

Rehabilitation: are we doing enough?

Derelict, abandoned quarries can have a number of negative impacts on the environment and neighbouring communities. Are the operators and owners doing enough to mitigate potential negative consequences? Chana Boucher speaks to three industry leaders.

Nico Pienaar

Director, Aggregate and Sand Producers Association of Southern Africa.



“The issue of rehabilitating quarries in South Africa has been on the agenda of the Aggregate and Sand Producers Association of Southern Africa (Aspasa) for a long time. However, we need to distinguish between two different problems, namely, quarries that are not rehabilitated and borrow pits that are not rehabilitated.

“In the past, the regulator didn’t pay much attention to the rehabilitation of quarries or even mining activities. We now sit with a legacy of mine dumps and unrehabilitated quarries all over.

“Aspasa members have been playing the game as rehabilitation at their quarries has to take place as

mining operations progress. Aspasa has introduced an environmental programme that is compulsory for its members to adhere to in order to pass the Aspasa audit. The auditor assesses rehabilitation and closure programmes and the progress in rehabilitation as per the quarries’ own environmental management plans. An important point is that the environmental programme looks at what provisions have been made for the rehabilitation fund, as required by legislation.

“The problem is that operations that closed down in the past without being rehabilitated gave the industry a bad name. In addition, these areas have become dangerous

Aspasa

and encourage scavengers to frequent and illegally mine material and leave. The result is that these quarries deteriorate over time and the adverse effects are exacerbated. Further, water tends to gather in the open pits and poses threats of drowning.

"Regarding borrow pits not being rehabilitated, there is often a formal quarry in the area that employs people, pays taxes and abides by the legislation. Later, however, a borrow pit opens down the road to build a road or structure. In South Africa there are a number of borrow pits that have just been left abandoned. The excuse is usually that the landowner has asked for it to be left because it serves as an extra dam when water gathers in it. These borrow pits are started under the guise of being for specific purpose, but later develop into fully-fledged operations which do not comply with the requirements of the Mineral and Petroleum Resources Development Act (MPRDA). Unrehabilitated borrow pits are dangerous to society.

"The Department of Mineral Resources (DMR) has in recent years looked at the problem and a list of unrehabilitated and derelict mines has been drawn up. Tax-payers' money has to be used to fix the mess of the past. In many cases the 'owners' of the quarry stopped operating and even if there was a rehabilitation fund, it just wasn't enough.

"Formal quarry operations, represented by Aspasa pay royalty levies and provide for rehabilitation funds. But not all quarry operators are members of Aspasa and regulators of the industry have not focused on those operations, instead tending to focus on 'formal' operations, while down the road operations are getting away with not being compliant. Often municipalities do not abide by the rules and their quarry operators are culprits in the breaking the law. If the informal industry is monitored better, it will ensure level playing fields.

"If the sites are left unrehabilitated, we will have a countryside full of holes, environmentally unfriendly, unsafe and degrading to society. The scars on the face of the earth will be left. In South Africa, alluvial diamond mining in South Africa's Northern Cape province and marble operations near Brits and Rustenburg in the North West Province are good examples of what happens when the rules aren't followed.

"The actual rehabilitation programmes are not difficult to achieve if the necessary knowledge and planning are applied."

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Gert Coffee

Chief operation officer of Afrimat's mining and aggregates division.

“A lack of or insufficient rehabilitation could create an unsafe situation, have an unsightly visual impact, cause an unnecessary dust problem and lead to groundwater contamination.”

“Rehabilitation of quarries is complex. Commercial quarries that are worked until their resources are depleted should be rehabilitated according to what best suits the area and circumstances. Safety and visual aspects are important, but in the end a lot of these quarries are changed into sought-after properties that benefit the local community, for example, Durbanville Waterfront, Bloemfontein retirement village and Bass Lake at Henley-on-Klip.

“Quarries used for crushing stone for contracts such as roads, harbours and other big construction work should be rehabilitated to make them safe and to minimise the visual impact. If these quarries are rehabilitated fully and sterilised, a new quarry must be opened when the road needs a major repair in 20 years time, or

