The Clydesdale Coalbrook Colliery Disaster

Dennis Schauffer

Professor Emeritus, University of KwaZulu Natal, Durban, South Africa

In 1960, just south of Sasolburg, in the province of the Free State, in South Africa, there occurred the greatest coal mining disaster in the history of the continent. Over four hundred miners (435) still lie buried in the mineshafts, forgotten and largely un-commemorated. In what used to be known as Coalbrook and now called Holly Country, which is administered by a Taiwanese Company, lies a rusting piece of mining equipment. If you visit the site in winter when the long grass does not obscure the view, you will find a small brass plaque. It reads:

In memory of those 435 miners who lost their lives
in the Coalbrook mine disaster on 21/01/1960.

“After all these years you are still in our hearts and thoughts”

There is a bitter irony in the last sentence as it is difficult to find anyone who can recall even one of the names of any of these miners. This is the only physical tribute ever raised to these men who lost their lives in the mine but mystery surrounds why no organisation was willing to do anything to mark this major event in our history on its 50th Anniversary in 2010. The relevant Trade Union was not willing to become involved with the commemoration. The reason they gave was that the Union did not exist at the time of the disaster and the Chamber of Mines declined the request by some local concerned residents in Holly Country to hold a commemorative service for the deceased miners with no specific reasons being given for their refusal. Some secrets seem to lie buried with these miners and with some investigation these may well still be revealed.

Whilst some information is available on the web, the more human side of the story is revealed more clearly in reports in the local press and in coverage in newspapers that have long since ceased publication.

In 2015 a chance visit by a friend of mine to a second-hand furniture shop in Parys, some forty-five minute drive to the south of Holly Country led to the discovery of some old Afrikaans language newspapers that contain some valuable insights into the disaster.

With this and other information that can be unearthed it should be possible to piece together an updated report on what occurred, not out of any morbid interest in the death of so many miners but because this touches upon an issue that is still very much with us today mine safety and the dark side of capitalism.
To this day the local communities are still involved directly and indirectly in the coal mining industry. Even if they have never gone underground to drill for and to shovel coal, large numbers of local people work at institutions such as SASOL (that produces oil from coal) that relies heavily upon coal in order to function. The employment landscape of the region is inextricably linked to the mining industry and whilst Mine Safety has improved drastically there are still reported incidents of injury and loss of life. Of course there are safety rules and procedures and inspections, and even commissions of enquiry into any loss of life or serious injury on the mines but the human story sometimes gets lost in the blame games, hidden agendas of those who may exert influence on an enquiry or who may put profits ahead of people.

The Clydesdale Mine Disaster Story has never fully been told and even though it is now almost forgotten, one has to suspect that there are still some lessons that can be learned from personal recollections, and reminiscence prompted by the accounts in these old newspaperstogether with some newsreel accounts gleaned from the archives, libraries and private collections.

The Heritage of a Nation is the inheritance that we as a unique collection of different people, have a right to claim as a basis of our communal experience. Not all experiences are pleasant or positive but the hope is that we can learn from experience to avoid the mistakes of the past and to forge a future that is closer to our communal vision of what our society could be like at its best. This cannot begin to be achieved if we choose to ignore important parts of our history. To ignore the lessons to be learned from the worst coal mining disaster in Southern African History would be a lost opportunity and a grave mistake. Time is not on our side. With every old person who dies before their unique story can be recorded for posterity, another page is torn from the record.

After the closure of this mine, which one assumes was due to the disaster, although there may have been other reasons, the vast majority of the people with stories to tell moved to other areas, other provinces and even to other countries. It would be impracticable to attempt to trace remaining survivors but a small research unit could begin to trace and list archival holdings of press reports and press photographs, newsreel records, and any articles that may have been written on the incident in local and international magazines and journals. This paper then represents a tentative first step to recover some of the information that is in danger of disappearing forever but which has not been recorded in the official records.

Of the existing official records a detailed paper published in the Journal of the Southern African Institute of Mining and Metallurgy by J.N. van der Merwe, in December 2006, entitled Beyond Coalbrook: what did we really learn? provides a description of the events that led up to the disaster and of some of the research outcomes that were prompted by this event but, as the article notes “ …not all the unknowns were attended to at the same level” (p.857) with the strength of the nominally square internal supporting pillars receiving the most attention. To this day research into the issue of pillar strength remains the most positive outcome of that which was generated by the disaster whilst factors such as barrier pillars, overburden
behaviour and loading systems remain, according to the article, largely under-researched. The socio-political implications were not explored at all in this article.

