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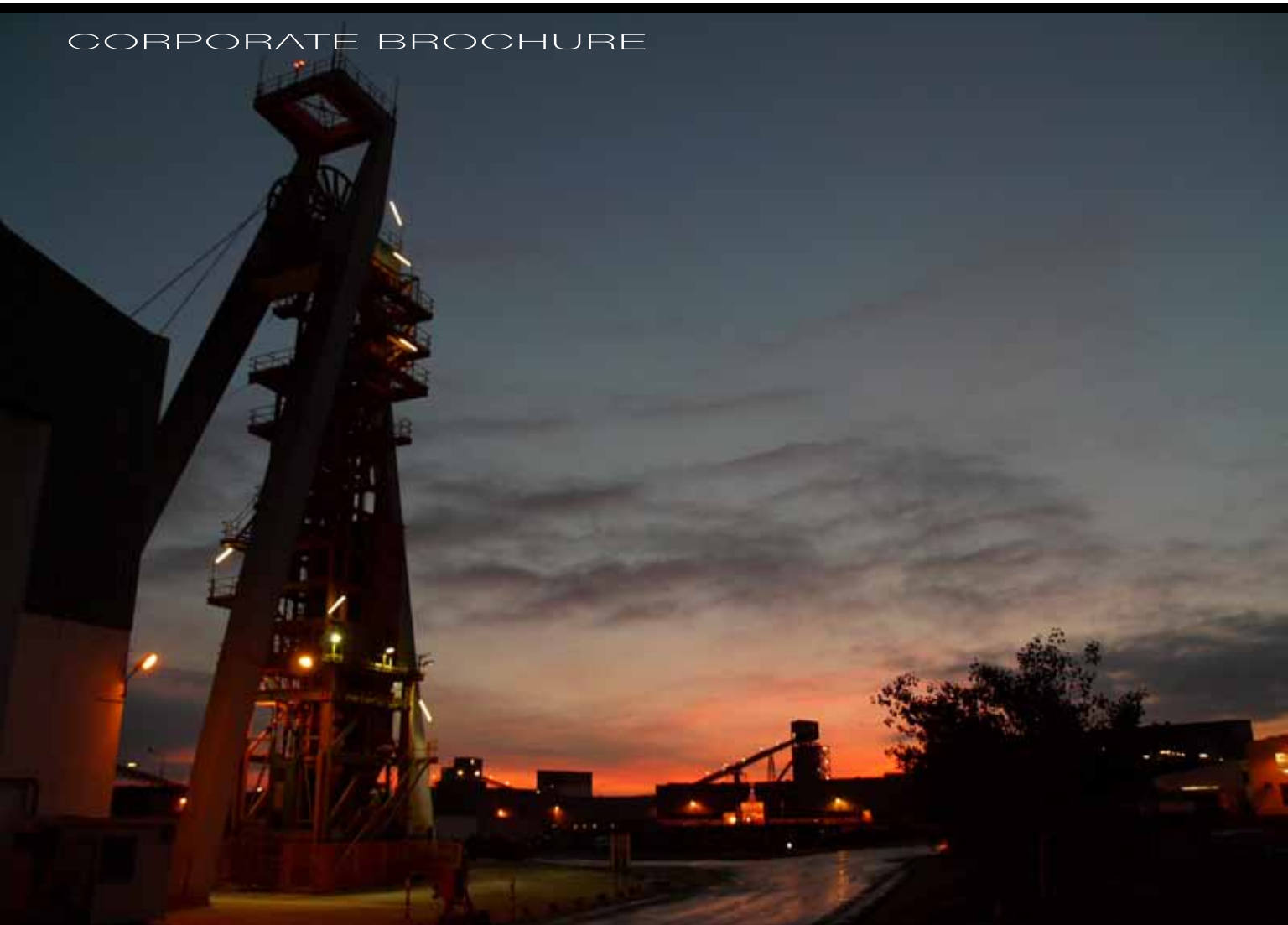
CORPORATE BROCHURE



