



Capability Statement

Experts in the Environment





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Our Company

World class revegetation solutions grounded in science to strengthen nature.

It is critical that soil stabilisation and revegetation works are delivered quickly and safely with a focus on sustainable outcomes. Results should be maintainable in the long term, whatever the conditions or location. Our years of experience in the Top End have presented Spray Grass Australia with some of the toughest and most punishing soil revegetation challenges on the planet. We understand that our clients need more than a 'spray and pray' approach to achieve fast, healthy, long term growth.

We have sourced some of the most experienced specialists in our industry and world class innovative products to ensure your site is revegetated and safely stabilised the first time, no matter where you are in the country. We have safe and environmentally friendly solutions that work across a range of locations, including severe, steep surfaces.

Spay Grass Australia continually invests in new technology and innovation to provide our clients with a complete end-to-end solution. We are the first company in Australia to provide our clients with the option to utilise drone technology as a service for surveying and monitoring, seeding and spraying.

Want outstanding and sustainable results on your next project? Choose Spray Grass Australia's balance of experience, science and nature.





Spray Grass Australia uses innovative techniques that are grounded in science to deliver effective, environmentally friendly revegetation, dust suppression and erosion control solutions for Australia's mining, oil and gas, civil and infrastructure projects.

Our Difference



SUPPLY

Our products and services are backed by the expertise and consultation of our specialist team of Australia's leading agronomists, horticulturalists and soil scientists. We have extensively tested their performance in some of the most depleted and degraded soils in Australia, which is why we are confident you will achieve project success the first time around. All of our products are developed and made right here in Australia.



APPLY

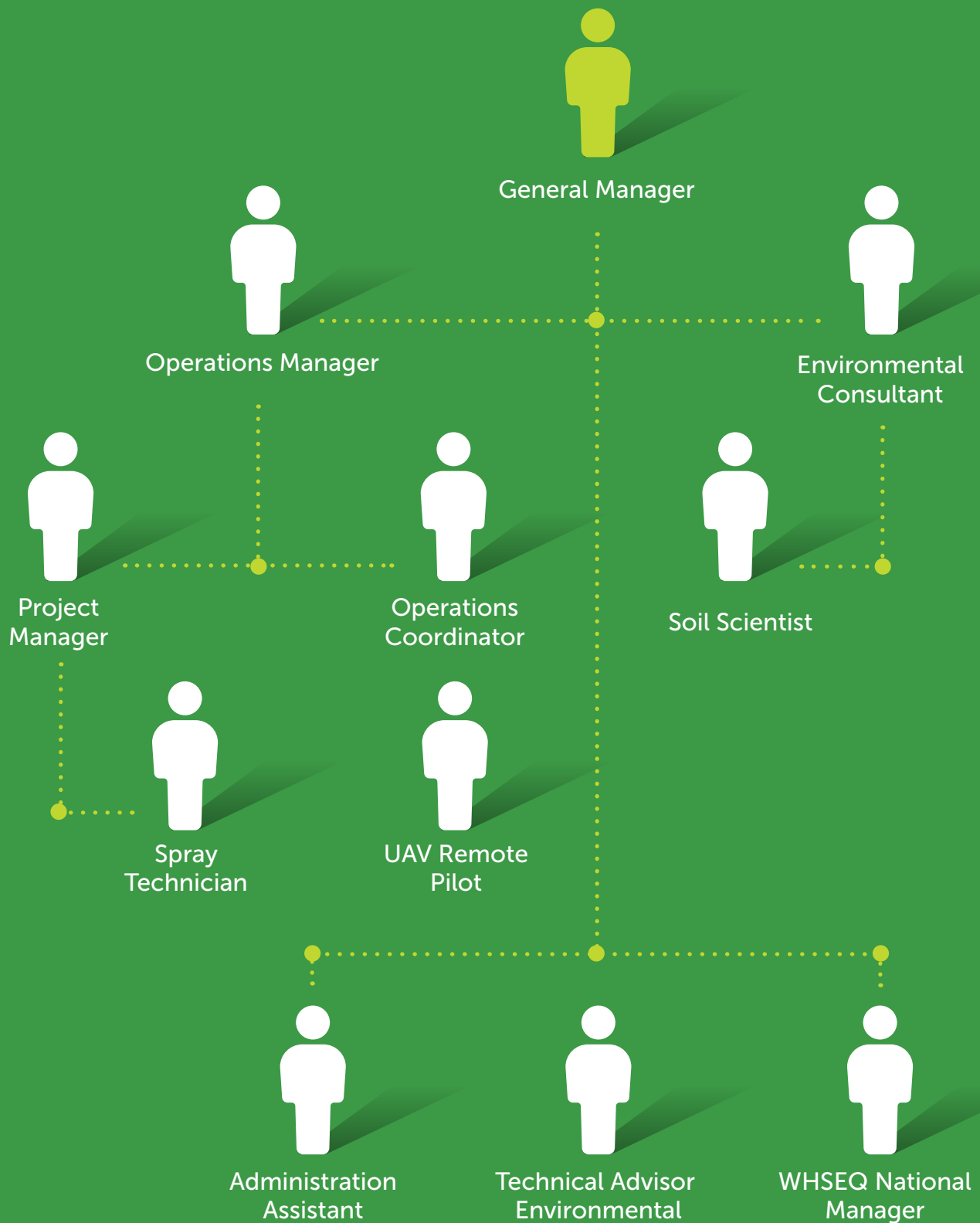
Feel confident that you are hiring knowledge and expertise. Our highly trained technicians utilise our specialist equipment to apply products with precision and accuracy, meeting Australian Safety, Environmental and Quality standards. Additionally, our ability to utilise drone technology for the application of solutions improves the quality and efficiency of our operations. For each project undertaken, SGA develop a tailored Quality Management Plan and an Inspection & Test Plan (ITP) to identify and record project specifications and requirements.



