A copper zinc gold mine in the Vic Alps?

15/09/2012

The Stockman Project is located in the Victorian Alps, 470km by road north-east of Melbourne and 60km by road north east of Omeo. The project contains two copper-zinc-lead-silver-gold rich deposits, called Wilga and Currawong. Wilga was discovered in 1978 and Currawong in 1979. Denehurst mined the copper rich core of Wilga deposit from 1992 to 1996. In 2006, following rehabilitation of the plant site and tailings dam by the Victorian Department of Primary Industries, the project was put out for public tender as part of an exploration incentive program. Jabiru Metals Limited (Jabiru) was awarded the project in March 2007.

The Independence Group has now bought up Jabiru, and is proposing to recommission the Wilga mine and establish a new mine four kilometres to the north (the Currawong deposit).

http://themountainjournal.wordpress.com/environment/stockman-mine/

Stockman mine background

The Stockman Project is located in the Victorian Alps, 470km by road north-east of Melbourne and 60km by road north east of Omeo. The project contains two copper-zinc-lead-silver-gold rich deposits, called Wilga and Currawong. Wilga was discovered in 1978 and Currawong in 1979. Denehurst mined the copper rich core of Wilga deposit from 1992 to 1996. In 2006, following rehabilitation of the plant site and tailings dam by the Victorian Department of Primary Industries, the project was put out for public tender as part of an exploration incentive program. Jabiru Metals Limited (Jabiru) was awarded the project in March 2007.

The Independence Group has now bought up Jabiru, and is proposing to recommission the Wilga mine and establish a new mine four kilometres to the north (the Currawong deposit).

Both new mining operations will be underground and located in State Forest where Jabiru has tenements consisting of an existing mining licence (MIN5523) and two exploration licences (EL5054 and EL5198). Both contain copper-zinc-lead-silver-gold ‘volcanogenic massive sulphide” (VMS) deposits, which are to be treated to produce copper-sulphide and zinc sulphide rich concentrates for sale to export markets in South East Asia.

The nearest communities are located between 20 to 40 kilometres to the west and south and include the towns of Benambra, Omeo and Swifts Creek. Local industry includes farming, grazing and tourism. Potentially impacted communities also include the towns of Ensay, Bruthen and Bairnsdale which are located along or in the vicinity of the proposed trucking route.

The proposal is estimated to require up to 1.5 gigalitres (GL) of water per annum. It will require a range of on and offsite ancillary infrastructure to support the mine operation, including a processing plant, access roads, water pipelines, electricity supply infrastructure,
upgrades to the proposed major transport route (along the Great Alpine Road to Bairnsdale – a major tourist route), and worker accommodation.

It is estimated that about 950,000 tonnes of ore per annum would be mined and processed over a period of 7 to 8 years. In addition to the project needing a range of infrastructure for processing the ore, it requires tailings facilities for storing waste rock and tailings in the project area. Because of the failed project that occurred previously, leaving huge volumes of dangerous waste, it is the tailings facility that most concerns local residents.

On 16 August 2010, the Victorian Minister for Planning requested Jabiru to prepare an Environmental Effects Statement (EES) under the Environment Effects Act 1978 to assess the likely environmental effects of the proposal.

The EES document can be found here.

The project was also referred to the Australian Government under the Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act).

The preparation of the EES is now well advanced, with the majority of the technical studies having now completed Stage 1 (existing conditions) and commenced Stage 2 (potential impacts).

The concluding Stage 3 of the technical studies (impact mitigation and management plans) began in the second half of 2011, with the overall final submission scheduled for government review by mid 2012. The company expects that final approvals will be granted in the second half of 2012.

Likely impacts

The main obvious benefit will come from job creation and injection of funds into the local community. There are, however, some significant concerns:

- **Water and food production**

  The key concern is about water. This area is in a rainshadow region, with considerable water stress already. Agriculture, which is reliant on ground and surface water, is the mainstay of the local economy, and will continue as such long after the mine has closed. The community wants to ensure they are not left with a toxic legacy from this second mining operation. Water Licences from the Tambo River have not been available to farmers since 2004, and there is a fear that the ‘needs’ of the mine will be considered greater than the needs of local farmers given the limited water which is available in the region.