Exploring all the options

Lundin Mining's copper mining company Somincor has discovered massive reserves of zinc in its Neves-Corvo mine, situated in the Alentejo, Portugal. Managing director John Andreatidis talks to Gay Sutton about ambitious plans to develop the reserves and quadruple the mine's production capacity over the next three years

The arid rolling hills and plains of the Portuguese Alentejo region are famous for their wines, castles, Roman ruins and cork oaks. And yet nestled into this sparsely populated agricultural landscape is one of Portugal's most important exporters, a significant contributor to its economy and a major local employer, providing jobs for around 1,500 people. Located at Neves-Corvo, just 15 kilometres from Castro Verde, Somincor is a major producer of copper; but recent discoveries look set to make it a world class producer of zinc.

The company was launched in 1980, commencing production in 1988, and during the first five years of mining, Neves-Corvo produced around 160,000 tons a year of copper metal contained in concentrates, from ore grades of over 10 per cent copper, making it the richest copper mine in the world. Today it is still considered to be a very rich copper mine. One hundred per cent owned by Swedish mining company Lundin Mining AB, it produces around 90,000 tons a year of copper metal in concentrates from copper ore grades of about four per cent and 25,000 tons a year of zinc in concentrates from zinc ores.

The company has always invested significantly in exploration, not only at the Neves-Corvo mine but across the Iberian Peninsula where it holds a number of exploration leases. However, to extend the life of the Neves-Corvo mine, the company initiated a programme of surface drilling in 2005 and began searching for further deposits of copper. It found them; but it also discovered a huge deposit of zinc.

Between 2006 and 2009, the exploration was ramped up dramatically. Approximately 30,000 metres of surface drilling was undertaken each year to explore the extent and depth of the deposits; and about 17,000 metres of underground drilling was carried out each year to convert resources into reserves.

"The total measured and indicated copper resource at the moment is 24 million tons at four per cent," says managing director John Andreatidis, "which is very rich. Meanwhile, our total measured and indicated resource for zinc is 73 million tons at 6.5 per cent. In addition, we have 23 million tons of zinc ore inferred which will likely translate into resources, so we really have zinc coming out of our ears." Updated resource estimates based on recent drilling are expected in the coming months.

In parallel with exploration of the zinc and copper deposits, the company began to prepare the mine to process these new reserves. Around €6.3 million was invested in converting an old tin plant on the site into an efficient and

PHOTO CREDIT: A.Cunha

Metso

Metso's worldwide leadership supplying grinding mills has been strengthened by Somincor's decision to acquire VERTIMILL technology for the New Zinc Plant project. This stirred media mill, an energy efficient alternative to a tumbling type mill, was selected after considering key advantages: higher energy efficiency, less over-grinding, lower operating costs, fewer moving parts, less downtime and greater operating safety.