GUARANTEE

That's right – we can guarantee results the first time around! Access qualified advice from our specialists about how we can guarantee outstanding results on your next project when our products are supplied and applied onsite by our expert team.

Our Management



Our Core Values



Safety

We are committed to providing a workplace that protects the health, safety and welfare of our team, including clients, contractors and visitors. The success of our projects relies upon the safety of our workforce and the communities around us. We care about the safe management of the environment.



Innovation

We understand that our clients need a methodology which is grounded and backed by science. We research, implement and promote leading edge solutions that are tailored to Australia's climate and our client's needs. We boast a fleet of modern hydroseeders, restricted-access equipment and a line up of drones that are fully mine spec compliant and unmatched in the industry.



Excellence

It's more than what we provide, it's what we think and how we act. Our business is not just about providing a scientific solution, it's about prompt, quality service, effective communication and expert information. We are committed to excellence by upholding the standards we set for our company and through the certified systematic and disciplined management of our projects. We aim for quality outcomes.



Integrity

We believe in doing the right thing, and doing what we say we will. We conduct business with the utmost professional behaviour and ethics. We believe in fulfilling our duties with the highest moral standards and value transparency, honesty and ethicality in all interactions with our clients, personnel, contractors and the public.



One team

We can accomplish more together. We take the strengths of each individual and leverage off the knowledge and experience of each other. We are dedicated to building the capability of our team and have sourced the most experienced agronomists, horticulturists and soil scientists in our industry. Our team has specialist environmental backgrounds and every member undergoes continuous training to deliver the best solutions to our clients.

Our Approach

Workplace Safety

Spray Grass Australia is committed to providing a workplace that protects the health, safety and welfare of the entire team, including clients, contractors, and visitors.

To ensure our safety and environmental systems are as robust as possible, Spray Grass Australia uses specialist safety, environmental, and quality consultancy services to ensure that our systems remain viable and aligned to AS/NZS 4801:2001 certification. Our WHSEQ management System integrates the above standards and all legislative and regulatory requirements, and is supported by a centralised SEQ Management System that can be accessed by all staff across the business.

Additionally, our safety and environmental systems are regularly audited by our clients in high-risk industries to ensure that we are compliant with their WHSE requirements. Spray Grass Australia continues to achieve certification for its safety systems to ISO and Australian Standards.



Certified System
Health & Safety
AS/NZS 4801

Certified System
Environment
ISO 14001

Certified System
Quality
ISO 9001

Environment

Spray Grass Australia is committed to protecting the environment, including minimising pollution and meeting its environmental commitments and compliance obligations.

Environmental planning is an integral part of our approach to each project, embedding relevant considerations into every aspect of our activities and operations from start to finish. Our commitment to the protection of the environment and its preservation is best demonstrated by our certification to ISO 14001:2015 Environmental Management Systems.

