

# Rainstorm are your local dust management specialists

When it comes to rural road construction, dust control, soil stabilisation and rehabilitation, Rainstorm are the trusted total solution provider, offering a suite of products and specialist services for Mines, Civil Contractors and Local Government.

Operating in Australia since 1990, Rainstorm have grown with the industry from being an early pioneer of dust control to being a world-wide industry leader, developing specialty products and equipment which optimise safety and environmental standards for clients around the globe.



## **Why Rainstorm**

Rainstorm have been a trusted partner in dust control for more than 30 years, enabling more productive, cost-effective and environmentally sustainable working environments.

We are an Australian owned company based in Perth, with manufacturing and service yards throughout Australia – bringing local knowledge backed by prolific national presence and global experience.

As industry specialists with on-site experience, Rainstorm are committed to being a holistic solutions partner for our clients, working closely with them to deliver tailored solutions and measurable results. We continuously develop new products and methods to ensure our clients are operating with industry best practices.

At the same time, we support more sustainable operations, using environmentally friendly products specifically formulated to be fit-for-purpose.

Rainstorm are approved vendors for most major mining companies in Western Australia, operating across sites at BHP, South 32, Fortescue, Rio Tinto, Atlas, Pilbara Minerals, Alcoa, Iluka, Talison Lithium and Karara.







ENVIRONMENTALLY FRIENDLY



ADVANCING BEST PRACTICE



OVER 28 YEARS'
EXPERIENCE



EXPERIENCED INDUSTRY LEADERS



LOCAL COMPANY



NATIONAL PRESENCE



ONSITE EXPERIENCE



APPROVED VENDOR STATUS



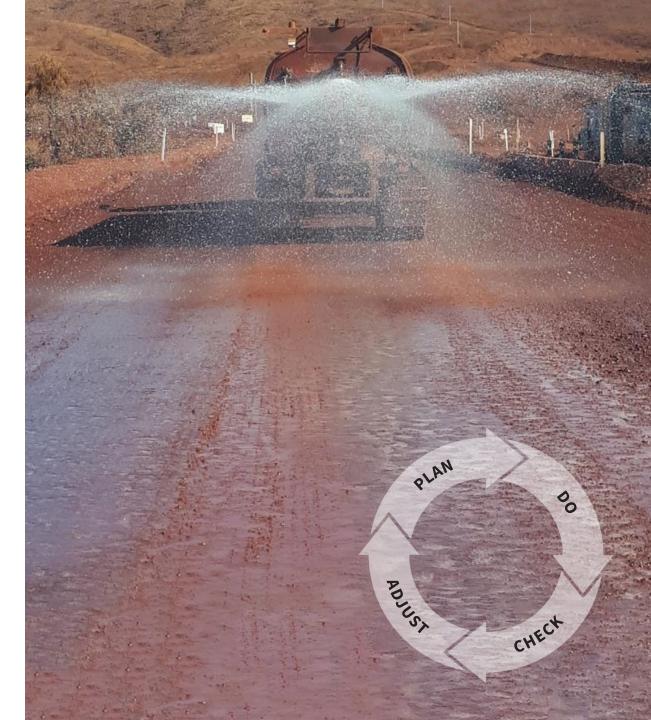
# Your 'one stop' provider for the complete solution

Rainstorm's complete dust management offering delivers the most effective solutions to meet all the needs of your project.

Bringing our suite of products, specialist in-house capabilities and extensive on-site experience, Rainstorm work hand-in-hand with our clients for the entire dust suppression program.

As experienced local manufacturers and importers, Rainstorm have long established supply chains as well as our own road and transport service division, giving us the ability to take control of the entire solution process for our clients – from supply to on-site application and ongoing maintenance.

We are also able to monitor the physical results after completion to bring about improved dust management practices and more effective spend.





# Dust management solutions tailored to your situation

Rainstorm offer a range of products and solutions designed to manage all aspects of dust across mining operations – roads and areas under traffic, materials handling, rail transport, open areas and rehabilitation.

Every dust control situation is assessed on-site to tailor a complete dust management program, either on a short-term or long-term basis, that delivers maximum effectiveness, durability and cost efficiency.



### **ROADS**

DustMag<sup>™</sup> | Dustex<sup>™</sup> | DustLig | PolyMag Paczyme | DustJel | Rainstorm Cement











# **Rail Car Veneering**

Rainstorm specialise in veneering ore for transport and can provide system-specific, site-specific solutions that reduce ore loss, save cost and improve operational efficiency.

Rainstorm dust control products for rail car veneering include:

Gluon™ 500





### The challenges we face

While each industry and site faces its own unique dust control challenges, dust lift-off from wind sheer during rail transportation causes considerable environmental impacts, inefficiencies, cost deficiencies and production loss across mining operations.

