

16 February 2018

Director, Industry and Infrastructure Policy  
Department of Planning and Environment  
PO Box 39  
Sydney NSW 2001

**RE: IMPROVING MINE REHABILITATION IN NSW DISCUSSION PAPER**

---

Dear Sir

The Australian Sustainable Business Group (ASBG) is pleased to comment on the Department of Planning and Environment's *Improving Mine Rehabilitation in NSW Discussion paper*.

The [Australian Sustainable Business Group](http://www.asbg.net.au) (ASBG) is a leading environment and energy business representative body that specializes in providing the latest information, including changes to environmental legislation, regulations and policy that may impact industry, business and other organisations. We operate in NSW and Queensland and have over 120 members comprising of Australia's largest manufacturing and a few mining companies. Members were involved in the development of this submission and ASBG thanks them for their contribution.

ASBG considers The Department of Planning's *Improving Mine Rehabilitation in NSW Discussion paper* appears to focus on shorter term mining activities such as coal or mineral extraction. Many other inorganic mining activities such as for sand, limestone, clays, salt etc can have mine life lengths exceeding 50 years and have highly variable outcomes in terms of 'voids'. Consequently there are a number of issues that are raised accordingly to the proposals in the Discussion paper.

**Proposal 1 Assessment Phase**

Key point: *Increased flexibility especially in the Assessment phase to the final rehabilitation plan, which is likely to change over a long term mining activity.*

The comments below relate to the items in table 1.

**3(a)** Community attitudes towards a new development is very different to an activity that has been in operation for more than 20 years. Resistance to change from the community is a fundamental part of human psychology, which is a key emotion driving many opponents. Use of scientifically based criteria becomes a tool to satisfy this drive. Hence, the community position at the commencement of a new planning proposal such as a mine often reverses some 20 years or so later, where calls for heritage and preservation of the project can occur. This is assuming the development has been a good neighbour. Consequently, basing final rehabilitation plans on community aspirations at planning stage will not reflect community attitudes and Government plans in the future when rehabilitation enters its final phases and rehabilitation. Much can change over the longer time period, just consider the abandonment of Sydney's road corridors.

**3(b)** While a number of beneficial uses are identified in the discussion paper, it seems to lean towards back-filling as a main option for void rehabilitation. Such activity is very costly and will make many mines unfeasible. Consideration of alternatives to back-filling of voids such as water reservoirs, music bowls, landfills, partial filling to engineered designs, other recreational activities and many more should be available and encouraged. Consequently, final rehabilitation of voids for beneficial reuse must be considered on a case-by-case basis. End uses of voids and closed mines also requires the input and support from Government at state and Local Government levels to find beneficial reuses and place them into the local area plans.

**3(d)** ASBG considers community involvement is essential at the planning stage, but it must be recognised that such plans are likely to change over time (see 3a). Consequently, flexibility to vary the final rehabilitation process needs to be built into the consent process. This may also prevent the planning phase getting bogged down in multiple potential land uses, which makes completion criteria difficult to specify.

**3(e) & 4(b)** Meaning of the term *progressive rehabilitation* requires clarification to ensure it is flexible and not limited to timetables or other time based criteria, but be assembled on a case-by-case basis. For example, actions for rehabilitation could be based on a milestone approach, where certain actions have been attained such as closure of a cell and reopening of another. Extraction rates will vary over time depending on economics and market conditions. Also Local Government may identify new beneficial reuses for the site as circumstances change and community attitudes change.

**ASBG Recommends:**

- **Mine rehabilitation practices can change as future planning and community attitude changes and this flexibility needs to be built into the rehabilitation process.**
- **Progressive rehabilitation should not be limited to time based criteria, but preferably on a milestone approach with the flexibility to change, within reason, if future options become available.**

## **Proposal 2 Assessment Phase**

Mining proposals can employ similar approaches used for manufacturing under [industrial ecology](#). Put simply one process waste becomes another's' raw material. Use of such practices in mining includes:

- A new mine spoils may be the source of void filling material for another void.
- A major construction project involving tunnelling and or large excavation uses its spoil to fill an active or even abandoned mine's void.<sup>1</sup>
- An older mine in the same mineral ore body uses spoil from a newer mine being developed to partially fill its void.