Our internal risk register addresses how we manage environmental impacts, such as:

- Spills
- Environmental Damage
- Contamination
- Hazardous waste and chemicals

Further to this, we have a clear objective in relation to minimising waste, with recycling processes in place to mitigate the wastage of our operations and site activities.

Quality

Spray Grass Australia is committed to providing impeccable products and service to its customers.

To ensure the utmost quality standard is achieved in our industry, Spray Grass Australia has implemented a Quality Management System aligned to ISO 9001:2015 Quality Management System. Our team of professionals is committed to providing a quality service, engaging with our clients and understanding their needs and project goals.

Our quality guarantee is managed by processes, policies and continual customer feedback company-wide. We use only the highest quality materials and have independent third party and internal audits conducted to ensure continual improvement and a high level of service is maintained.

Expertise

Spray Grass Australia is backed by the experience and consultation of our team of leading agronomists, horticulturalists and soil scientists. Our expert team is continuously trained in the effective use of our range of solutions and techniques to ensure they are applied to specification for optimum results. As part of our team's dedication to a solution that benefits the environment as much as it does your budget, we pride ourselves on our ability to provide high quality, specialist advice. You can rest assured that our expertise and advice is sound, and that all involved parties are protected under our Professional Indemnity Insurance.

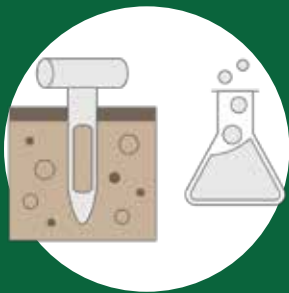
Communication

We know that every project is unique, which is why we use a tailored approach to ensure each project is customised, cost-effective and has the best chance of long term success. Our team takes time to understand your project and objectives in detail, while our Inspection & Test Plan, along with our Quality Plan, will provide you with assurance. Whether your project is a smaller commercial revegetation assignment or a large soil rehabilitation program with many moving parts, Spray Grass Australia will recommend the ideally customised solution to achieve your business objectives with consideration to your specific needs.

SGA's Revegetation Process

Spray Grass Australia utilises 8 basic principles balanced in experience, science and nature to produce outstanding results that revegetate your site the first time. Our approach makes it easy to make important decisions that are vital to the success of your revegetation project and achieving your project goals. We understand that our clients need more than a 'spray and pray' methodology to achieve fast, healthy, long term growth and erosion control.





1. Collect & Assess

Soil testing provides essential information to determine how we can optimise vegetative growth. This assures a more favourable growing environment for faster growth and establishment.



2. Choosing the right plant species

To safeguard success, it is essential to select the best plant species to suit the project location, site conditions, intended use and maintenance requirements.



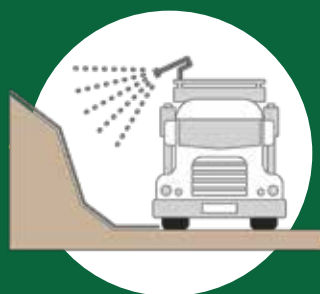
3. Drone Survey

A 3D survey is undertaken of the proposed revegetation site to accurately measure the area size and to map it to a high degree of detail for quality, planning and analysis purposes.



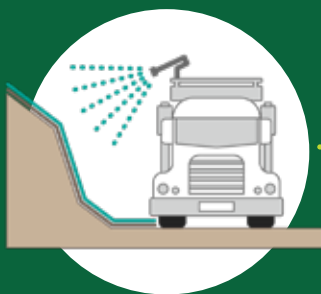
4. Tailor the best revegetation solution

Taking into account the erosion control product's effectiveness, its ability to facilitate growth and the functional longevity required for that protection, our experts carefully select the best solution.



5. EnviroSoil Application

The active blend of thermally engineered plant fibres, soil conditioners, extracts and minerals work to rectify the soil's rhizosphere.



6. Even and uniform application of revegetation solution

Our highly trained technicians ensure that the solution is mixed and applied according to guidelines to maximize the performance to meet required project goals.



7. Drone Spraying

The latest drone technology allows us to apply fertiliser, trace elements and soil probiotics 4-8 weeks after seeding application to ensure the ongoing success of the project.



8. Post-project Monitoring

Continually monitoring how projects are progressing is the best way to make sure all site requirements and compliance issues are being addressed. Maintenance may be required to mitigate against unexpected challenges.