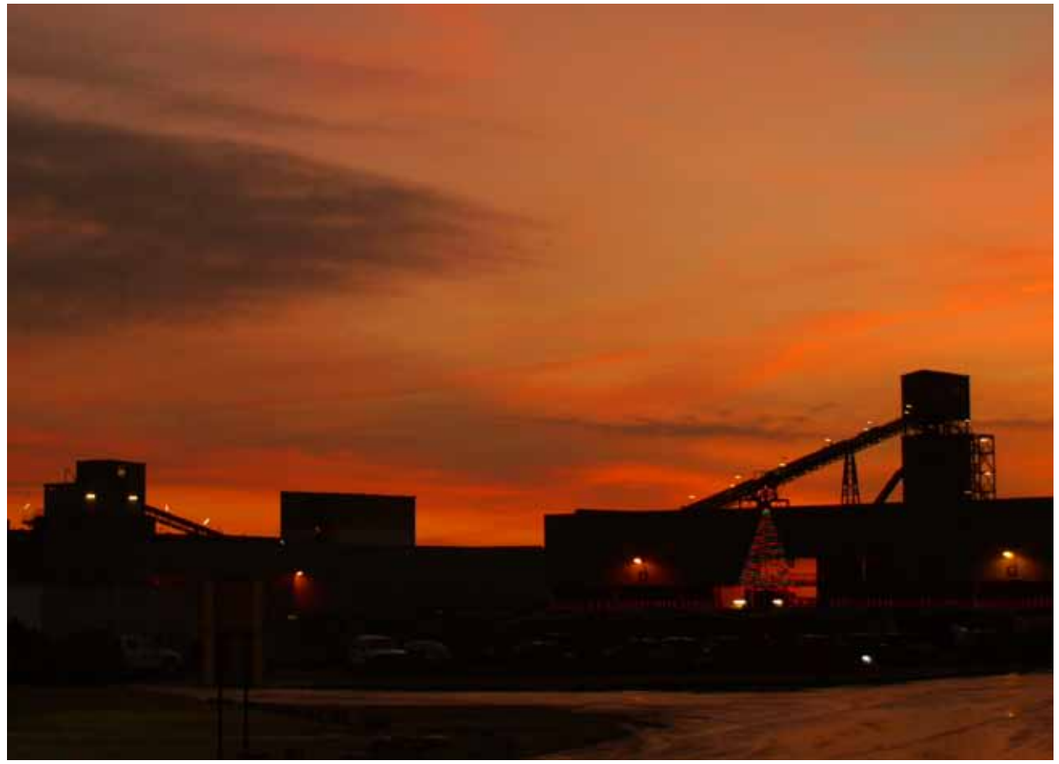
This consolidates Metso as a key partner to Somincor, with extensive know-how in mineral processing technology as well as in filtration (VPA membrane filter press) and pumping solutions (Sala pumps). Metso is also a reliable lifecycle service provider.

Metso expects to have the opportunity to supply Somincor with the latest generation of new crushing and screening equipment (new crusher generation HP4 and banana screens).

modern zinc treatment plant. The entire structure was raised to make room for the necessary lifting gear and equipment, while the existing equipment was upgraded or replaced. Once all the bottlenecks in production had been ironed out, processing capacity at the plant increased from 365,000 tons a year to 500,000 tons, which would yield 25,000 tons of zinc metal in concentrates.

Zinc production began in July 2006 and remained steady at 25,000 tons a year of zinc in concentrate until November 2008, when the world dipped into recession and zinc prices collapsed. "We then suspended the zinc mining. But we continued investing in our programme of expansion," Andreatidis says. "In technical and industrial terms we could in fact resume zinc production now, but we're just waiting for prices to stabilise a little more."

To date, around €50 million has been invested in underground development, exploration and studies for zinc and the company expects to invest further over the coming years as it develops the resource. A large proportion of this is likely to go into underground work,



Aker Wirth

Aker Wirth is proud to be selected by Somincor-Lundin Mining as the piston diaphragm pump supplier for its tailings system. Golder Associates UK, the tailings system engineer for Somincor, selected Aker Wirth as its preferred supplier. Aker Wirth also received a second tailing pump order before commissioning of the first pump, highlighting our positive relationship with Golder and Somincor.

