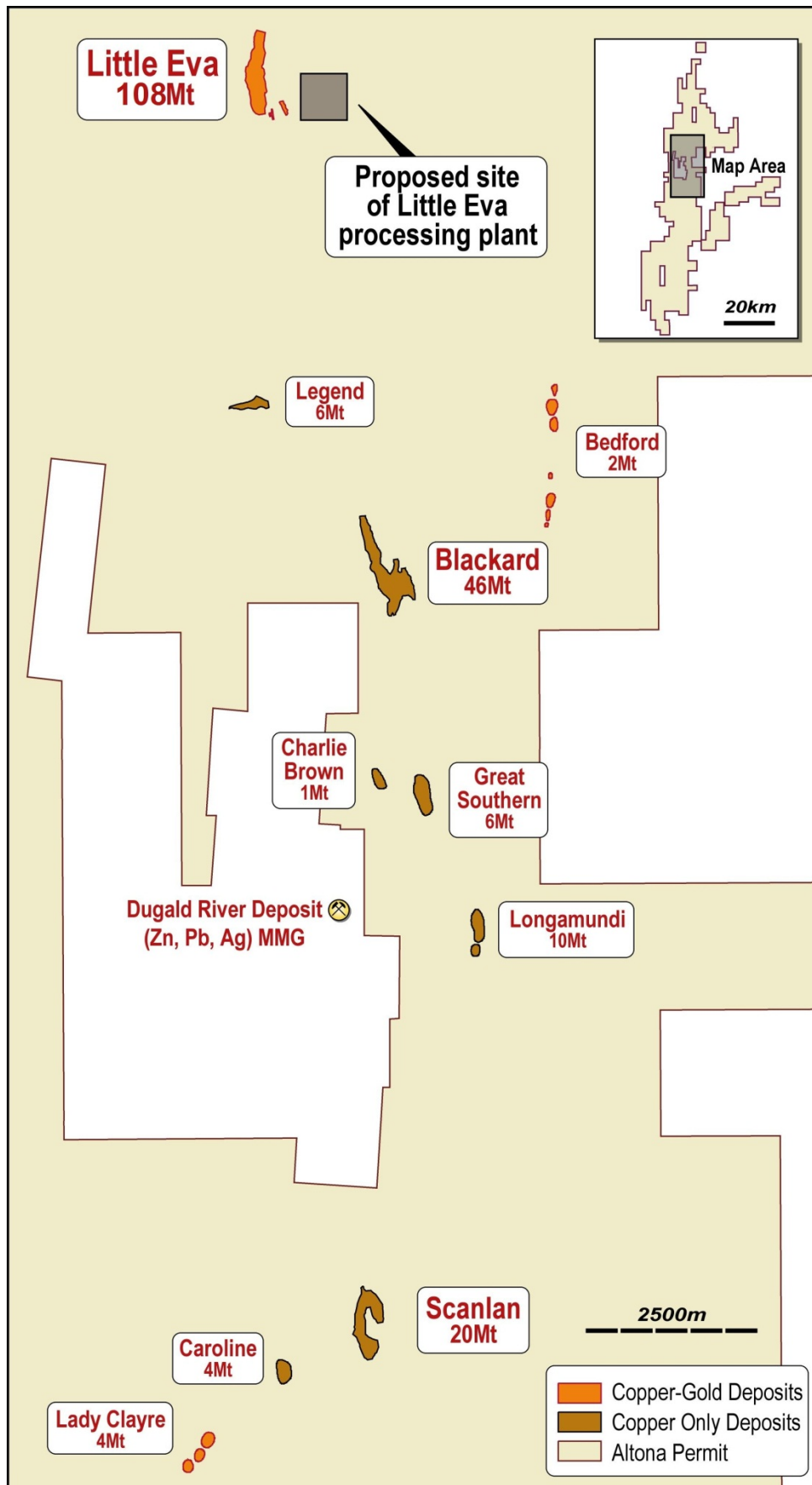
Table 1: Little Eva Mineral Resource Estimate at 0.20% copper cut-off grade

	<b>Tonnes (Mt)</b>	<b>Copper (%)</b>	<b>Copper (tonnes)</b>	<b>Gold (g/t)</b>	<b>Gold (ounces)</b>
<b>Primary Mineralisation</b>					
Measured	36.3	0.63	227 000	0.08	99 000
Indicated	32.7	0.48	156 000	0.08	81 000
Inferred	31.5	0.48	150 000	0.10	104 000
<b>Total primary</b>	<b>100.3</b>	<b>0.53</b>	<b>534 000</b>	<b>0.09</b>	<b>284 000</b>
<b>Oxide Mineralisation</b>					
Inferred	7.7	0.39	30 000	0.09	21 000
<b>Total oxide</b>	<b>7.7</b>	<b>0.39</b>	<b>30 000</b>	<b>0.09</b>	<b>21 000</b>
Total Measured	36.3	0.63	227 000	0.08	99 000
Total Indicated	32.7	0.48	156 000	0.08	81 000
Total Inferred	39.2	0.46	181 000	0.10	125 000
<b>Total Resource</b>	<b>108.0</b>	<b>0.52</b>	<b>564 000</b>	<b>0.09</b>	<b>305 000</b>