### **SOCIAL LICENCE**

Pugitive dust creates significant environmental issues along the rail corridor and potential health implications for mine site workers and surrounding communities.

#### **MAINTENANCE**

Dust fines cause damage to the rail line infrastructure and destabilise ballast, resulting in more frequent and costly maintenance, and an increased risk of derailment.

### **PROCESS OWNERSHIP**

The effects of dust related issues run across several business units within the mining group, creating a lack of ownership at rail location interfaces that prevents effective resolution.

### **PRODUCTIVITY**

Left untreated, material lift-off from wind sheer can cause significant ore loss of as it is transported from mine to port, resulting in significant production losses and associated revenue.





# High performance Gluon™ 500 veneering

Rainstorm's zero harm, Gluon™ 500 veneering agent has been developed over 30 years, in response to client and site requirements.

Gluon™ is a versatile water-bound polymer emulsion sprayed onto ore to form a 'veneer' which is resistant to wind whilst allowing water to pass through.

Applied as a surface coating to ore for transportation from the mine site, the Gluon™ polymer bonds upon hydration, creating a surface mesh and binding the ore, acting as a dust suppressant. The bonding chain remains stable and flexible, to fix ore in place; reducing ore loss, saving costs and improving operational efficiency.





HIGHLY EFFECTIVE



AUTOMATED APPLICATION



INTEGRATES WITH EXISTING OPERATIONS



COST EFFECTIVE



MINING



# Fully automated application

Rainstorm specialise in automated rail car veneering systems, utilising our in-house engineering and construction capabilities to provide fully automated site-specific application units, including installation along with the attendant contractor services.

Specifically designed to fit seamlessly with our clients' existing operations, this ensures no impact to rail load out facility operations or loading times.



VENEERING APPLICATION PROCESS



### **Proven results**

We work hand-in-hand with our clients for the entire dust suppression program and can monitor the physical results after completion of the job to validate with the clients' own monitoring program.

Rail car veneering has been proven effective, with a working case in operation over the last 5 years at a Western Australian mining site.

- Generated cost savings and efficiencies
- Optimised production
- Reduced environmental impact
- Safer and healthier working environments
- Good community relations
- Increased profitability, without impact to operations



# Veneering costs can be less than the cost of lost ore

234 Cars per Train	29,500 Mt
Ore loss of 0.25%	74 Mt FeO
Cost of Ore Loss	\$ 7,800
Cost of Rail Car Veneering	\$ 2,500
Net Saving Per Train	\$ 5,300

Ore loss using inline track scales or Lidar can

# More productive, profitable and environmentally sustainable operations.

#### **SOCIAL LICENCE**

- Eliminates dust generation issues along the rail corridor, significantly reducing the environmental impacts and effects on surrounding land users.
- Prevents harmful air particulate emissions affecting the health & safety of employees and nearby communities.

#### **MAINTENANCE**

- Protects the integrity of the rail infrastructure, reducing maintenance and downtime for increased efficiencies and cost savings.
- + Protects against dust fines that can destabilise ballast, reducing risk of derailment.

### **PROCESS OWNERSHIP**

- + Holistic oversight eliminates ownership issues at rail location interfaces, enabling effective dust control management that benefits multiple business units across the mining group.
- Solutions tailored to specific operational requirements.

