# Sensitive quarrying required

ggregates and sand from quarries and borrow pits are essential to keeping the country's construction industry supplied.

However, careful environmental care needs to be exercised when operating these as they are often situated close to built-up areas or near to roads and railway lines to ensure quick and easy supply. As a result community concerns need to be handled carefully and sensitively in order to ensure a harmonious and mutually beneficial relationship exists throughout the lifecycle of the operation.

Director of the Aggregate and Sand Producers Association of Southern Africa (Aspasa), Nico Pienaar, says if these guarries are operated correctly there should be little cause for concern. Aspasa members especially are required to work within the confines of the country's stringent environmental legislation, as well as uphold strict standards imposed by the association relating to safety, health, environment ISHE and About Face programmes.

## Concerns were founded

"Unfortunately the public has a right to be sceptical of new quarries within their neighbourhoods as past practices left a lot to be desired. Things have changed, however, and they are far less likely to get away with damaging the environment these days," he says.

He adds that communities are increasingly aware of their rights and quarry owners have simultaneously become more sensitive to their fears. Despite widely diverse environments and similarly large numbers of operators. controls are in place to ensure legislation and standards are adhered to. They also ensure communities and the environment aren't negatively impacted and that quarries can operate unimpeded.

Guidelines do exist both from a legislative point, as well as from the association's ISHE/ About Face standards. They can assist communities, as well as the operators involved, to ensure planning, development, operation, rehabilitation and final decommissioning of quarries and borrow pits are done correctly. The following simple controls exist:

# 1. Application and approval

Several different Acts govern the approval of quarry operations depending on location, land tenure and likely impact. These in turn determine the approval procedure to be followed and the degree of detail which must be provided in a licence application.

## 2. Planning and development

Site planning needs to be done in association with a development application supported by all relevant information required to get approval. Only once this has been obtained can the plan be implemented according to site development steps laid out. When these have been met the operation can go ahead.

#### 3. Site operation and controls

Once the quarry operation is in progress, careful environmental management must be sustained to ensure dust emissions and noise impacts do not become a significant issue. At the same time rehabilitation must be planned to dovetail with quarry operations.

## 4. Rehabilitation

This should be done progressively where the operation allows staged development and subsequent closure and rehabilitation of different areas. Or it can take place at the end of the total operation if it is a short-term project or staged development is not possible.



# 5. Decommissioning

When quarry operations and any associated processing are completed the area should be tidied up, all facilities not otherwise required should be removed and rehabilitation should be completed on the remaining disturbed areas.

## Short-term alternatives

For short-term quarries and borrow pits the range and intensity of measures drawn will generally be modest. In these cases the staging of developments may not be necessary if the quarry or pit has a life less than one or two years, and total rehabilitation might be carried out as part of site decommissioning.

These basic guidelines should be in place within any modern pit or quarry operation. In addition Aspasa members uphold strenuous guidelines to ensure they operate in harmony with people and the environment where they operate.