Table 2: Little Eva Mineral Resource Estimate at 0.30% copper cut-off grade

	<b>Tonnes Ore</b>	<b>Copper (%)</b>	<b>Copper (tonnes)</b>	<b>Gold (g/t)</b>	<b>Gold (ounces)</b>
<b>Primary Mineralisation</b>					
Measured	24.6	0.81	198 000	0.10	76 000
Indicated	20.5	0.62	127 000	0.09	62 000
Inferred	18.5	0.64	119 000	0.13	79 000
<b>Total primary</b>	<b>63.6</b>	<b>0.70</b>	<b>444 000</b>	<b>0.11</b>	<b>217 000</b>
<b>Oxide Mineralisation</b>					
Inferred	5.1	0.47	23 000	0.10	16 000
<b>Total oxide</b>	<b>5.1</b>	<b>0.47</b>	<b>23 000</b>	<b>0.10</b>	<b>16 000</b>
Total Measured	24.6	0.81	198 000	0.10	76 000
Total Indicated	20.5	0.62	127 000	0.09	62 000
Total Inferred	23.6	0.60	143 000	0.13	95 000
<b>Total Resource</b>	<b>68.7</b>	<b>0.68</b>	<b>468 000</b>	<b>0.11</b>	<b>234 000</b>

Figure 1: Location of deposits in the central part of the Roseby Project area





## Competent Persons Statement

1. Little Eva Resource estimation: The Little Eva Mineral Resource Estimate that is reported in this ASX Release was undertaken by Mr Jari Juurela, MSc, MAusIMM who is a full time employee of the Company and who has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2004 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves' (The JORC Code). Mr Juurela consents to the inclusion in the release of the matters based on his information in the form and context in which it appears.
2. Responsibility for entire release: Information in this ASX Release that relates to Exploration Results, Mineral Resources or Ore Reserves is based on information compiled and reviewed by Dr Alistair Cowden BSc (Hons), PhD, MAusIMM, MAIG, who is a full time employees of the Company and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as Competent Person as defined in the 2004 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves' (The JORC Code). Dr Cowden consents to the inclusion in the release of the matters based on his information in the form and content in which it appears.

**Metal equivalence** is provided to assist investors in assessing the value of polymetallic Resources.

The calculation of metal equivalence requires 3 inputs:

- metal prices assumed
- recoveries to concentrates
- a factor to reflect the potential commercial return from payable metals recovered to various concentrates

Metal prices assumed are copper; US\$ 8,000/t, cobalt; US\$ 37,468/t, nickel; US\$ 17,081/t, zinc; US\$ 1,653/t and gold; US\$ 1,450/oz.

## Appendix 2

### Summary of Mineral Resource Estimates for the Roseby Project

DEPOSIT	TOTAL			CONTAINED METAL		MEASURED			INDICATED			INFERRED		
	Tonnes	Grade		Copper	Gold	Tonnes	Grade		Tonne	Grade		Tonnes	Grade	
	million	Cu %	Au g/t	tonnes	ounces	million	Cu %	Au g/t	million	Cu %	Au g/t	million	Cu %	Au g/t
<b>COPPER-GOLD DEPOSITS</b>														
Little Eva	108.0	0.52	0.09	564,000	305,000	36.2	0.63	0.08	32.6	0.48	0.08	39.2	0.46	0.10
Ivy Ann	4.0	0.72	0.12	29,000	15,000							4.0	0.72	0.12
Lady Clayre	3.7	0.88	0.51	33,000	61,000							3.7	0.88	0.51
Bedford	1.8	0.93	0.24	16,000	14,000							1.8	0.93	0.24
Sub-total	117.5.2	0.54	0.11	642,000	395,000	36.2	0.63	0.08	32.6	0.48	0.08	48.7	0.53	0.14
<b>COPPER ONLY DEPOSITS</b>														
Blackard	46.3	0.63		291,000		26.3	0.64		17.9	0.63		2.1	0.58	
Scanlan	19.6	0.68		133,000					15.4	0.65		4.2	0.80	
Longamundi	10.4	0.66		69,000								10.4	0.66	
Legend	6.1	0.60		37,000								6.1	0.60	
Great Southern	6.0	0.61		37,000								6.0	0.61	
Caroline	3.6	0.53		19,000								3.6	0.53	
Charlie Brown	0.7	0.40		3,000								0.7	0.40	
Sub-total	92.7	0.64		589,000		26.3	0.64		33.2	0.63		33.2	0.63	
<b>TOTAL</b>	<b>210.2</b>	<b>0.59</b>	<b>0.06</b>	<b>1,231,000</b>	<b>395,000</b>	<b>62.5</b>	<b>0.63</b>	<b>0.05</b>	<b>65.8</b>	<b>0.56</b>	<b>0.04</b>	<b>81.9</b>	<b>0.57</b>	<b>0.08</b>

See ASX release of 26 July 2011 for full details of resource estimation methodology and attributions.

Note: All figures may not sum exactly due to rounding.

Little Eva is reported above a 0.2% copper lower cut-off grade, all other deposits are above 0.3% lower cut-off grade.