Our Plant & Equipment

All SGA plant and equipment is mine compliant and is maintained according to manufacturer specifications and requirements in order to ensure the safety and reliability of the equipment during operation. SGA ensures that all plant and equipment is thoroughly washed and cleaned prior to and at completion of each project so that cross-contamination of client sites and products does not occur.



Hydroseeders

With hydraulic cannons mounted on state-of-the-art Hydroseeding trucks, SGA has the ability to apply product to areas in a fast and efficient manner. SGA's hydroseeders feature in-built agitators to keep the mix uniform and homogenous and are also fitted with hydraulic hoses with an extended hose capacity in excess of 500 meters. Our fleet is perfect as the power, speed and design of the machines makes them unbeatable for eliminating the need to work on steep slopes and deliver fast and effective coverage of extremely large areas.

All SGA hydroseeders are fully mine-specification compliant and boast the ability to apply product to 50,000+ square meters per day. The safety of our drivers and operators is paramount, and to this end our hydroseeders are fitted with Rollover Protection Systems, edge protection and harness attachment points, interlocks and emergency stops, fire-fighting equipment, spill containment kits and first aid equipment.

SGA ensures that:

- Only competent personnel will operate mobile plant, and this includes ensuring High Risk Work Licenses;
- Pre-start inspections are conducted prior to use;
- The plant is only to be used for the purpose for which it was designed;
- All health and safety features on the plant will be used;
- Guarding is permanently fixed and is not permitted to be removed.

Seeding Drone

With a fully automated process, a planting pattern is generated before flight to ensure precision planting. Intelligent memory means that current positions are recorded as the drone makes its way across the seeding area, mitigating quality issues that may arise in the event that the operation is interrupted. By altering the speed, altitude and feed rates, our operators have a great range of control over the spread and density.



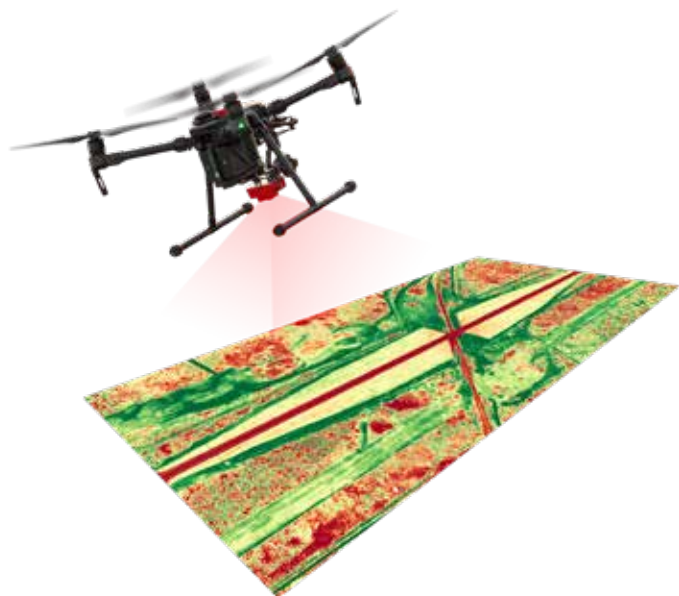
Spraying Drone

The combination of speed and power ensures streamlined spraying operation. The intelligent spraying system automatically adjusts its spray according to the flying speed so that an even spray is always applied. With four interchangeable nozzles placed directly below each motor, the downward flow of air accelerates the spray, thereby increasing reach. We are able to effectively cover up to 5 ha p/h.

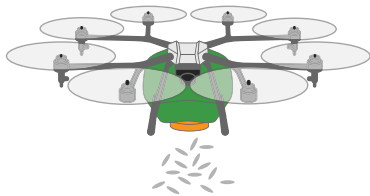


Monitoring Drone

High-performance motors paired with long-ended propellers ensure that stable flight is achieved in strong winds while an enclosed design ensures weather and water resistance, allowing flight in a range of environments. Intelligent systems and various sensors ensure that obstacles are avoided with precision hovering. Fitted with the latest multispectral camera technology, we are able to undertake 3D surveys and analyse many different analytical layers including NDVI, NDRE and Chlorophyll for precision and accuracy.



Our Services



Drone Spraying

We utilise drone technology to apply fertiliser, trace elements and soil probiotics post-project to areas that have been treated with hydroseeding or hydromulching solutions. This ensures the ongoing success of rehabilitation and revegetation efforts.



Drone Seeding

Flying at a height in excess of 10 meters, the specialist drone follows the pre-set planting pattern, firing seed down to the ground in exactly the right location. This allows for a reduction in costs while increasing the planting quantity.

