



# COMPANY PROFILE 2021



Lion Heart Road Technologies

*LHRT are the specialists in Dust Control, Soil Stabilisation, Erosion Control and Water Management.*

# INTRODUCTION

LHRT are the specialists in Dust Control, Soil Stabilisation, Erosion Control and Water Management.

We are a newly established, engineering technology company focussing on providing innovative products and solutions for the mining, civil, agricultural, resources, land development, and environmental management sectors.

LHRT's industry-leading technology is proven to drive process efficiency, deliver sustainable infrastructure outcomes, and improve community health, safety and environmental outcomes.



## Engineered Solutions

Delivering high quality, reliable, technologies that solve safety, transport and access, and environmental challenges for our customers and their stakeholders. This is made possible by the following foundations LHRT is built on.

## Research & Development

LHRT products have been developed in house. As an outcome focused company, our desire is to solve problems and improve industry performance.

Targeted areas include:

Road safety and integrity

Mine site safety

Dust control and suppression

Erosion control and soil stabilisation

Water resource management

# APPLICATIONS

## ENVIRONMENTAL CONTROL SOLUTIONS - APPLICATIONS

LHRT's revolutionary processes and products are designed to provide innovative environmental control solutions for the most challenging conditions. These products are the result of experts in dust suppression and control, erosion control, soil stabilisation and water management coming together to provide practical, engineered solutions.



LHRT's products deliver unparalleled results and benefits for the roads, resources and rural sectors.

From underground mining companies seeking to protect workers from dust-related health issues, to resource companies in need of durable access roads all year round, to military personnel requiring all weather, dust free camp grounds, to farmers protecting cattle and horses, to construction sites preventing erosion the applications of LHRT engineering solutions encompass civil, mining, rural and environmental industries.

LHRT's ultimate goal in developing strategic road technology and groundbreaking formulas.

To help create safer workplaces and communities, by providing durable cost effective roads, industrial processes, and infrastructure for individuals, communities and businesses across the globe.

### Industry Applications

- > Mining Applications
- > Oil & Gas Applications
- > Renewable Energy Applications
- > Road Construction Applications
- > GRT Civil Equipment
- > Military Applications



# PRODUCTS

All LHRT products and processes are founded on the foundation of engineering excellence and innovative performance through GRT.

## Engineered Solutions

Our company's range of targeted environmental control solutions have been rigorously tested and designed to solve a variety of safety, transport, and environmental challenges.

## Targeted Environmental Control

LHRT's innovative environment solutions are formulated and developed by a diverse team of experienced technologists and researchers in several fields of engineering, from chemical and geotechnical to civil.

## PROVEN APPLICATIONS

- > Road and soil stabilisation
- > Dust Control and Suppression
- > Erosion Control
- > Water Management,



### Dust Control

LHRT's innovative dust control technology helps overcome the global challenge of creating safer roads and workplaces for people, industry and communities.



### Erosion Control

When it comes to erosion control & protecting exposure to land against the ravages of wind and water, LHRT's advanced polymer technology delivers the complete erosion control solutions.



### Water Management

LHRT delivers cost effective solutions for mine and quarry managers, civil contractors and farmers to manage your site's water quality and quantity issues.

# SOLUTIONS

## DUST CONTROL & SUPPRESSION PRODUCTS



### GRT ACTIVATE UG



GRT Activate UG super-activates water to overcome this behaviour causing the water to immediately coat airborne particles, forcing them to drop out of suspension in the air.



### GRT ACTIVATE



GRT Activate is used to super-activate water sprayed to control dust in material crushing, transfer & handling operations and optimising soil/water conditions for road construction. Most fine dust is by nature hydrophobic (water hating) and at the microscopic level repels water – so despite the volumes used, the finest particles simply bounce off of sprayed water. These fine particles, which may not even be visible, are the most hazardous to health, leading to respiratory disease and eye irritation and damage.



### GRT HAUL-LOC



GRT Haul-Loc is a specially formulated liquid polymer added to watering trucks used to reduce water required for continuous dust suppression by at least 65% and extend the dust suppressing effects four to five times longer than water alone.

*Best Dust Suppression System*



## GRT WET-LOC



GRT Wet-Loc is our newest and most advanced synthetic total dust control product. It is environmentally friendly, clear, and highly refined synthetic fluid designed to handle heavy and damaging traffic movements for at least 6 months at a time, making it perfect for packing and loading yards, container yards and ports, livestock yards, pens, stables, racetracks, horse arenas, underground mining, heavy machinery yards, access roads, and much more.