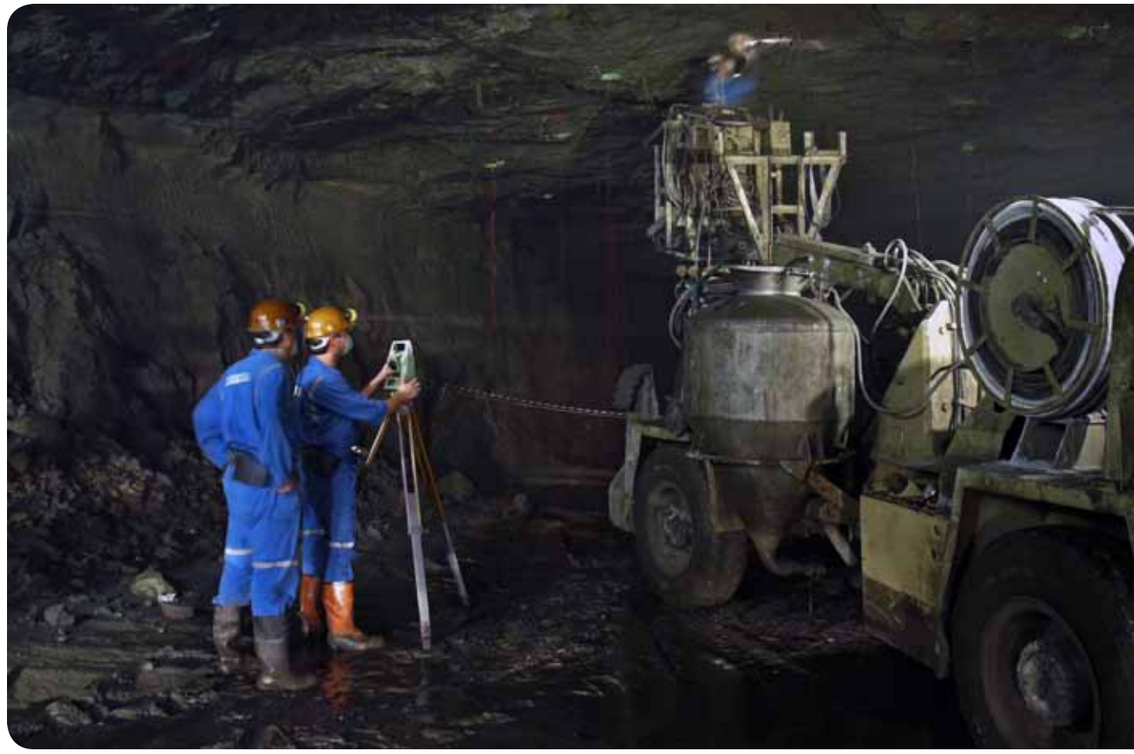
Golder Paste Technology Ltd.

Golder Paste Technology Ltd. (Golder PasteTec) is proud to have assisted Somincor at its Neves-Corvo mine site by providing sustainable engineered solutions which have supported its ongoing operations. From Golder PasteTec's UK office, we work in partnership with Golder Associates' mining services groups in order to provide fully integrated mining services directly to our European clients.

building new galleries and access ramps; and the rest into an ambitious plan to quadruple the capacity of the zinc plant over the next three years.

The first phase of expansion at the plant is a €43 million investment in grinding, flotation and filtering equipment, which will double the processing capacity to one million tons a year. This is due to come online in the second half of next year.

"All the equipment and building space in this first phase of expansion has been designed to enable us to ramp up easily to a second phase of expansion. The plan is to double our capacity once again to two million tons of zinc ore by 2013, and this will make us one of the biggest zinc producers in Europe," Andreatidis says. "We are currently in the last stages of the pre-feasibility study for this. There will also be some minor infrastructure upgrades to do, and we will need to



SEC

SEC was created to develop the Portuguese explosives market, standing next to national mines, quarries and civil works. We offer a set of products, services and innovations that reach the most safety, efficient and economic solutions, together with the least environmental impact. We are proud to be a key supplier to Somincor and wish them continued success in the future!