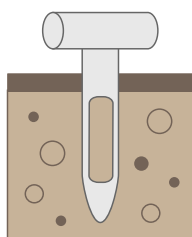
Drone Performance Monitoring

As well as innovating through our focus on soil health, Spray Grass Australia utilises the latest in drone, sensor and imaging technology to gain better insights and more accurately plan and manage operations and projects.



Mine Site Rehabilitation

Our site rehabilitation involves careful analysis of your site's requirements and conditions to customise a solution that meets your goals. Our solutions can be used for land rehabilitation both during and after your project to minimise risk and maximise success.

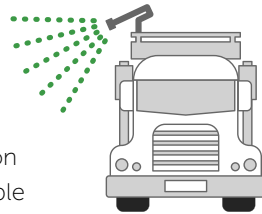


Soil Testing

With the backing of some of Australia's most experienced and respected soil rehabilitation specialists, we can ensure that our analysis and preparation will give your revegetation project the optimum chance of success. It all starts with the science.

Hydromulching

Damaged and depleted soils require more than conventional methods to achieve sustainable growth. Through the application of world-class Growth Mediums, we are able to support faster vegetation growth while minimising erosion.



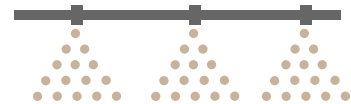
Hydroseeding

Seeding large areas can be a costly and time-consuming process. Hydroseeding is an efficient technique used to cost-effectively revegetate large areas including moderate slopes, delivering lower prices than other techniques.



Dust Suppression

The cutting-edge product technologies we use for dust suppression consistently achieve superior dust control results. Our dust control experience on large and remote sites ensures that your project will receive professional management and solutions focused on achieving successful results.



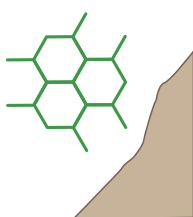
Erosion Control Blanket

Erosion control projects present us with some of our most challenging work. There are substantial safety risks to staff in the installation of traditional erosion control matting products, particularly when there is a steep slope involved. Our groundbreaking, Australian designed and manufactured synthetic Erosion Control Blanket allows for safe and effective installation.



Soil Stabilisation

Spray Grass Australia uses a cost effective and long-lasting soil stabilisation method developed by a recognised global leader in the field of polymer soil stabilisation. Extensive investment into research has helped formulate some of the most effective and advanced soil stabilisation agents available.



Our Solutions

Revegetation

Successfully revegetating damaged landscapes following construction or mining activities can be particularly difficult in the harsh Australian environment. Diverse soils, site and weather conditions across the country means that there isn't a 'one size fits all' solution for every revegetation and erosion control project.

Revegetating with healthy, sustainable vegetation that supports existing ecosystems is the most efficient and effective way to meet mine sites' environmental remediation requirements. The restoration of vegetation in areas that have been disturbed by activity in Australia can reverse the adverse impacts caused by the clearing and disturbance. Vegetation controls erosion, reduces land degradation, stabilises batters through root reinforcement and provides a habitat for biodiversity and animal species. Hydroseeding and hydromulching have proven effective on revegetating and stabilising batters.

Revegetation involves careful analysis of your site's requirements and condition to customise a solution that meets your goals. Our solutions can be used for land rehabilitation and stabilisation both during and after your project's activity to minimise risk and maximize the chance of long term success.

Hydroseeding - **EnviroSprout**

Hydroseeding uses water as a carrier to spray seed and fertiliser onto the seedbed. It is important to note that hydroseeding is not hydromulching – it is simply a method of applying seed. Our specially designed hydroseeding equipment allows the operator to agitate the mixture to ensure even and constant mixing of ingredients.

Representing an advanced way to revegetate compared to conventional direct seeding and drill seeding methods, our EnviroSprout allows for the revegetation of difficult to reach areas, as well as batters when a binder is added to the mix.

EnviroSprout is best used on large areas where quality soil is present, mulch is not required, and quality irrigation is present. Hydroseeding is simply a method of applying seed and provides limited erosion protection or soil stabilisation until vegetation has established.



