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GOLD POTENTIAL INCREASES WITH NEW STRUCTURAL INTERPRETATION ON SIAN/PRASO, GHANA

TORONTO, CANADA: Monday, February 28th, 2011: Midlands Minerals Corporation (“Midlands” or the “Company”) is pleased to announce that the potential to increase the ounces of gold on Sian has been significantly increased as a result of reinterpretation of geological structures on Sian and Kwahu Praso.

Tom Neelands, P.Geo. and Vice President Exploration said: “The new geological model changes the focus from adding more indicated gold ounces to the current Sian gold deposit, to adding inferred ounces from other highly prospective geochemical targets south of the Sian open pit. These new ounces will be less costly to obtain and will provide a clearer picture of the potential of the property and the importance of MMI soil sampling as an exploration tool. We are now targeting two million “inferred” ounces using the new interpretation of the geochemical and geophysical data.

Sian and Praso are two highly prospective gold projects which lie in upper Birimian geology with a very strong influence of Dixcove granatoids. Together, Sian and Praso form a 160 square kilometre gold district on the north east end of the Ashanti Gold Belt.

An aggressive MMI (mobile metal ion) soil sampling program, designed to further confirm the new geological model prior to drilling the remaining 9,000 meters on Sian/Praso, has been underway since January 2011 on a number of selected targets. To this end, a Phase 1 infill MMI soil-sampling survey has been completed over an area of 3 kilometres by 2 kilometres, which now provides coverage on a spacing of 100 metres by 50 metres. Previous sampling was completed at 200 metres by 50 metres, and this is considered inadequate since most of the indicated resource on Sian (322,100 ounces gold grading 1.9 g/t Au) and inferred (216,800 ounces gold grading 1.7 g/t Au) falls within a 200 metre strike-length.

“This tighter sampling grid will also address the possible existence of ENE structural controls on the mineralization that is associated with the Obuasi-Aykem ENE trend that cross-cuts the Esaase stratigraphic trend,” said Tom Neelands, P.Geo.

The map below contains the structural lineaments interpreted by Geotech Airborne Limited, superimposed on a pre-existing geochemical interpretation and suggests that the ENE structural controls do exist.

Please click on the link below to view the map:

www.midlandsminerals.com/press_releases/images/Mpeyo_Map_MMI.pdf

Some wide-spaced drilling has already been completed in this area, which covers about 16 square kilometres. A map, which can be viewed on the link below, shows where some of the drilling has been completed south of the Esaase/Sian prospect. Most of the drilling was done on lines spaced 200 metres apart. “Although all holes intersected gold, there was very little follow-up to the wide intersections and mineralized structures parallel to the Esaase/Sian prospect because the Sian open pit prospect had priority,” said Tom Neelands, P.Geo.

Please click on the link below to view the map:

www.midlandsminerals.com/press_releases/images/Drill_Intersections_090226.pdf

Once the Phase 1 infill soil results have been interpreted, an aggressive drill program will start in May 2011 to source the required additional inferred ounces on Sian and Praso.

“We are pleased to have a fresh interpretation of very complex geological structures on Sian/Praso,” said Kim Harris, President and Chief Executive Officer.

The technical information in this news release has been reviewed by Tom Neelands, P.Geo., and a Qualified Person under National Instrument 43-101.

ABOUT MIDLANDS MINERALS

Midlands is a growth oriented and value based gold exploration company operating in Ghana and Tanzania, two stable countries with a history of gold mining. Midlands’ top priority project is the fully permitted Sian gold project in Ghana. The Sian property contains Esaase and Ampeha, two previously producing open pit mines with a resource with significant growth potential. Midlands’ contiguous Kwahu Praso project, which was once part of Sian, contains extensions of the Esaase and Ampeha trends. Sian and Praso are just 30 kilometres northeast of Newmont Mining’s +8.7 million-ounce Akyem gold deposit.

Midlands’ second priority project in Ghana is the highly prospective Kaniago gold project, which is located on the Asankrangwa Gold Belt and is contiguous to two past open pit gold producers – Abore to the north and Obotan to the south.

Midlands also holds highly prospective licences for gold and diamonds in the Lake Victoria Goldfields in Tanzania, including its advanced Itilima Gold Project, which lies within the Geita-Bulyanhulu-Sekenke Trend, which is host to over 40 million ounces in gold reserves, and has now added to its Tanzania portfolio with the acquisition of the New Kilindi-Handeni prospecting licences.

The Company has a highly qualified management and technical team with broad African experience and extensive experience in the countries in which the Company operates. For more information on the Company, please visit Midlands’ website at www.midlandsminerals.com.

On behalf of the Board

Kim Harris
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Certain statements contained in this news release constitute forward-looking statements. Such forward-looking statements involve a number of known and unknown risks, uncertainties and other factors, which may cause the actual results, performance or achievements of the Company to be materially different from actual results and achievements expressed or implied by such forward-looking statements. Forward-looking statements consist of statements that are not purely historical, including any statements regarding beliefs, plans, expectations or intentions regarding the future. No assurance can be given that any of the events anticipated by the forward-looking statements will occur or, if they do occur, what benefits the Company will obtain from them. These forward-looking statements reflect management's current views and are based on certain expectations, estimates and assumptions, which may prove to be incorrect.

The Company adds a cautionary statement to the effect that the potential quantity and grades that may be referred to in this press release are conceptual in nature. There has been sufficient exploration to evaluate a mineral resource. However, the Company is uncertain if further exploration will result in a mineral reserve. Readers are cautioned not to place undue reliance on these forward-looking statements, which speak only as of the date the statements were made. Readers are also advised to consider such forward-looking statements while considering the risks inherent in the business of mineral exploration. For more information, investors should review the Company's filings that are available at www.sedar.com.