  Water is likely to be obtained from several sources, including direct runoff to a water storage dam, supplemented by water from bore fields in the vicinity of Benambra. The mine sits on the border of the headwaters of the Tambo River, which eventually flows into the Gippsland Lakes. The Lakes system is already under great ecological stress, largely because of input of pollutants and dredging at the mouth of the lakes, which is slowly making it a saline rather than freshwater system. Any reduced flow as a result of mining must be seen in terms of the overall health of the Gippsland Lakes.
The impacts on the surrounding underground water supply is not known. What must be made clear before the mine is allowed to proceed is exactly where the replacement water is coming from, and what pathway it will travel through to reach the aquifer. Recharge rates must be fully understood before new pressures are added to existing aquifers.

· **Tailings dam**

There are a number of deep concerns about the proposed structure of the tailings dam. What is known is that a previous mine in the area generated substantial waste, which was discharged into the Tambo River system.

The previous mine (Lake St Barbara Mine) left the community with a tailings dam that leached poisons into the head of the Tambo River and forced the state government to spend about $5 million on the rehabilitation of the site. Independence Group is planning to reuse this same tailings dam site, as well as create another storage downstream of the existing dam, which many locals believe has the potential to be dangerous. They are pleading with the company to consider taking a more environmentally safe alternative. As mentioned above, the Tambo River flows into the Gippsland Lakes System. Previous leakage from this dam into the river has been described as being like “battery acid”.

The company claims that this new use of the tailings dam will be safe because of re-design. However, the facility will contain hundreds of thousands of tonnes of contaminants in the tailings dam. It is estimated that around 2 km of Straight Creek will be dammed as part of creating the enlarged facility. Flash flood events could put substantial pressure on the dam for release into river systems below.

**A better way:**

Independence intend to stabilise the tailings by mixing them with limestone sand, which helps prevent the potential resuspension and oxidation of the tailings if they are disturbed under the water body, and then covering them with water.

Given this mine’s location in the headwaters of a significant river, local community members have called for best practise measures to be employed in creating the tailings dam, built in accordance with DPI guidelines. This would mean that it is lined with clay and membrane in the base and wall, and then covered over with membrane, on completion, which will then prevent oxidation.

· **Biodiversity**

The site is in a ‘relatively natural’ condition apart from areas disturbed by the former mining operation and past forestry activity. The native vegetation includes 16 different ecological vegetation classes; 24 significant fauna species have been identified as occurring within 5 km of the project site.

· **Other impacts on the economy**

Nature-based and travel tourism is of growing significance for the region. The heavily publicised ‘Great Alpine Touring Route’ covers some of the roads where heavy mine traffic will operate. These are predominantly winding and narrow mountain roads. A large number
of large vehicles associated with the mine will pose a significant risk for all road travellers in the area. The region is one of the most popular motorcycle touring routes in Victoria.

Community Benefit Fund

Some in the community, including the group Voices of Benambra, have called for the creation of a community fund, with 2% of gross profits being put into a fund which is then allocated to the community. Given that this mine will have less than 10 years of operation and potentially a long term impact on the community, such a proposal seems very reasonable.

Community funds are sometimes created by energy and resource companies.

Info off the Independence group PDF 3.5mb file

Stockman Copper-Zinc Mining and Processing Project Benambra, East Gippsland
Gippsland Major Project and Opportunities Summit
14 February, 2012
Dr John Yeates - Manager Approvals and Government Relations