Hydromulching HGM - **EnviroPro**

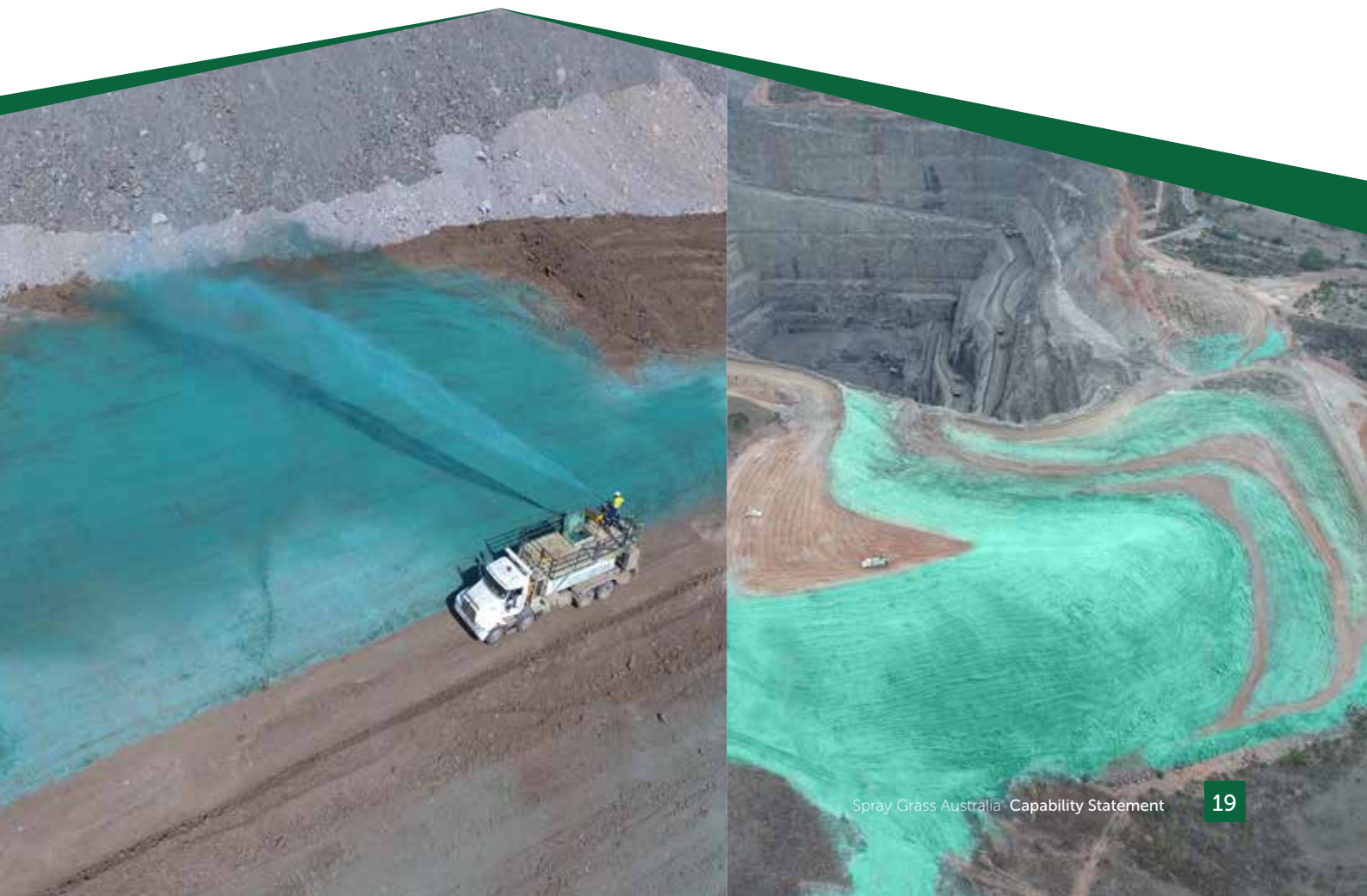
For hydromulching projects, high-quality mulch in the form of Australian-tested Growth Mediums such as Hydraulic Growth Mediums (HGM) are added to the mix. With water used as a carrier, seed, fertiliser, binder, cellulosic mulch and tracking dye are applied to the seedbed in a similar way as hydroseeding.

Our EnviroPro combines the benefits of biologically active soil conditioners and fertilisers with the perfect blend of organic mulch fibres, binders and soil stabilisers. These fibres are designed to hold moisture longer to support faster vegetation growth while minimising erosion, meaning that far less water is required to apply to this product.

