# EMGOLD MINING CORPORATION

# 1400 – 570 Granville Street Vancouver, B.C. Canada V6C 3P1

www.emgold.com

July 21, 2004 Ticker Symbol: **EMR**-TSX Venture Exchange

SEC 12g3-2(b): 82-3003 Standard and Poor's

## EMGOLD DISCOVERS NEW ZONES AT THE IDAHO-MARYLAND

Emgold Mining Corporation (EMR: TSX Venture Exchange) (the "Company") is pleased to announce results from the recently completed Phase II surface core drilling program at the Idaho-Maryland Gold Project located in Grass Valley, California. The primary focus of the surface drilling program was to further define the structural nature of the Idaho Deformation Corridor in near surface targets within historically mined areas west of the Idaho No 1 shaft, as well as several new locations that have never been mined. Visible gold was observed in some of the core and several unexpected high-grade intercepts were identified. This phase of drilling successfully confirmed the Company's geologic interpretation and exploration methodology for specific areas of the Idaho-Maryland gold deposit. Several new, high-quality exploration targets were identified, confirming the target-rich structural environment present on the Idaho-Maryland. The Company is reviewing the results of the Phase II surface drill program in conjunction with historical data to evaluate the possibility of increased mineral resources and the need to initiate a new NI 43-101 Technical Report.

The twenty-six hole program from two drill sites totaled 18,060 feet and was designed to follow-up the high-grade gold intercept in the Idaho 120 Vein (refer to press release – September 16, 2003), and test the entire unexplored width of the Idaho Deformation Corridor for new mineralized zones westward from the historic Idaho No. 1 Shaft. Coarse visible gold was noted in several drill intercepts and is typical of the historic high-grade gold deposits at the Idaho-Maryland Mine.

#### TARGETS ALONG WESTERN STRIKE EXTENSION - DRILL SITE A

Sixteen core holes tested the strike continuity of the Idaho Deformation Corridor westward from historically developed areas. Visible gold was intersected in the new Idaho 250 Vein and step-out drilling was conducted to test down-dip and westward from the high-grade intercept in hole IDH001, along the Idaho 120 Vein. Important structural geologic information obtained during this program will help direct future exploration. The drilling continued to provide valuable information regarding ore controls exerted by bench dislocations in the ultramafic – metavolcanic contact, along the south boundary of the Idaho Deformation Corridor. Drilling identified multiple large carbonate alteration blooms at depth, which are strong indicators for blind, high-grade shoots, and provide excellent targets for future surface and underground drill programs. A similar carbonate alteration bloom mapped at the surface resulted in the discovery of high grade gold in the Idaho 120 Vein reporting 10.1 feet grading 0.93 ounces of gold per ton (31.9 G/T).

#### PARTIAL ASSAY RESULTS FROM DRILL SITE A

Hole#	Interval	Interval	Interval	Interval	Gold Grade	Gold	
	From	To				Grade	Notes
	(ft)	(ft)	(ft)	( <b>m</b> )	(oz/ton)	(GPT)	
IDH017	637.5	641.1	3.6	1.10	0.01	0.34	
IDH018	317.0	320.0	3.0	0.91	0.01	0.34	
	368.0	371.0	3.0	0.91	0.01	0.34	
	383.0	386.0	3.0	0.91	0.01	0.34	
IDH019	556.3	562.3	6.0	1.82	0.03	1.03	Visible Au
IDH020	513.5	517.0	3.5	1.07	0.01	0.34	
IDH021	486.0	489.0	3.0	0.91	0.01	0.34	
IDH022	372.0	375.0	3.0	1.83	0.09	3.08	Visible Au
	384.0	387.0	3.0	0.91	0.03	1.03	
	420.0	423.0	3.0	0.91	0.01	0.34	
IDH024	395.0	398.0	3.0	0.91	0.31	10.63	Visible Au
	404.0	407.0	3.0	0.91	0.02	0.69	
IDH029	355.0	358.0	3.0	0.91	0.03	1.03	
	367.0	373.0	6.0	1.83	0.03	1.03	

