

## **NSW Mine Rehabilitation Reform Project - Submission**

Scientifically backed solutions based on early engagement, analysis and planning are the key to successful rehabilitation projects. We believe that strengthening the operational requirements will provide the framework for leading practice rehabilitation and optimum environmental and community outcomes.

As an industry solutions provider, Spray Grass Australia strongly endorses the NSW Government's proposals to strengthen the legislative requirements for mine site rehabilitation and revegetation.

Spray Grass Australia uses innovative techniques grounded in science to deliver effective, environmentally friendly revegetation, erosion and dust control solutions to Australia's mining industries.

Through our practice, we encourage clients to engage our services early to ensure that rehabilitation sites are able to be thoroughly assessed, with soils analysed and amendments made to ensure that enough data is collected to achieve a successful outcome utilising the right solution. We believe that soil is the foundation for success of any revegetation project, so our programs are always based on a thorough understanding of the physical, chemical and biological characteristics found on site. Too often, stockpiles sit around for an extended period of time and they tend to lose their life and microbial activity. We have had ongoing success with our program to kickstart dormant soil biology and stimulate life.

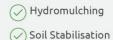
By setting higher mandatory rehabilitation requirements for all major mining developments, it will ensure that best practice approaches are standard and more competitive across the board. Setting higher benchmarks will eliminate a minimalist "spray and pray" approach to revegetation thus improving the quality of the service provided by our industry and ensuring that land is left in a healthy productive state once operations have ceased.

Spray Grass Australia would support legislative requirements for mine owners to produce plans for rehabilitation and revegetation of mine sites before mining commences because our experience clearly shows the benefit of a scientific approach and early engagement with service providers.

As an organisation engaged in providing mine site rehabilitation solutions across the country, we would also support progressive rehabilitation throughout the life of a mine, rather than leaving it until closure. This practice would enable service providers to become involved with key mining personnel from the early planning stages to ensure successful and ongoing rehabilitation. These programs could then be continually modified and adapted to the life of the mine to best meet the site characteristics and rehabilitation goals, with the land being returned to a healthy productive state much sooner after mining has ceased.

To be effective, any new mandatory requirements for rehabilitation must include monitoring and measurement of the results with explicit standards for such parameters as vegetation coverage, survival of desired plant species and freedom from erosion.

Spray Grass Australia is an industry leader in the use of drones for rehabilitation performance monitoring, utilising multi-spectral imaging and sensor technology. This technology is evolving rapidly











and has become a powerful tool for measuring the success of our current revegetation projects. Allowing areas to be mapped to a high degree of detail, we are able to count and monitor the health of plants, perform disease analysis and see areas that are under heat and drought stress. These type of monitoring systems should be included as an integral part of any verification process employed for monitoring mine site rehabilitation in the future.

Spray Grass Australia is working at the "cutting edge" of adapting this technology to our industry and is able to provide valuable advice to the Rehabilitation Reform Project.

We are willing to provide further information and a service industry perspective to the consultation process.

Sincerely,

Spray Grass Australia

Glenn Sullivan

**Environmental Consultant** 

**Phil Barnett** 

Phil Barnet

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