CP Carga

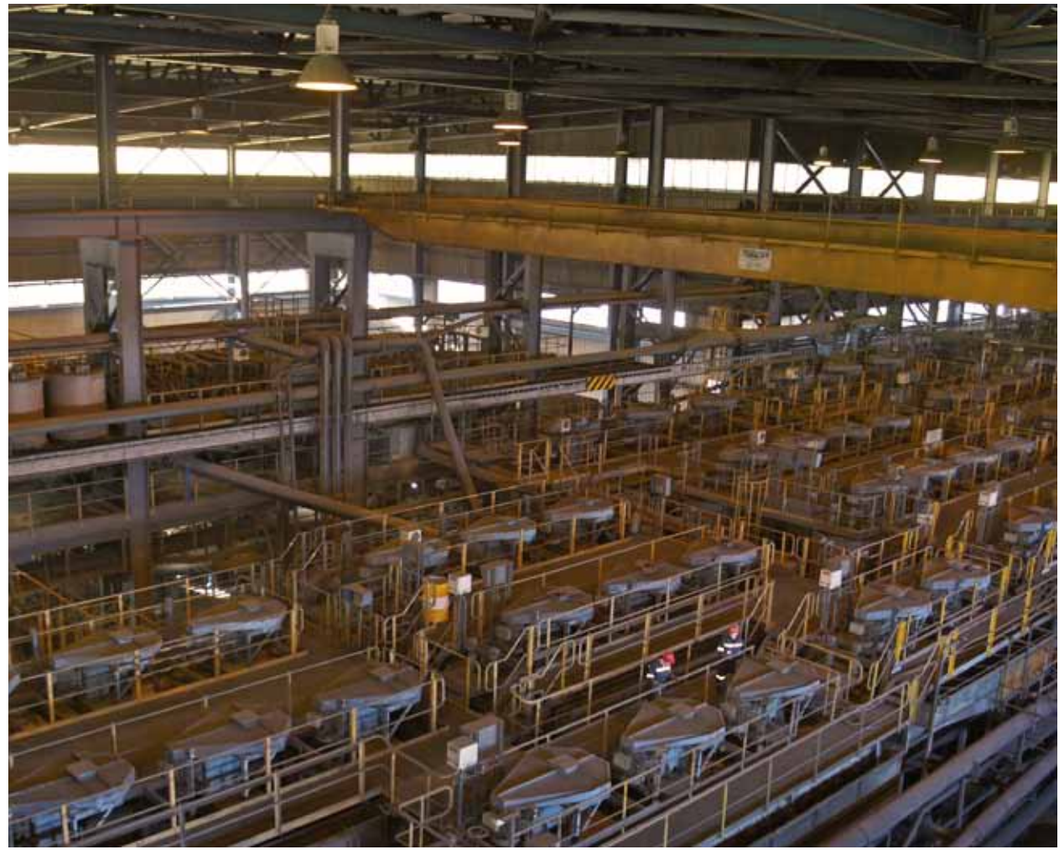
CP Carga is one of the biggest rail freight companies on the Iberian market. We have 2,700 specially designed wagons for all kinds of goods, a network of our own logistics bases in Portugal and a fleet of 75 electric and diesel engines ready to get your business on track.

purchase more equipment such as flotation cells and vertical grinding mills."

The mine itself has a single 600 metre-deep access shaft, so from the surface its footprint is modest. The shaft head, processing plants, rail head and stockpiles occupy only around 160 hectares and the tailing area another 170 hectares. Underground, however, there are currently over 140 kilometres of galleries spread out in a flat configuration along the plane of the pyritic lens.

"We mine our ore principally from the Corvo deposit to the east of the shaft and the Neves deposit to the west, at the moment," Andreatidis says. "However, we are developing the Lombador South deposit, which is to the north of Corvo. This contains rich zinc and copper resources and should be producing in the next few years."

Further north lies the Lombador North deposit which Somincor is continuing to explore. "We've put some exploration holes through there and found copper intersections at 1,200 metre depth—some of 22 metres with 5.9 per cent copper, and others of 32 metres with 3.8 per cent copper. So there are still large copper lenses out