Obviously locations, distances and economics need consideration. Nevertheless, in the early stages of a mine an off-set program<sup>2</sup> may be employed, where for a set period, spoils from a new mine can be used to fill an older void nearby. A mine spoil off-set process should be established as a formal practice to rectify abandoned voids where there is an obvious beneficial reuse and better economic outcomes than purely on-site management.

The above tends to focus on fill of voids; however, complete filling is often not required depending on the acceptable end use. There are many uses for properly designed re-engineered void areas sculpted to the desired final use as described above.

What is missing are planning mechanisms and appropriate cooperation between proponents, Local Government and the NSW Government, which can establish these environmentally desirable outcomes. Also the assessment phase should consider the potential for future mines and or excavation processes to provide external fill at future active rehabilitation stages.

### **ASBG Recommends:**

- **Both state and Local Government to play an active role to facilitate finding beneficial reuses for voids and incorporating these into Town Planning and local area plans.**
- **Establish a spoil off-set program, where spoil and fill can be sourced from external sources which is supported and encouraged by the planning system.**
- **Install a one-stop shop run by the Department of Planning for the above activities.**

## **Proposal 5 – Operational Phase**

The issue of changing approaches to rehabilitation and final end uses makes the use of a Final Landform and Rehabilitation Map one of a current perspective, but it needs the flexibility to change over the life of the mine. Obviously changes will need assessment and acceptance. Such change should be also be suggested by NSW and

---

<sup>1</sup> [Westconnex spoil](#) from tunnelling is used to partially fill an abandoned quarry in Hornsby

<sup>2</sup> Off-set programs are used for [bio-diversity](#) and [carbon emissions](#)

Local Government and or other developments that can see environmentally beneficial outcomes for both projects.

ASBG members take issue with the need to prepare multiple reports where the information is over 90% the same, but varies in format to suit the bureaucratic preferences of each agency. *Department of Planning & the Environment* already requires many duplicated reporting covered by other agencies including:

- Sites with Environment Protection Licences (EPL) are also required to report to *Department of Planning & the Environment* on compliance of EPLs using an independent auditor, where EPLs are strongly overseen and enforced by the *Environment Protection Authority*.
- The requirement to generate both an *Annual Rehabilitation Report and Program (ARRP)* and an *Annual Environmental Management Report (AEMR)* is again duplicative to the *Department of Planning & the Environment* and the *Department of Resources and Energy*.
- Submitting a *Rehabilitation Management Plan* to Department of Planning is duplicative of *Mining Operational Plans* sent to the *Department of Resources and Energy*.

Clearly this is overly bureaucratic and such duplications should be removed and reporting streamlined into a combined report where the majority of the information is the same, but expanded to include any minor differences in information.

#### **ASBG Recommends:**

**Removing and streamlining of the duplicative reporting to the Department of Planning & the Environment where the:**

- **Environment Protection Authority accepts the sites Environment Protection Licences is in compliance and does not raise issues, and reporting limited to other consent conditions not reviewed by other Departments.**
- **Annual Environmental Management Report incorporates the Annual Rehabilitation Report and Program.**
- **Mine Operational Plan incorporates the Rehabilitation Management Plan.**

**Where more than one agency requires the report the same report will be sent to those agencies.**

#### **Post Closure Phase**

ASBG is concerned regarding the open-endedness of when mine owners are released from their rehabilitation responsibilities. The phrase: *reviewing mechanisms to address residual risk and potential long term environmental degradation pose mining, in collaboration with other relevant agencies* requires clarification. In particular the term *residual risk* should be clearly defined in safety and environmental acceptable risk terms. For

example, the acceptable health and safety risk could be 1 in 100,000 maximum tolerable or 1 in 1 million acceptable risk mortality rate<sup>3</sup>.

**ASBG recommends the term *residual risk* be defined in an objective and measureable way and based on or similar levels of acceptable risks used for safety and health.**

Should further details and explanation of the above points be required please contact ASBG.

**Yours Sincerely**

*Andrew Doig*

**Andrew Doig**

**CEO**

**Australian Sustainable Business Group (ASBG)**

T. +612 9453 3348

A. (PO Box 326, Willoughby NSW 2068)

---

<sup>3</sup> World Health Organisation [Ch10 Acceptable Risk](#), P Hunter and L Fewtrell