- The Stockman Project comprises two copper and zinc deposits in State forest, 19 km south-east of Benambra and 30 km north-east of Omeo in East Gippsland, Victoria.
- The Stockman Wilga deposit was discovered in 1978 and was mined for its copper-rich core from 1992 to 1996. The Currawong deposit was discovered in 1979 but not mined.
- After rehabilitation of the Wilga processing plant site and tailings dam in 2006 by the Victorian DPI, the project was put out to tender as part of an exploration incentive program.
- Jabiru Metals won the project in March 2007 in competition with 12 other companies, committing to a work plan expenditure of $19.6 M over a five year period
- The project is based on re-opening the underground Wilga mine and developing a new underground mine for the Currawong deposit.
- The commitment covered re-evaluating known mineralisation, further exploration and development of a viable mining plan. This work confirmed the feasibility of the project.
- The deposit is similar to other Australian deposits, with fine grained and complex mineralogy and is located in a challenging physical environment.
- The Stockman project will involve underground mining, on site processing of ore to produce concentrates, and transport of the concentrates to port for export.
- The mine will have at least an 8 year mine life with a total of some one million tonnes of ore planned to be mined and processed annually. Results of further exploration could increase the mine life.
- The processing plant will be located on-site. Copper and zinc concentrates will be trucked to Bairnsdale, then transported to a port for export internationally.
- Infrastructure will include mine portals, exhaust fans, workshops, administration and storage facilities, and water and power supplies.
- Deloittes’ Economic Impact Assessment for Stockman shows the project will, relative to business as usual, very positively impact on;

The Victorian state economy, through
- Growth in Gross State product (GSP) by $938 million, and growth in investment by $454 million
- Stimulation to consumption by $238 million•Increase in total revenue to Victoria (including royalties) by $60 million, and exports by about $1,000 million
- Average annual increase in employment by 180 jobs (direct and indirect) over the proposed project life. Most of the Stockman Project workforce will be drawn from Victoria
The East Gippsland regional economy, through

- Growth in East Gippsland’s GRP of $680 million
- Growth in East Gippsland’s average annual employment of 210 jobs (direct and indirect) over the proposed life of the project. The East Gippsland region will experience the strongest total employment benefit over the operation phase.

Industry

- Construction services, trade services, business services, rail transport – freight, other transport and electricity supply industries will benefit most from the Stockman Project in value-added terms.

Permitting required for the project

- The Minister and the Department of Planning and Community Development (DPCD) determined in 2010 that an Environmental Effects Statement (EES) was to be prepared for the project. This process is anticipated to be completed in 2012.
- State work programme approvals will also be required once the EES process has been completed.
- Fauna and flora matters have been identified as requiring assessment under the Commonwealth Environment Protection and Biodiversity Conservation Act (EPBC Act).
- Re-opening of then old mine shafts is provided for in the company’s exploration licence (mining and ore processing operations are dependent on environmental and planning approvals.)
- The Wilga mine portal has been re-opened to provide access for drilling machinery to explore for additional ore resources.
- Drilling and assay work to further define the resource is ongoing. Groundwater exploration work near Benambra is being undertaken.
- The EES will describe potential project impacts, and the management of impacts before, during and after the project is operational.
- Specialist studies required under the EES scope are near completion.
- Community consultation is ongoing – focus and reference groups, factsheet, newsletters, meetings.
- Government agencies are represented on the Technical Review Group (TRG), led by DPCD, appointed to oversee assessment of the EES work.
- A Social Impact Assessment has been prepared.
- Independence is working with the East Gippsland Shire Council to develop an MoU to identify and develop business opportunities which will deliver benefits to the region.
- There are however some policy related issues which have been articulated by regulatory agencies relatively late in the EES process, which have cused concern to Independence.

Triple bottom line – and some frustrations

- The EES process is heavily focussed on environmental issues. Economic and social impacts and benefits assessment is required as part of the EES process, but most State agencies involved to date have been primarily concerned with environmental matters.
- Independence believes the Stockman project is a project of State significance that will create significant short and long term benefits.
- Independence has briefed DBI on the benefits of the project and the commitment to good environmental management made by Independence, to ensure a ‘triple bottom line’ perspective is applied to the project.
- The EES process in Victoria has been found by Independence to be convoluted, and to lack a ‘lead agency’ framework. This could deter or hinder future investment in industries such as mining, as mining investment funds are ‘mobile’