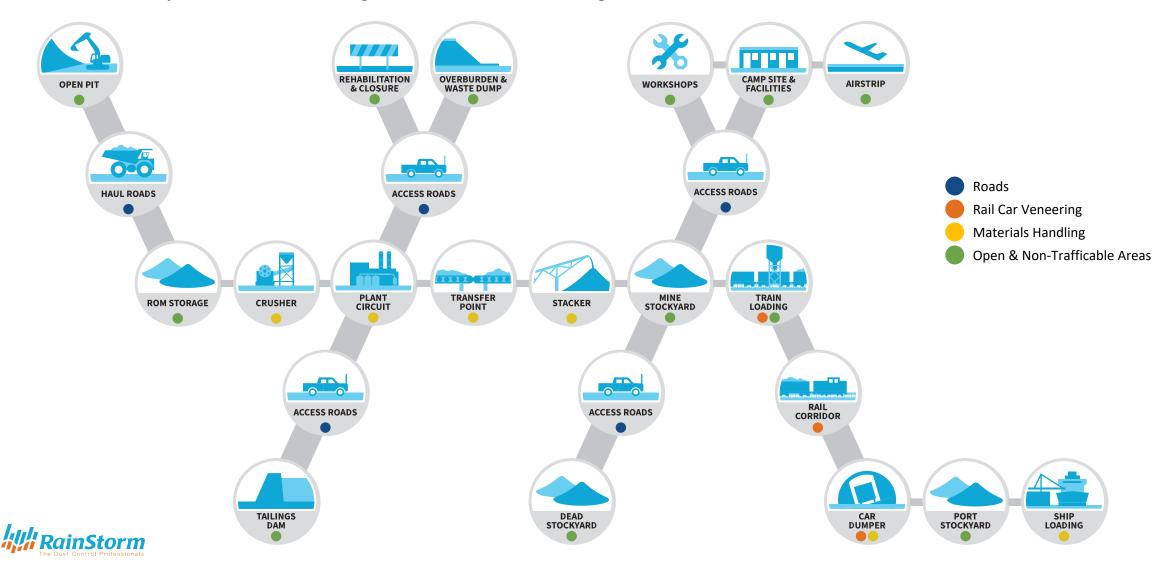
#### **PRODUCTIVITY**

- + Eliminates loss of ore from dust generation during rail transport, optimising overall operations for measurable productivity and profitability improvements.
- Integrates into existing operations, ensuring no impact to load out facility operations or loading times.



# Eliminating dust as a hazard

Rainstorm offer site-specific solutions to manage dust across the entire mining value chain.



## **Science-based solutions**

Our range of specialty products have been tailored for use across mining operations.

	Chemical or Binding Technology	Areas Applied	Suppressant	Stabiliser	Compaction Aid	Ore Treatment	Water Extender	Veneering Skin	Manufacturing	Delivery	Application	Depth	Effectiveness	Lifecycle Longevity	Maintenance Frequency	Enviro. Friendly	Compliant to Standards	Iron Ore Suitability
DustMag	Hygroscopic	Roads	•	•	•				Local, Pilbara	Bulk Tanker	Water Cart	Top Coat	Highly Effective	10 to 12+ Weeks	3 Months Cycle	<b>②</b>	<b>⊘</b>	<b>Ø</b>
Dustex	Organic Binder	Roads	•	•					Imported	IBC 1000lts or Bulk	Water Cart	50-100mm / Top Coat	Mid to High	7 to 10 Days	Weekly Top Coat	<b>Ø</b>	<b>⊘</b>	<b>Ø</b>
DustLig	Hygroscopic / Organic Binder	Roads (Heavy Vehicle)	•	•					Local, Pilbara & Imported	Bulk Tanker	Water Cart	50-100mm / Top Coat	Highly Effective	10 to 12 Weeks	Weekly Top Coat	<b>Ø</b>	<b>⊘</b>	<b>Ø</b>
Gluon 900	Co Polymer Binder	Roads	•	•				•	Imported	IBC 1000lts or Bulk	Water Cart	50mm lifts	Effective	12 Months	None Required	<b>Ø</b>	<b>⊘</b>	<b>Ø</b>
PolyMag	Co Polymer Binder / Hygroscopic	Roads	•	•					Local, Pilbara & Imported	IBIBC 1000lts or Bulk	Water Cart	Top Coat	Highly Effective	10 to 12 Weeks	Weather Dependant	<b>Ø</b>	<b>⊘</b>	<b>Ø</b>
DustJel	Super Absorbent Polymer	Roads	•				•		Local, Australia	1000lt IBC	Water Cart	Top Coat	Effective	Short Term	Daily Application	<b>Ø</b>	<b>⊘</b>	<b>Ø</b>
Paczyme	Wetting Agent	Roads			•		•		Local, Perth	1000lt IBC	Water Cart	Top Coat	Effective	Short Term	Daily Application	<b>Ø</b>	<b>⊘</b>	<b>Ø</b>
Gluon 500	Co Polymer Binder	Open Areas						•	Imported	1000lts	Automated System	Top Coat	Highly Effective	3 to 12 Months	None Required	<b>Ø</b>	<b>⊘</b>	<b>Ø</b>
Hydromulch	Organic Binder	Open Areas						•	Local	Bulk Speciality Truck	Specialty Truck (Rainstorm's)	Top Coat	Effective	3 to 12 Months	Weather Dependant	<b>Ø</b>	<b>⊘</b>	<b>⊘</b>
Proganics	Organic Binder	Open Areas						•	Imported	Bulk Speciality Truck	Specialty Truck (Rainstorm's)	Top Coat	Highly Effective	3 to 12 Months	None Required	<b>②</b>	<b>⊘</b>	<b>⊘</b>
PDX	Wetting Agent	Materials Handling	•			•			Local	Bulk Speciality Truck	Automated System	N/A	Highly Effective	N/A	N/A		<b>⊘</b>	<b>⊘</b>
Dry Fog Systems	N/A	Materials Handling	•						Local	N/A	Mechanical Unit	N/A	Effective	N/A	N/A	<b>⊘</b>	N/A	





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