The research prompted by this event did yield some very impressive formulae for determining coal mining pillar strength that were published in the above-mentioned journal by Salamon and Munro (Sept., 1967, pp. 56-67) and many of these have become official or de facto mining standards. However, in considering these scientific advancements, important as they undoubtedly are, it is easy to forget that the original Salamon and Munro formulae were ironically not valid for mining conditions in the Vaal Basin. More importantly, the actual horror of 435 miners trapped in a confined space in a tunnel 515 feet (157m) below ground with many near them crushed to death, with no food and the only water coming from seepage which would ultimately fill the tunnel and with a dangerous build-up of methane gas, this human aspect of the story has not been mentioned in any great detail in the reports.

Above ground, however, macabre scenes were being played out as more than an estimated 1000 people visited the site on the first weekend after the tragedy. According to press cuttings (Rand Daily Mail 29/01/1960) many were “gaily dressed and rowdy and police had difficulty in keeping them under control”. Women carrying children and men carrying picnic hampers got out of cars parked on a final mile-long stretch of dirt road from Sasolburg. 2400 bottles of minerals were sold at the mine trading store. The woman in charge of the shop told reporters that, if the shop had been stocked with five-hundred cases of minerals, they could have sold the lot. These ‘festive’ crowds must have been hard for the tearful wives and children to bear as they clustered around the main mine shaft desperately hoping that the rescue teams, working without a break to drill through to the tunnel, would be successful.

Whilst the news media carried pictures of the grieving white families I have managed to trace only two photographs of grieving black African women in the archival records which, in itself, is a reflection of the socio-political climate of those years. All the newspapers were white owned with almost exclusive white readership and black suffering was simply not newsworthy. Public TV broadcasts, with strict monitoring of content, were only introduced in South Africa from 5 January 1976.

Vigorous attempts were made to rescue the trapped miners and highly trained mine rescue teams from surrounding mines converged on Coalbrook but were prevented from working underground by the unstable conditions; the fear of further roof cave-ins and the high concentrations of methane gas. The collapse had also caused air pressure to build up and this had caused damage to the air conditioning fan cutting off the fresh air supply to the mine. All hope of rescue rested upon the drilling of a new shaft down to where the miners were thought to be trapped. A sophisticated drill bit was flown in from Texas. This drill bit battled to bore through the 117’8” layer of dolerite and progress was very slow when time was of the essence. There were no computer graphics programmes in those years so instead of using something like Photoshop, newspapers had to rely upon hastily hand-drawn illustrations to enliven their accounts. I apologise for the poor quality of the next slide [Slide showing the position of the miners underground and the position of the drill rig].
Although one can hardly decipher this image it does show the site of the drilling rig in relation to the two mine-head shafts and the depth of drilling required. The fateful cave-in occurred at around 7.30pm in an area where miners had been removed shortly before this happened but workers on the eastern side of this cave-in were trapped.

By the time the rescue attempts were called off the Texan drill bit, which was at the time the most sophisticated mining drill bit in the world, had still not penetrated the dolerite layer. But prior to the commencement of the main drilling attempt using the Wolfram bit, a narrow borehole had been sunk down into the mine tunnel where the trapped miners were thought to be and a microphone had been lowered down the shaft. All that could be heard was the sound of lapping water. After eleven days the rescue mission was finally called off. The bodies were never recovered.

At this point it is tempting to shut the book and to nip off for a cup of coffee. But before you do so, there are just one or two issues that need explaining:

1) Why was Colebrook required to step up coal production in the first place to a level that represented a nearly 17-fold increase?
2) Why were some miners prevented from leaving the mine when they were concerned for their safety?
3) Why was such a poor amount of compensation paid to black miners as distinct from that paid out to white miner’s families?
4) Why were miners not involved with the accident confined to their worker’s dormitories and not allowed to speak to any enquirers?
5) What were members of the special branch doing at the mine?
6) Why did the Unions and relevant government departments not want to have anything to do with the fiftieth year commemoration of this major event in our history?

These issues led me to pose five key questions:

1) Why was there the need to increase coal output from the Coalbrook mine so drastically?
   In 1950 planning by ESCOM (Electricity Supply Commission) started for the building of a thermal power station at Kragbron which is just a valley away from what was the Coalbrook South mine which was awarded the contract to supply the new power station with local coal. In 1954 the first generators came on line and immediately the demand for coal jumped from 1 600 tons per day to 10 000 tons per day by 1958. From being a relatively small mine with a modest output Coalbrook suddenly became a prosperous mine of major strategic importance to the region. But was this output sustainable? The Electricity Supply Commission hired a prominent mining engineer Mr. F. A. Steart who reported that “…competent planning, electrical equipment and organisation would be necessary if the greatly increased output were to be maintained safely.” He drew specific attention to the poor support column strength and
recommended that the mining height be limited to 2.9 metres and that barrier pillars should be left at 18.3 m centres along roadways of 6.1 to 6.7m width.