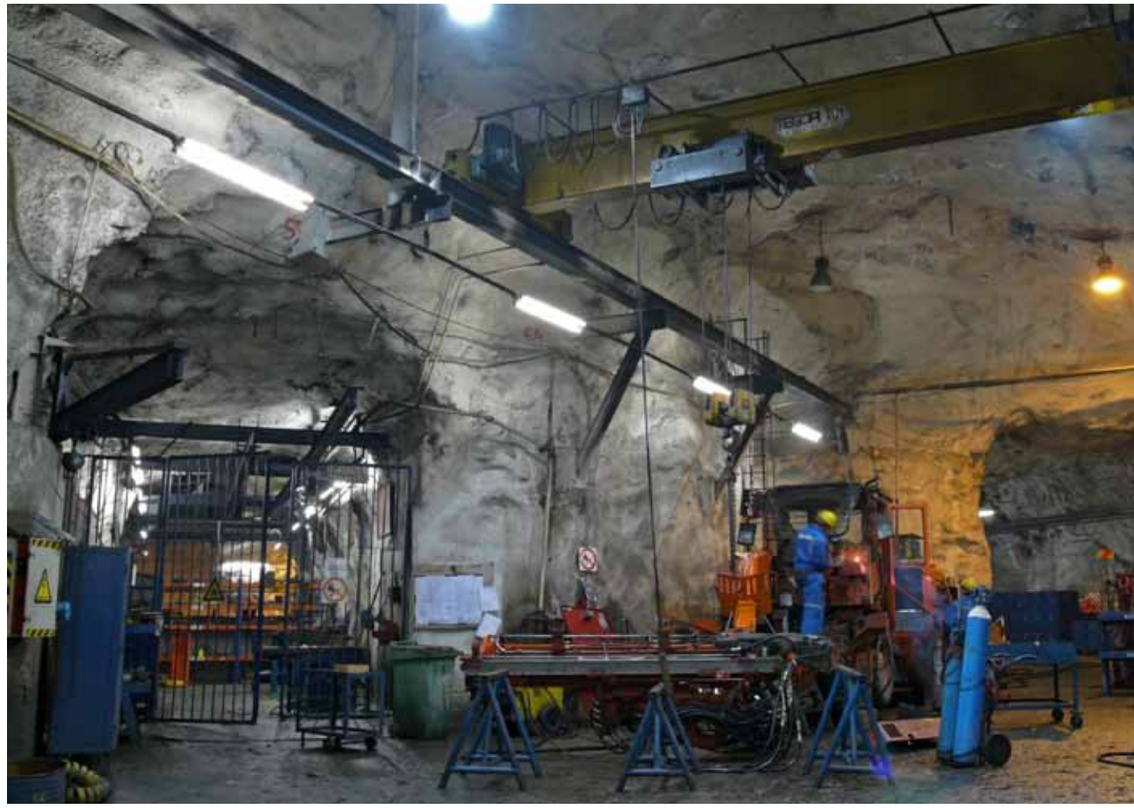
GIA Industri

GIA Industri is one of the world's leading companies in ventilation systems, with the continuous development of high-pressure fans and flexible ducting making the complete system cost-effective. GIA has for many years co-operated with Somincor as a key supplier of GIA's SwedVent ventilation system. Tailor-made fans in different capacities have been delivered over the last 10 years. Another important aspect of our business with Somincor is the MEGCIS Cablebolter, which has been used by Somincor for many years, the latest unit being supplied in 2009. The MEGCIS has a capacity to install grout and cable into holes as long as 40 metres, operated by radio remote control.

there. Our aim is to define how much copper we have in those deep areas and to begin mining it, five or six years from now. But it's early days yet, and we may need a new shaft because it's so deep and so far to the north of the existing ore haulage systems."

Zinc exploration, meanwhile, has been put on hold—not because of the low zinc prices but simply because so much has already been found and is yet to be developed.

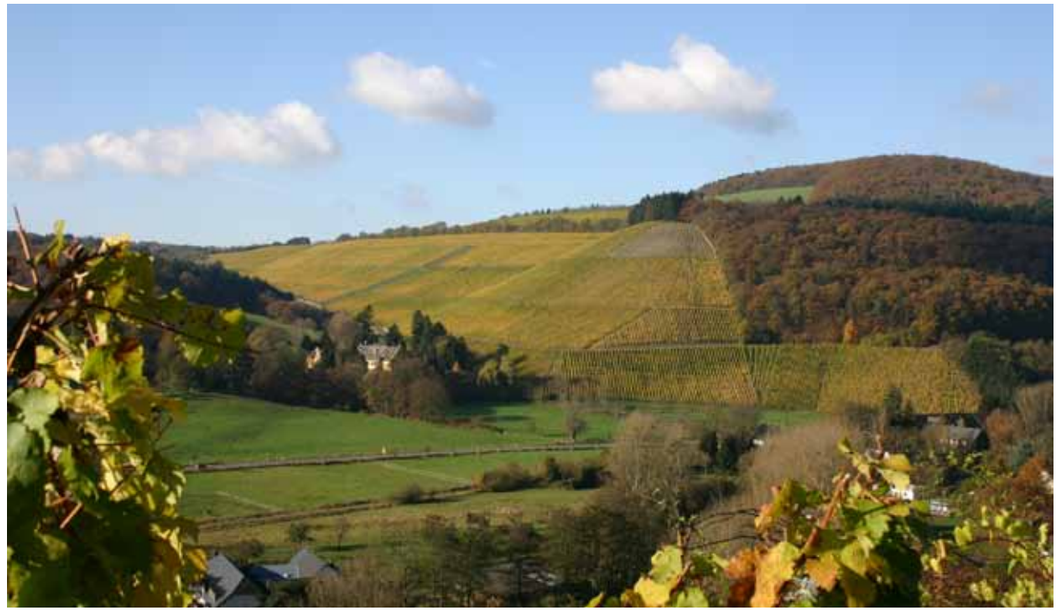
Expansion of capacity at the Neves-Corvo site has been a relatively inexpensive and easy exercise, partly because of the existence of the old tin plant and equipment; and partly because the site enjoys easy access to all the utilities. Water and appropriate recycling technologies give plentiful supply and are adequately sized, and power comes via a 150 kilovolt power line directly from the country's main transmission artery. The mine is also located close to the main A2 highway that links Lisbon to



