

# **The Northern Miner, Sept. 29 – Oct. 05, 2008.**

## **The Path to Development in Eritrea**

### **Trailblazers Nevsun, Sunridge, build an industry**

By Kip Keen

Vancouver – The bomb dropped on Sept. 2 2004, when mineral exploration and mine development companies in Eritrea received letters from the Eritrean government commanding them to halt operations. Most disconcerting: the government gave no reason for the order.

Among exploration companies most active in Eritrea's fledgling minerals industry – Nevsun Resources (NSU-T, NSU-X), with Bisha, its advanced exploration-stage project, and Sunridge Gold (SGC-V, SGCNF-O), with Emba Derho, its early stage exploration project – had little choice but to quiet their drills and watch as their shares plummeted.

On the opening Tuesday after the long weekend when the news hit, the volume of Nevsun shares traded shot up to 4.5 million and its share price halved in a single day, from \$3.98 to \$2.15. Sunridge crashed from \$1.95 to close at \$0.85.

The ordeal was to last four months, as information trickled out of meetings between the Eritrean government and the exploration companies. The first bit of news was more incendiary than inoculating. Eritrean officials uttered the phrase "review of mining laws."

"It appears to be quite a bomb-shell for a lot of people because it came out of nowhere," recalls Sunridge executive vice-president Don Halliday. "It became this, 'are they going to take our projects away?'"

But as both Halliday and the president and CEO of Nevsun Cliff Davis can tell you, that never happened. Nevsun is still at the helm of Bisha, where construction has just begun and as equipment with long lead times, such as semi-autogenous grinding (SAG) mills, have been ordered. At Emba Derho, Sunridge has finished updating its resource estimate and is close to releasing its first scoping study. The projects, in fact, have gone from double to advancing quickly. The same might be said of the Eritrean government's attitude toward mining.

### **Mining 101**

In early 2005, at the end of those four nerve-wracking months, the government announced its decision on the review of the mining law: it wasn't going to alter a word. A government that only months before appeared close to grabbing hefty stakes in mining projects – and potentially setting the stage for an exodus of international mining companies – said it was sorry for creating so much angst.

"They realized, 'Holy cow. We knocked the value of the companies' way back,'" Davis says. "They didn't understand the implications at the time."

Instead of changing mining laws which give the government a 10% free-carried interest in mining projects, its minister of mines, Tesfai Ghebreselassie, simply said the government would increase to 30% from 20% its allowable equity position – paid stakes – in mining projects.

In the months to follow, the Eritrean government also took steps to better understand the mining industry. The first step it took was to go knocking on the doors of independent mining experts around the world.

One of the people the Eritrean government brought was James Otto, a former professor at the Colorado School of Mines and an expert on natural resource law who has advised numerous governments on the subject. He chalks up events in 2004 to overwhelmed government officials dealing with jurisdiction totally new to them.

“Basically what happened in 2004 is that a lot of people showed up at their door and they didn’t feel prepared,” Otto explains. “They had a fairly large project (Nevsun’s Bisha) that was coming into late stage exploration and they were being asked things they just didn’t know the answer to.”

Part of the problem, Otto says was that companies were coming in and asking the government to make changes to the existing mining law, but the Eritrean government didn’t feel comfortable negotiating those changes.

“They’d had some advice on the mining code and they felt, ‘well geez. We just did the mining code not too long ago. What’s wrong with it?’”

Otto prepared a model mining agreement, a template to be used in negotiations with mining companies, to support the existing mining law. But since the government and its ministries still lacked first-hand experience, Otto set up and trained teams about the tax implications of various changes the government might make to the agreement and to acquaint them with modern negotiating practices and mining regulations.

“The idea was to give them a tool kit to put them on par with their counterparts in industry,” Otto says.

### **Policy in practice**

The results are apparent. Davis heaps praise on the Eritrean government for its actions and foresight since the shock of 2004. In addition to bringing in Otto, Davis says that the mining ministry hired SRK Consulting as a third party expert to review Nevsun’s Bisha feasibility study.

“They understood they had limits in their own capacity and so they sought international involvement,” he says.

From Davis’s point of view, the importance of Otto’s assistance, and the government’s mining education program, has been to ensure that any agreements between it and the government are bankable.

The government also set up the Eritrean National Mining Company (ENAMCO) to hold not only the free carried interest in future projects, but also to consider buying additional stakes up to 30%.

“Buying” is the operative word for Davis. “A lot of jurisdictions, particularly in developing countries, take interest as opposed to pay for interest,” he says.

“And these guys, you know, they’re a very proud country. They take the high road. They understood the need, if you’re going to develop an industry that you have to develop it in a fair way. So they agreed to pay us for the share they wanted in our project.

Last December, Nevsun and ENAMCO announced the country’s first mining agreement. Further to the 10% free carried interest ENAMCO bought a 30% stake in Bisha. The agreement included an immediate infusion of cash to Nevsun and an understanding that ENAMCO would be responsible for 33% of the project’s costs.