# **IDAHO 120 VEIN TARGET (SITE A)**

The Idaho 120 Vein target remains open down-rake to the east and continues to show great promise for hosting a significant high-grade gold resource. Step-out drilling was conducted down-dip and westward from discovery hole IDH001 to test the westward extension of the Idaho 120 Vein, and continuity of the deformation corridor. Holes IDH016 through IDH029 targeted this area and successfully traced the Idaho 120 Vein westward, but found it to weaken rapidly to the west from the high-grade gold intercept in hole IDH001. Holes IDH017 through 20 intersected a very old stope (pre-1908 report) westward and up-dip along the 120 Vein from the IDH001 intercept, indicating that an oreshoot 200 feet in height and 200 feet in strike length had been present up-dip and westward. A shallowly-SE raking bench dislocation in the ultramafic – metavolcanic contact along the south side of the corridor appears to exert a strong control for this shoot, which is located on the north side of the corridor. The bench dislocation abruptly terminates westward, which marks the west end of the famous one million ounce stope in the Idaho 1 Vein and the pinching down of the 120 Vein shoot westward. The 1 Vein bonanza stope lies directly on top of the shallowly-raking bench dislocation. Similarly, the 120 Vein shoot appears to rake parallel to and above the elevation of the bench. The known 6,000-foot rake length of this bench dislocation indicates great promise for continuity in the 120 Vein shoot.

Step-out drilling along the Idaho 120 Vein and the deformation corridor could only be conducted westward from the IDH001 intercept, as angles of incidence to test the zone eastward were very unfavorable. A new drill site has been identified, which would be favorable for drill testing eastward down-rake along the Idaho 120 Vein high-grade shoot. Negotiations to lease this new site and obtain a work permit from the City of Grass Valley will be in progress shortly. It may take approximately 2 to 3 months to obtain the surface-drilling permit from the City to initiate a Phase III surface drill program.

## **IDAHO 250 VEIN TARGET (SITE A)**

Coarse visible gold was observed in core that cut into the Idaho 250 Vein, a new zone of replacement-type gold mineralization hosted in a diabase unit. The coarse gold mineralization is hosted in an array of thin quartz stringers developed along the periphery of a shear zone that diagonally cuts westward through the diabase from hanging wall to footwall. This zone extends westward from the abrupt western termination of the bench dislocation in the ultramafic contact and close to the elevation of the bench. Step-out drilling confirmed the termination of this zone upward and along strike in both directions, but the target remains open to depth and will be a target for underground exploration.

# TARGETS WEST OF THE IDAHO $N^{\circ}$ 1 SHAFT - DRILL SITE B

Ten core holes were drilled from Site B to test the entire width of the Idaho Deformation Corridor westward from the Idaho No. 1 Shaft. Visible gold mineralization was intersected at fairly shallow levels in the Idaho 192 Vein, up-rake of and west of the historic high-grade stope mined in that structure from 1908-1912. The 192 Vein was intersected in all holes that successfully penetrated through the historic Idaho 1 Vein stope. Two significant carbonate alteration blooms were identified coincident with strong faults on the northern side of the corridor. Both carbonate alteration blooms appeared in the farthest western drilling at Site B, and present good possibilities for future high grade gold discoveries along both faults at depth and to the west. Hole IDH006 targeted a theorized shallowly-dipping bench dislocation along the bottom keel of the Brunswick Slab. The hole was drilled to intersect the bench and a possible target at 900 feet vertical depth, but entered a strong carbonate alteration at 1100 feet vertical depth. This indicates that the bench in the contact lies 200 feet deeper and may cover a larger area than previously thought. The target was not reached as the drill rig was at the limits of its capability. High-grade stopes were historically mined within similar structural traps in the Idaho 16 Vein below the 1500 Level. The structural traps along bench dislocations under the keel of the Brunswick Slab continue to remain as promising exploration targets for underground exploration.

