Close Window | Print this story

Concerns about SA engineer pipeline
Allan Seccombe
Posted: Tue, 22 Jul 2008

Sandra Burmeister, CEO Landelahni

EMAIL ARTICLE

RELATED ARTICLES

[miningmx.com] -- THE pipeline of engineers in South Africa is disturbingly small, requiring more attention from the government and sectors where these skills are needed, said Landelahni Business Leaders CEO Sandra Burmeister.

Landelahni has completed a survey of 12 of the 18 major mining companies, representing 57% of the 316,400 permanent employees in the sector.

South Africa has a relatively small pool of engineers from which to draw skills and the pipeline for new entrants, judging from the number of graduates, particularly in mining-related engineering, doesn't bode well for the future.

"The pipeline is a big issue"

Of the total 304,240 people who enrolled for engineering degrees between 1998 and 2006, only 35,511 graduated.

Of more pressing concern for the mining sector is that, while the numbers of engineers graduating from mining-related degrees has increased, the numbers are still low.

In 2006, there were 305 mining engineer graduates, up from 61 in 2003. Metallurgical engineer graduates topped 220, up from 100 over the same period.

“I don’t think the mining industry can support its growth objectives on just 305 graduates,” Burmeister said.

Between 1998 and 2006, a total 35,511 people graduated as engineers across all disciplines. There are just 14,234 professional engineers registered for all disciplines.

Not only is the mining sector competing for these scarce skills domestically as South Africa embarks on massive infrastructural projects for the 2010 World Cup football tournament, increased power generation and to redress the past, but globally there is high demand for South African mining skills.

The number of candidate engineers in by December 2007 had fallen to 3,499 from 4,733 a decade earlier, according to statistics from the statutory Engineering Council of South Africa (ECSA).

“The pipeline is a big issue,” Burmeister said, not only to meet the growing demand but also to replace an aging workforce.

Burmeister said, in her opinion, the introduction of a skills levy on companies by the government of one percent of the total payroll had set back skills development in South Africa.

The government introduced the levy in April 2000 and Burmeister argued this meant companies cut back sharply on bursaries and training expenditure, passing this over to 27 Sector Education and Training Authorities (Setas).

“Up to the 1990s there were huge bursary programmes in place, but these have been cut back considerably and one of the reasons is the skills levy,” Burmeister said.

“From spending four percent of their payrolls on training, companies now pay their one percent levy and leave it at that,” she said. Internationally the level is around five percent.

As South Africa’s skills base shrinks, some companies, especially in the mining sector, have woken up to the fact they need to pump a lot more investment into their workforce.

“Over the last two or three years we’ve seen a doubling and tripling of the number of bursaries,” Burmeister said.

The mining sector is ahead of the overall industrial sector in South Africa when it comes to training workers, the research showed.

There was a bad patch between 2003 and 2004 when no mine manager certificates were awarded, according to Landelahni. This has picked up sharply to 80 in 2006, but still well shy of a 1997 peak of 123. No reason was given for the drop off.

Burmeister raised the possibility of a link between the low number of mine manager certificates and the poor safety record on South African mines.