In order to meet the increased demand secondary extraction was begun in early 1959. This involved cutting into existing pillars to extract coal, and top coaling (extracting coal left in the roof of the tunnels after initial mining) was undertaken. The height of the ceilings in an experimental section of the mine that was no longer in use (Section 10) was raised to 4.3 m and in some places it was increased to 6.1m Some support pillars were cut into on all four sides, some on two sides and others, just on one side. After two months nothing untoward had happened and the mine management concluded, without undertaking a proper, detailed scientific study, that it would be safe to continue with secondary extraction in other sections of the mine. But, at about 19:00 on 28 December 1959 the northern part of section 10 collapsed. Two weeks later an Inspector of Mines undertook a routine inspection of the mine but the collapse was not reported to him. He left recording nothing unusual at the mine.

One is tempted to conclude that the mine management did not report the collapse for fear that the mine would be closed for a more comprehensive safety check. This would have interrupted the increased rate of coal production and would have called into question the ability of the mine to continue supplying coal to the Highveld Power Station. The financial implications would be staggering and it could even have resulted in closure of the mine. Hoping that everything had settled down, they continued mining. Twenty-four days after the unreported collapse in Section 10 the major disaster occurred. Although the official enquiry concluded that insufficient pillar strength and lack of geological research was the cause of the accident, a more human-centred conclusion would be that capitalist greed created the disaster.

2) To answer a question based on number two, the black miners were from rural areas in Mozambique and Botswana and they were arguably closer to nature than the white miners and the white mine bosses so, when they saw the rats in the mine scrambling up stopes and shafts, like rats leaving a sinking ship, it was a clear sign to them that it was time for them to leave the mine. The mine managers, sitting in their offices at ground level were very concerned about keeping up production to honour the lucrative contract with the new power station and when they heard what was going on, they regarded this as an illegal strike and they therefore instructed the black mine stewards (called boss-boys) to prevent the miners from leaving. A management delegation was sent underground to address the miners, threatening arrests and legal action against them for breaking their contracts and threatening them with dismissal without any accumulated benefits. We must remember that, at that time, Unions were banned from operating at the mine and so workers had no organisation to turn to for defence of their rights.

3) The issue of compensation is a thorny one not least because the majority of black miners received far less than that which was paid out to the families of white miners. The amount for black miners was a lump sum determined by a complex formula based on three years’ wages and further based on the miner’s pay rate and the number of his
dependants. The minimum pay-out was 180 pounds. The average monthly wage of a black African miner was 5 pounds and 6 shillings with the pay per shift underground being 4s and 3d. The maximum grant to a widow with three children was a once-off payment of 252 pounds and a widow without children received 168 pounds. On the other hand the families of white miners were given a life-time pension, and could stay living in their houses in the mining village for as long as they liked. Irrespective of the inequitable financial compensation all of the miners both black and white who were husbands, fathers, partners and colleagues would all, irrespective of the different cultural backgrounds, have felt the need to bury their dead according to the dictates of their traditions and belief systems. The inability to retrieve the bodies and to get closure in this way would amount to a second devastating blow after the impact of the deaths in the first place.

4) This disaster was world news and it achieved coverage in the international media for some time. Foreign reporters visited Coalbrook and the last thing the Apartheid government wanted was for negative reports on conditions in the mines to be broadcast to the world. There was a national security division known as the Special Branch. They were a much feared unit that had the power to arrest suspects, agitators and those suspected of being Communists. That is clearly why the miners who survived the disaster were confined to their dormitories, and journalists were prevented from making contact with these workers. Members of the Special Branch were in Holly Country to keep a watchful eye on things.

5) Fear of investigative journalism putting the spotlight on Apartheid practices might have led to not wanting to commemorate an event that to this day can raise awkward questions and that remain officially unanswered.

Considering the history of the Coalbrook Mining disaster one has to conclude that although lack of suitable equipment, lack of geological research and seismic activity all played their role, the elephant in the room that nobody wants to address is the socio-political climate that sustained the Apartheid system and which kept up the profit returns to wealthy investors in London and New York. One could surely be forgiven for viewing the Coalbrook and other mining disasters as a demonstration of a dark side to Capitalism.