the Algarve, and this means it's within easy reach of the airports of Faro, 80 kilometres to the south and Lisbon, 150 kilometres north-west.

The main bulk transport is by rail. The mine has its own rail spur and transports copper and zinc concentrates directly to its ship loading facilities at the Atlantic port at Setubal, about 140 kilometres away.

Andreatidis points out that the company has not focused purely on exploration and development, but has also been considering the eventual closure and rehabilitation of the site. Tailings from the mine, which are highly pyritic and oxidise to form acidic waste when exposed to air, have so far been disposed of by the conventional method of depositing them under a one metre skin of water—in this case, in a purpose built dam close to the mine. "The idea was that the water cap isolates the tailings from oxygen, preventing them from becoming acidic and leaching into the water table. However, we felt that was not a good legacy to leave following closure! How do you maintain a water cap forever?" he asks. "We



also had to find a way of extending the life of the dam, as a tailings dump, for another 20 years."

To solve this problem, the company has been engaged in a 10-year research programme in partnership with Golder Associates, to adapt the Golder Paste Technology to pyritic tailings. After feasibility studies, detailed engineering and extensive pilot testing at the mine site, a €20 million paste plant is now under construction and is due to come online in the second half of this year.

Over the next 20 years, a series of cells will progressively be constructed across the dam. Each cell will be filled with tailings and then covered with paste. As the paste pushes the skin of water out of the cell, it encapsulates the tailings in a moist layer that excludes oxygen. When the cell is full, it will be capped with a layer of rock, a geomembrane, then sand and finally, bentonite.

"We will then cover this with soil and grass it over," Andreatidis explains. "In 20 years the dam will look like the rest of the countryside—a little rolling hill. And the tailings will be sealed from oxygen and shouldn't form acid. It's turned out to be an economically sound and environmentally good solution for us. We're happy with that."

Mining has always been a notoriously hazardous business. However, Lundin Mining has invested considerable time and effort in addressing health and safety. This has been done from three angles. "Good communications are absolutely essential," Andreatidis says. "We have also developed clear standards and guidelines for all activities on site, and we've put increasing efforts into training." Risk management, inspections and auditing have become much more rigorous and have extended to contractors on site.

"We have record levels of staff here at the moment," he continues. "With the increased mining activity and the construction going on we now have over 800 contractors on site, in addition to our own 850 staff." Yet 2009 saw the lowest accident rate on record for staff and contractors combined, and broke many records for health and safety. "We achieved an all-time low of just two lost time accidents in the entire year for our own staff. We only had eight medical treatment accidents—the previous record was 11—and our total accident frequency rate for our own staff came down from a previous low of 2.8 in 2007 to 1.69."

Sixteen years ago, when Somincor produced its first 'life of mine' plan, it was based on the known reserves at that time which suggested the mine would be finished by 2012. This intensive programme of exploration and development has significantly prolonged that life expectancy. The full extent of the copper and zinc finds have yet to be defined, so it is hard to predict the lifespan of the mine, but there is no doubt that it has an impressive future, based on a combination of copper and zinc mining. **– Editorial research by Daniel Finn**

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