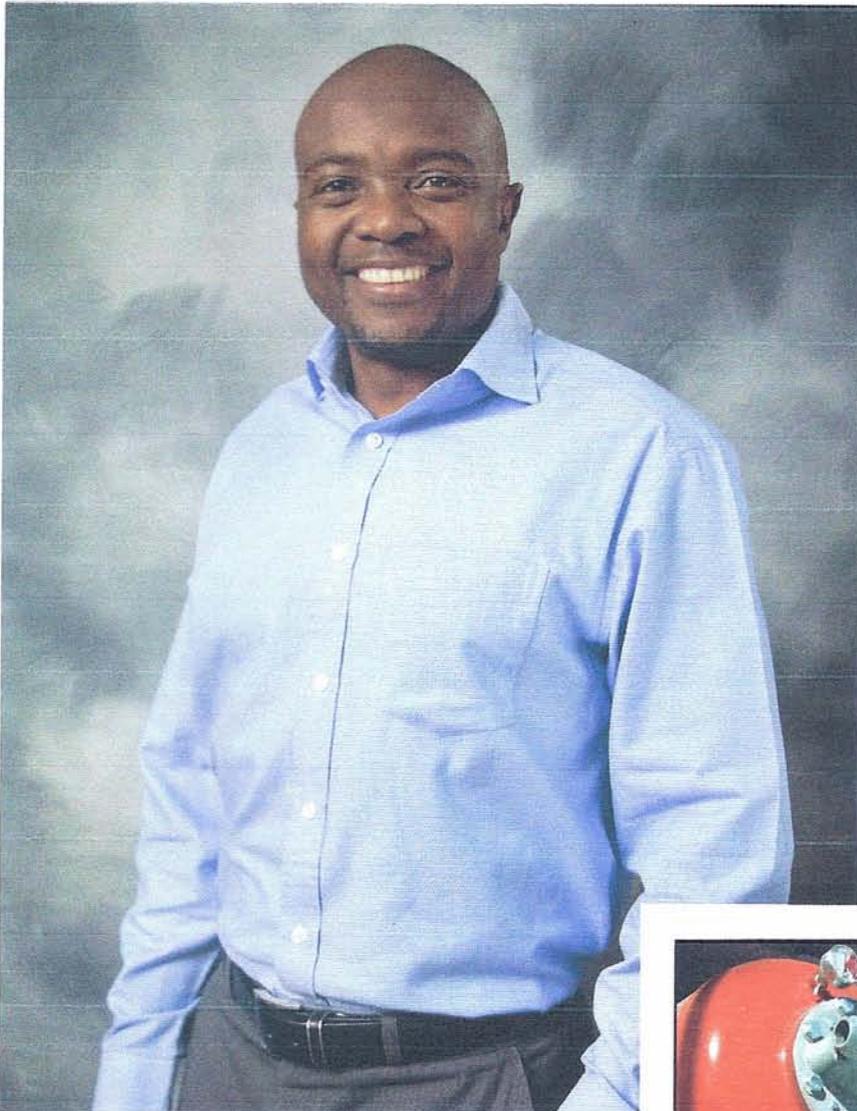


Afrimat

extensions to the harbour need to be done.

“Based on the above I believe that enough is being done to rehabilitate quarries, however, I feel people with knowledge of the future plans for development in a specific area should also be involved in the final decisions. “Over the last 30 years, a lot has been done not only in the rehabilitation of quarries but also in the safety of the abandoned quarry as well as on the visual aspect. It is not uncommon these days for people to drive past a quarry without knowing it exists. Today, the planning of quarries takes place with the end use in mind. “Enough is being done as long as the authorities ensure

that the initial financial guarantee required for rehabilitation is sufficient. The reason for this is that most damage to the environment is done during the initial years of the life of a quarry. “A lack of or insufficient rehabilitation could create an unsafe situation, have an unsightly visual impact, cause an unnecessary dust problem and lead to groundwater contamination. Some of the biggest challenges being faced when it comes to rehabilitating quarries include safety fences and signs being stolen, and the inability of the authorities to take responsibility to sign off a rehabilitated quarry and release the financial guarantee.”



Lafarge

Funani Mojono

CEO, Lafarge Mining South Africa.

“Lafarge group operates some 2 000 quarries around the world and requires them to have not only active rehabilitation programmes but where relevant, a biodiversity conservation programme. This is no different for our Lafarge South African quarries.

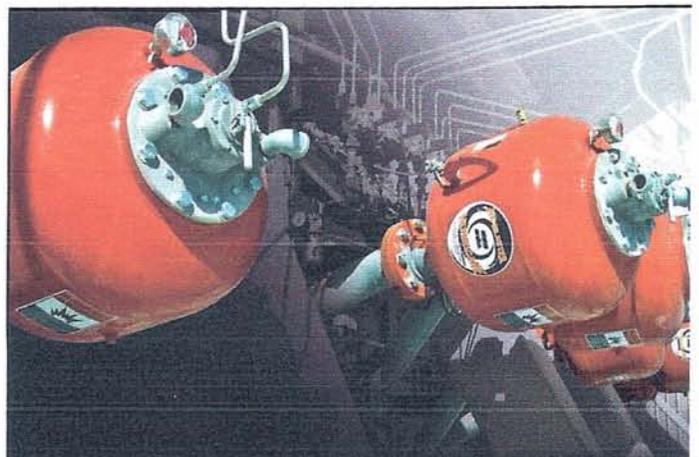
“These programmes are not intended to only kick in when the quarry is worked out. Rehabilitation is generally taking place in parallel with normal quarrying

activity.

“In South Africa, the law requires that financial reserves be allocated for rehabilitation. This is based on the proper assessment of future requirements and the future value of money. Lafarge operates to its international industry-leading sustainable development standards and complies with local regulations.

“In view of this we do not see rehabilitation of our quarries as being a problem.” ■

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