Hydromulching BFM - **EnviroLoc**

Essentially a heavy-duty growth medium, BFM employs a combination of two passes over the surface area. The first step involves a combination of water, seed and amelioration being applied onto the surface to ensure effective seed-to-soil contact. The second step consists of spraying cellulosic mulch and proprietary binder and tackifier at a high application rate to ensure erosion effectiveness. BFM's viscous bonding agent dries to form a protective skin over the treated surface area, while interlocking fibres work to retain a high level of moisture, promoting an ideal growing environment.

EnviroLoc BFM has been designed to provide increased performance in comparison to standard hydromulching solutions when applied to steep batters, slopes, verges and flat areas. EnviroLoc follows and moulds to the contours of the surface and is perfect for all terrain types. This includes extended protection against erosion for up to 18 months by providing complete soil surface cover and improved seed germination, thus improving revegetation outcomes and a greater ability to suppress weeds.



Our Solutions



Dust Suppression


Spray Grass Australia provides commercial dust suppression solutions for mining, civil, oil & gas, environmental and infrastructure projects Australia-wide. Conventional dust control solutions tend to have a short life span and require re-application. We, on the other hand, utilise advanced dust suppression methods that are more effective, longer lasting and environmentally friendly.

These cutting-edge technologies will not only save water, but they can dramatically minimise all site activity, time, money and energy spent on project management tasks – especially when works are undertaken by drone. At the same time, they consistently achieve significantly better dust control results.

scrupulously engineered and exhaustively tested. Our dust control experience on large and remote sites ensures that your project will receive professional management focused on achieving successful results.

Our methods are designed to create durable, water resistant and environmentally friendly surface crusts over dust, soil and aggregate. We also offer dust control that is suited for vegetation. Application rates are carefully tailored to meet your site-specific requirements.

Our experienced and highly trained staff will consult with you to solve the most complex dust abatement issues. The best type of dust control solution for your site depends upon a host of variables that are site-specific, such as the time available to establish vegetation, micro-climate, seasonal conditions, soil type, the area topography, drainage and project duration. We understand how important these elements are in Australia's dry and drought-prone environment.

An aerial photograph showing a small, white and red aircraft flying over a dry, hilly landscape. The aircraft is spraying a bright blue liquid, likely water or a chemical, which is visible as a long, narrow trail behind it. The landscape is covered in sparse, dry vegetation and rocky soil. In the background, there are more hills and a clear sky. A green diagonal graphic element is visible on the left side of the image.

**We use cutting-edge
technology that saves
water, dramatically
minimises site activity,
time, money and
energy spent on project
management tasks.**

Our Solutions



EnviroSoil is a smarter way to reclaim your land and replace depleted soils, overcoming site challenges.



Topsoil Replacement

Biotic Soil Amendments (BSA) are soil amendments that have been designed to improve the composition of poor soils that lack essential nutrients and bio activity after they have been disturbed by land activity. These BSAs act as a complete topsoil and compost replacement and soil building erosion control solution. These artificial soils work to promote natural microbial activity and natural topsoil forming processes. These topsoil replacements are made to be hydraulically applied through a hydroseeder, spraying onto the surface in a consistent slurry.

EnviroSoil

EnviroSoil has been designed as a topsoil alternative for when you need vegetation, but your soil won't support it. It is a smarter way to reclaim your land and replace depleted soils, overcoming site challenges.

The active combination of thermally refined organic fibres with high carbon and organic soil conditioners, seaweed extracts, mineral blends, including basalt and microbial inoculants, work as a coactive solution to rectify and improve the growing potential of the rhizosphere. The unique beneficial blend of nitrogen fixing bacteria in conjunction with mycorrhizae work to stimulate the soil to mimic the natural cycle, thereby creating a sustainable growing medium for the germination of plants. Thermally treated fibres not only provide an interlocking matrix to minimise erosion, but act as an initial food source for microbial colonies to regenerate during initial plant strike.

Our Solutions



Erosion Control Blanket

Erosion control projects present us with some of our most challenging work. There are substantial safety risks to staff in the installation of some traditional erosion control products, particularly when there is a steep slope involved. After a great deal of research into the best erosion control products on the market, we have created a groundbreaking, Australian designed and manufactured product that allows for safe and effective installation.

EcoArmour

EcoArmour is a ground-breaking, Australian designed and manufactured solution that allows for safe and effective installation on all surfaces. EcoArmour is a synthetic erosion control blanket that has been designed to be sprayed through high-pressure hydroseeder equipment. Once sprayed, it dries and sets in a matter of hours, providing extended high shear resistant erosion control.