### *Advanced Dust Suppression System*

## DRILL & BLAST DUST CONTROL PRODUCTS



## GRT DC BINDER



GRT DC Binder prevents dust generation from the hazardous piles of drill cuttings produced by drill & blast activities. These piles contain very fine, respirable dusts that lead to lung disease such as silicosis and coal workers pneumoconiosis.

Dust can become airborne from wind, traffic and even the just movement of staff as they walk around and work in the pattern area. Fine respirable dusts are also often invisible to the naked eye - so it can be a hidden killer.

### *Blast Pattern Dust Control*



## GRT 12X



GRT 12X super-activates drill water so it saturates and captures the fine, hazardous dust drilling can generate, preventing it from becoming an airborne hazard.

### *Blast Dust Control*

# SOIL STABILIZATION & CIVIL CONSTRUCTION PRODUCTS



## GRT 7000



A specially formulated liquid polymer, GRT 7000 is a key solution that dries clear, and is environmentally friendly. Engineered for use in civil construction, it can act as a clear polymer sealant as well as a high performing stabilization agent.

*Polymer Sealing Dust Control*



## GRT 9000



GRT's most advanced polymer soil stabilization product, GRT 9000 was developed, for use in the construction of high quality and cost-effective pavement applications.

*Polymer Soil Stabilization Solution*



## GRT PCM



Cracking of cemented gravels used in road construction have historically limited their use to specific applications; whereas if the cracking can be reduced or eliminated, their use could be extended to a much wider range of applications.

*High-Quality Polymer Cement Modifier*



## GRT 5000



GRT 5000 Dust Control Solution is a robust, liquid polymer that provides an exceptional surface coating solution on nearly all soil and resource surfaces. Independently performed testing confirms successful suppression of up to 95% of dust particles.

*Liquid Polymer Dust Control*

## EROSION & SEDIMENT CONTROL PRODUCTS



## GRT NATURE PLUS



A specially formulated liquid polymer combined with a highly effective source of phosphorus and nitrogen to increase germination and strike rate, LHRT Nature Plus is a key solution for all revegetation needs. Engineered for use in civil construction and Mine site rehabilitation.

*Reliable Seed Generation Solution*



## GRT ENVIRO BINDER



GRT Enviro Binder is a unique erosion control product proven to outperform in any application and provide immediate, long lasting results.

*Erosion Control Product*

# WATER MANAGEMENT PRODUCTS



## GRT DAM SEALER



Save water & prevent pollution. Leaking tailings dams are potential source of contaminants into downstream environments, causing ecological and health impacts, as well leading to fines for dam owners and operators.

*Fix dam leaks, dam fast!*



## GRT CC



GRT CC is a Concentrated Coagulant, used to clarify water contaminated with finely suspended clays in dams and sedimentation basins. It is also used for removal of nutrients such as phosphate from water and fluoride from industrial wastewater.

*Contaminated Water Treatment Solution*



## GRT LIQUID FLOC



GRT Liquid Floc is a premium flocculation product utilising long-chain polymer (LCP) technology to clarify water by capturing suspended particles and dropping them out of suspension. This clarifies water contaminated with finely suspended particles in dams and sedimentation basins.

*Long-Chain Polymer Technology*

# MILITARY APPLICATIONS PRODUCTS



## GRT 1000



GRT 1000 is a tough durable, all purpose polymer soil binder and sealant that achieves a stable layer of clear, bonded material resistant to wind erosion, rain impact, pedestrians, and traffic.

*Military Grade Polymer*



## GRT 2000



When buildings and other infrastructure are damaged because of combat or demolished due to natural disasters, many hazardous dusts can be released into the environment. This is a significant health hazard for the civilian population as well as military personnel deployed for combat or humanitarian reasons.

*Combat & Natural Disaster Zone Dust Control*



## GRT 3000



Depending on the natural environments military operations are set in, the presence of water – either too much or not enough creates – critical issues for aircraft, built infrastructure, logistics and equipment management.

*Rapid Deployment Dust Control*

LION HEART ROAD  
TECHNOLOGIES



## CONTACT US

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 P.O. BOX 1836, PORT MORESBY  
NATIONAL CAPITAL DISTRICT

 +61-400-1000-10 | +675-7687-3046

 [immanuel@lhipng.com](mailto:immanuel@lhipng.com)