“They didn’t pay us a token amount,” Davis says. “They paid us a down payment,” – US\$25 million initially and another US\$10 million since – “and the rest of it is going to be based on fair value at first gold shipment.”

### **In Nevsun’s footsteps**

Back at Sunridge Halliday is happy to have Nevsun go first. “They paved the way for us,” he says. Sunridge is about a month away from releasing a scoping study for its Emba Derho project, 12 km northwest of Eritrea’s capital city Asmara. The latest resource estimate has pegged the contained metal in that deposit at nearly 1 billion lbs. copper, 2 billion lbs. zinc, 500,000 oz. gold and 20 million oz. silver.

The copper zone weighs in at 38.4 million indicated tonnes grading 1.02% copper, 0.99% zinc and 0.18 grams gold per tonne, and the zinc zone, 20.5 million indicated tonnes grading 0.28% copper, 2.35% zinc and 0.39 gram gold.

For Sunridge being second translates into a two-fold advantage: not only has it helped it anticipate what the company needs to do in order to advance its project, but it will also so long as Bisha goes to production help change the international community’s perception of the country’s mining industry and its stability.

“The big thing for the country is building the first mine....Nevsun has almost gone through the whole process now and all they have left to do is raise debt,” Halliday says. “And we see that (a mine) as a monumental thing for that country, because what we hope it does is make everybody go, ‘Oh, OK – it’s fine.’”

### **Building blocks**

Abroad, Eritrea is best known not for its mineral wealth, its products or cultural practices but for a brutal, 30-year civil war waged to achieve independence from Ethiopia – which happened in 1993 – and for nasty border skirmishes with Ethiopia since. The latest major conflict, known as the Eritrean Ethiopian war, flared up between 1998 and 2000. That ended with 80,000 dead on both sides and an Eritrean economy thrown into a tailspin. Gross domestic product in 2000 hit negative 12.1%.

Clearly, with wars raging for the better part of 40 years, advancing the mining industry has not been a top priority for the government.

But in the past eight years, tensions between the countries have eased, though social and economic woes have not. The United Nations estimates illiteracy rates among Eritrea's 4.5 million people ranging from 30% to 80%, depending on the region. And because about 80% of the country depends on small-scale agriculture and herding, per capita income is about US\$1,000 a year. Slim pickings for the government to tax for its programs.

Eritrea's socioeconomic woes and the government's meager treasury largely explain the appetite to develop a functioning mining industry. From his experience working with the government to draft a model mining agreement, Otto describes the Eritrean government this way:

"My impression is that it is a very small government, very streamlined. In the time I was over there, they were very receptive to foreign investment. This is certainly not the type of situation in other countries where you see a history of deep seated fear of outside involvement."

This is largely the case, Otto suggests, because Eritrea hasn't been scarred by environmental problems associated with mines development at a time when environmental standards were lax.

## **Bisha**

If it goes forward the Bisha project, 233 km west of Asmara by road, will become Eritrea's first industrial scale mine. And it may be the first of a number of others to follow.

As the United States Geological Survey's *Outlook 2006 on Eritrea* describes, volcanogenic massive sulphide discoveries made in the past five or so years, including Bisha and Emba Derho, are the backbone of the country's mineral potential. So long as peace with Ethiopia continues and metal prices remain favorable, the USGS says Eritrea's mining industry may soon experience "substantial growth".

At the moment, Bisha is on track to begin operation the first or second quarter of 2010. In its 2006 feasibility study, Nevsun outlined a three-phase mine plan.

A two year phase would target Bisha's silver-gold oxide zone, 4 million proven and probable tonnes grading 7.99 grams gold and 32.85 grams silver. The next three year phase would target copper-gold supergene zone, 6.4 million proven and probable tonnes grading 4.4% copper, 0.83 grams gold and 35.98 grams silver. The final phase, which would last five years, would target the zinc copper primary zone – 9.7 million proven and probable tonnes grading 7.2% zinc, 1.14% copper, 0.76 grams gold and 54 grams silver.

To get the first phase up and running, initial capital costs are pegged at US\$196 million, while subsequent phases – US\$61.2 million for the second and US\$30.8 million for the third – will be funded by operational cash flow.

Nevsun's most conservative model, based on US\$435-per-oz. gold, US\$1.44-per-lb. copper before 2015 and US\$1.28-per-lb. thereafter, US\$0.57-per-lb. zinc and US\$6.50-pr-oz. silver, give Bisha an international rate of return of 26% with a net present value of US\$135 million and a payback period of 2.6 years.

Davis, who just got back from the site with "project finance guys," says there's "no slippage" in the 2010 commission date. "Fortunately we had the money and the appetite for some risk and we did the long-lead orders," he says. This year Nevsun ordered new Polysius SAG mills and has begun site clearing.

Davis says that the response from the insurers and banks has been positive.

And if the last piece of the puzzle – debt financing – falls into place, it may finally change what Davis and Halliday argue is a misperception about mining in Eritrea.

"People are so uneducated about this country," Davis laments.