A blend of minerals, interlocking fibres and specialty binders form EcoArmour's durable, non-flammable crust. The specialty binders adhere to and incorporate themselves onto the substrate below, forming a tough, resilient cover that is also flexible enough to bind and move with the ground below it, eliminating cracking of the coating. For aesthetic purposes, a colouring agent may be added to the EcoArmour blend, achieving a range of custom colours to blend in with the surrounding environment.

Advanced technology means that surfaces will be stabilised for up to 20 years, making it the ideal erosion control and stabilisation product for vertical walls, roadside batters, steep slopes, swales and drains, levees and as bund and culvert lining. EcoArmour meets or exceeds all relevant transport and main roads specifications.



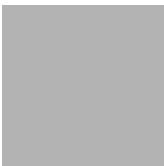
Before application



After application

Colour options

EcoArmour may be coloured grey, brown, green or a custom colour to suit the surrounding environment.



Rehabilitation Performance Monitoring

The use of drones allows Spray Grass Australia to accurately measure the area size of a site for quality, planning and analysis purposes. We have considerable experience working with drones and are confident flying in difficult conditions and surveying multiple terrain types to a high degree of detail. In using drones, we work together with our clients to capture the data needed to ensure project success.

The combination of a reliable and easy platform with the latest multispectral camera technology gives us the ability to capture high resolution and high quality multispectral and visual data in more environments.

Utilising some of the latest industrial drones, we can take advantage of multispectral and thermal imaging cameras and sensors to gain a deeper understanding on how plants are performing. NDVI technology, when utilised in conjunction with sensors, is the classic indicator of plant health and vigour. We are able to monitor and analyse the sowing quality, growth rate, and the counted number and planned number of plants. We can also undertake plant disease analysis and pest detection.

By combining these remote sensing techniques, we can monitor the environment more closely and form a more accurate picture of activities. This allows us to plan rehabilitation performance on a landscape-wide basis and maximise growth efficiency.

Operating personnel have undergone rigorous training and hold all relevant licences, compliant with Civil Aviation Safety Authority (CASA)





Drone Spraying

Combined with mapping, drone sprayers can be utilised to target specific areas where treatment of fertiliser and soil ameliorants is necessary, reducing disease and increasing efficiency both in processes and revegetation outcomes. The combination of speed and power means that areas are able to be treated up to 40 times faster than manual spraying operations.

Intelligent flight control allows the drone to scan the area below, providing real-time data, and adjust to keep a constant and accurate height above vegetation. Spray density is maintained even as the substrate below rises and falls, so that the optimal amount of fertiliser and soil ameliorants are applied at all times.

Designed with safety in mind, the application of solutions, such as dust suppression, onto steep batters and inaccessible and restrictive vehicle areas such as ash dams and tailing storage facilities, eliminates the threat posed to personnel. The ultra-quiet technique advertently eliminates the noise nuisance to local communities created with aerial application via air tractor and helicopter.



Drone Seeding

With current advancements in drone technology, drone seeding has been able to significantly decrease the costs involved with seeding. New techniques allow the required seeds and nutrients to foster germination to be shot onto the ground in a gel-like substance in exactly the right location, eliminating the effect that wind has on displacing the seed. This allows for a reduction in costs while increasing the planting quantity and efficiency.

Our operators have a large range of control over the radius and density of the spread simply by altering the flight speed, altitude and application rates. An optimised planting pattern is generated to avoid obstructions and ensure uniform and precision planting. Utilising the waypoint feature, seeding becomes a fully automated process. Intelligent memory ensures that coordinates and current position are recorded as the drone makes its way across the seeding area in case the operation is interrupted.

Our Clients

RioTinto

GLENCORE



HILLGROVE
RESOURCES





Our Presence

Spray Grass Australia is present in the following industries:



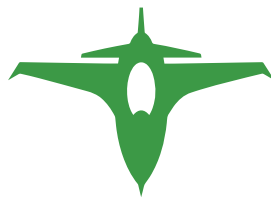
Mining & Resource



Civil & Infrastructure



Rail



Defence



Government



Environmental



Energy



Oil & Gas





NT

QLD

SA
(Head Office)

NSW

VIC



1300 040 050

spraygrassaustralia.com.au



Health & Safety
AS/NZS 4801



Environment
ISO 14001



Quality
ISO 9001