### PARTIAL ASSAY RESULTS FROM DRILL SITE B

Hole#	Interval	Interval	Interval	Interval	Gold	Gold	<b>N</b> T 4
	From (ft)	To (ft)	(ft)	(m)	Grade	Grade (GPT)	Notes
	(11)	(11)	(It)	(111)	(oz/ton)	(611)	
IDH006	292.0	295.0	3.0	0.91	0.01	0.34	
	592.0	595.0	3.0	0.91	0.02	0.69	
IDH008	126.4	130.0	3.6	1.10	0.06	2.06	
	154.0	157.0	3.0	0.91	0.01	0.34	
	160.0	163.0	3.0	0.91	0.01	0.34	
	163.0	166.0	3.0	0.91	0.03	1.03	
IDH009	130.8	133.8	3.0	0.91	0.17	5.83	
	184.0	187.0	3.0	0.91	0.03	1.03	
	187.0	193.0	6.0	1.83	0.17	5.83	Visible Au
including	187.0	190.0	3.0	0.91	0.25	8.57	
IDH010	154.8	158.8	4.0	1.22	0.04	1.37	
	222.0	228.5	6.5	1.98	0.02	0.69	
	247.5	250.4	2.9	0.88	0.03	1.03	
IDH011	170.0	173.0	3.0	0.91	0.01	0.34	
	213.0	219.0	6.0	1.83	0.17	5.83	
IDH012	114.7	118.0	3.3	1.01	0.04	1.37	
IDH013	145.0	149.0	4.0	1.22	0.02	0.69	
	165.7	172.3	6.6	2.01	0.01	0.34	
IDH014	258.0	267.0	9.0	2.74	0.02	0.69	

Hole#	Interval From (ft)	Interval To (ft)	Interval (ft)	Interval (m)	Gold Grade	Gold Grade (GPT)	Notes
					(oz/ton)		
IDH015	251.2	255.0	3.8	1.16	0.04	0.34	
	286.0	291.5	5.5	1.68	0.02	0.69	
	318.0	321.0	3.0	0.91	0.01	0.34	

### PROPOSED PHASE III SURFACE DRILLING PROGRAM

Plans are being developed to conduct a third phase of surface core drilling to: (1) expand the 120 Vein zone eastward down-rake, (2) investigate a bench dislocation in the ultramafic contact from Drill Site D, south of the Idaho no. 2 Shaft, and (3) test the entire width of the Idaho Deformation Corridor in the undeveloped area west of the Idaho no. 2 Shaft. The bench dislocation near Site D was mapped at the surface and may be a continuation of the Brunswick 11 Vein, an important umbrella-like structure potentially with high-grade gold mineralization in the eastern part of the Idaho-Maryland deposit.

The Idaho-Maryland exploration programs are planned and supervised by Mr. Mark Payne, California Registered Geologist Number 7067, Chief Geologist for the Idaho-Maryland Project and "Qualified Person" for the purpose of National Instrument 43-101, "Standards of Disclosure for Mineral Projects". The Company's geological staff, with review and verification by Mr. Payne, performed the data compilation for the surface core-drilling program. The Company has implemented a quality assurance/quality control program to ensure sampling and analyses of all drill cores is conducted in accordance with the best possible exploration industry practices, and conforms to National Instrument 43-101. The drill cores are logged, sampled, and stored in a secure facility near the project site. All cores were of HQ-size to maximize core recovery a sample size. Surface core drilling over the past year on this project has been done primarily to better delineate existing gold resources in preparation for extensive drilling from a future underground drilling program.

A tabulated list of drill hole data and assay results in conjunction with maps and other geologic information will be posted on Emgold's website after all of the assays and check assays have been received and evaluated. For more information about Emgold, the Idaho-Maryland Project and the Ceramext<sup>TM</sup> process please visit http://www.emgold.com/ or http://www.sedar.com/.

William J. Witte, P.Eng
President and Chief Executive Officer

For further information ple ase contact:

**Mark Feeney, Investor Relations** Tel: (604) 687-4622 Fax: (604) 687-4212

Email: info@emgold.com

No regulatory authority has approved or disapproved the information contained in this news release.