Disaster recovery plans in place at AngloGold Ashanti

Managing risk is an integral part of business. The process essentially involves identifying risks, assigning each risk a priority value in terms of the probability of its occurrence and its impact, and developing strategies either to reduce the likelihood of its occurrence or mitigating its impact.

“The problem with this approach is that events which are highly unlikely, but potentially catastrophic, tend not to receive enough attention,” says manager: safety John McEndoo.

To counter this, a new analysis of health and safety-related risks was carried out at all AngloGold Ashanti operations, between 2002 and 2007, ignoring probability and focusing only on impact and plausibility.

The analysis team, led by McEndoo, focused on three types of event: fire, flood and explosion. Each of these was analysed in terms of possible causes (failures in conditions, activities, systems or technology) and likely impact on people, equipment, materials and the environment. Over 1,400 risks were identified in this way, some common and some operation-specific.

“These risks were further categorised by whether their negative impact would affect the operation or reputation of the group as a whole, or of an individual mine,” says McEndoo. “The great majority – over 90% – fell into the latter category, and the mine-level teams were tasked with developing disaster recovery plans (DRPs) to eliminate or mitigate these.” Disaster recovery is defined as the process of recovering business functions in the shortest possible time to minimise impact on business objectives such as market share and reputation.

The six areas of the DRP comprise programme management, risk assessment, emergency response, crisis management, training and awareness and post-event audit and maintenance. The six areas are further broken down into a number of elements, each of which is given a rating from zero (non-existent) to five (world class). “We regard an overall score of three as being acceptable,” says McEndoo. Plans are in place, although with work required in some areas before the required rating is attained, at Siguiri in Guinea, Navachab in Namibia and Serra Grande in Brazil. Operations for which plans will be completed in 2007 include Moab Khotsong in South Africa, Obuasi and Iduapriem in Ghana and Cerro Vanguardia in Argentina.

“CC&V provides a good example of a proactive approach to the issue,” says McEndoo. “The mine has an excellent safety record (it has achieved three years without an injury) but has prepared a DRP in anticipation of being required to comply with the Mine Improvement and New Emergency Response (MINER) Act, recently promulgated in the United States in response to a number of coal mine fatalities.”

Although developed at operational level, local DRPs are audited by McEndoo in his capacity as DRP co-ordinator, and the overall DRP status is reported to the board on an annual basis. The programme is supported at the highest levels in the organisation, and is aimed at equalling global best practice in the area.

Depending on the nature of the risk, DRPs may include measures to avoid the risk altogether, or, where these are not feasible, to mitigate its impact. As an example of the former, McEndoo cites the 30,000kg gas bullet used in the canteen at Sunrise Dam in Australia. “The mine is situated in a major lightning strike area,” says McEndoo “and, should the gas bullet have been struck, the resulting fire would have been catastrophic. Installing lightning conductors would have reduced the risk, but the mine opted to remove the risk altogether by relocating the gas bullet away from the danger zone. No DRP was thus required for this issue.”

Some risks – the use of cyanide in the metallurgical process for example – cannot be avoided, and a complete and comprehensive DRP is then required *(see case study: Using Cyanide responsibly at CC&V, AngloGold Ashanti Report to Society 2005 page EN38)*.