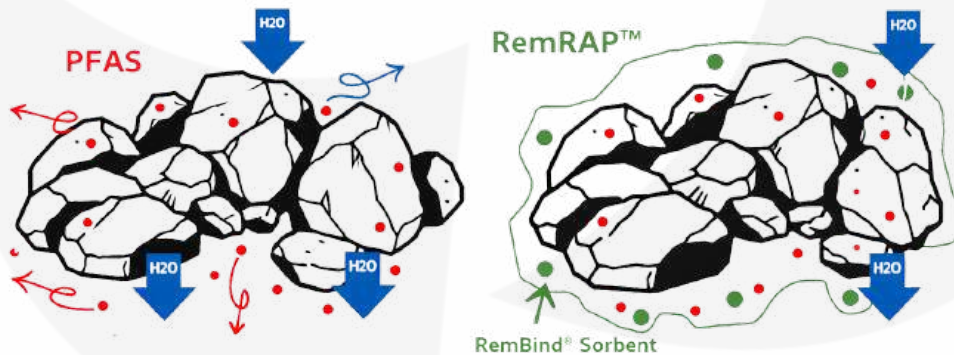


# RemRAP™

## Sustainable PFAS Management For Asphalt

RemRAP™ helps our global clients to turn Per- and Polyfluoroalkyl Substances (PFAS) impacted Recycled Asphalt Pavement (RAP) from a waste problem into a valuable material for new roads and runways.

Globally, PFAS impacted materials such as asphalt and granular materials are stockpiled on sites while a cost effective solution is found. That solution is here in the form of the RemRAP™ process patented by RemBind® and Fulton Hogan.



### The RemRAP™ Solution

RemRAP™ uses specialised patented\* bitumen products and sorbent mixtures to:

- Immobilise PFAS and other contaminants in RAP and granular materials so it can be safely reused
- Applied through a foamed cold process that reduces PFAS volatilisation
- Maximise the proportion of RAP that can be incorporated into new works
- Provide a system with several treatment options to minimise PFAS risk

\*International (PCT) patent No. PCT/AU2024/050240

“LET’S BUILD A CLEANER, MORE SUSTAINABLE FUTURE, ONE PAVEMENT AT A TIME”

### KEY BENEFITS

#### ENVIRONMENTAL

- Prevents PFAS leaching and volatilisation. Landfill disposal and contamination risks are reduced
- Enables reuse of onsite materials lowering demand for virgin materials
- Supports low carbon, low energy road construction
- Helps clients meet net zero emissions and sustainability targets

#### PERFORMANCE AND DELIVERY

- Patented process locks in PFAS and remains effective after heat exposure
- Rapid installation and weather tolerant construction help shorten delivery windows and reduce disruption

#### COST AND EFFICIENCY

- Manufactured at ambient temperature, cutting energy use and bitumen demand
- Immediate placement and compaction keep projects on programme and budgets under control
- Circular use of RAP reduces stockpiles and long term disposal costs

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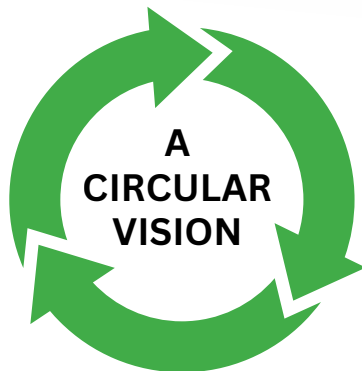
## Sustainable PFAS Management For Asphalt

### How It Works

- 1 PFAS impacted RAP is treated with RemRAP™ to immobilise contaminants
- 2 The treated material is encapsulated in foamed bitumen, which:
  - Binds the RemRAP™ treatment within the mix
  - Further immobilises PFAS while providing increased water repellency
  - Uses a cold process eliminating risk of volatilisation
- 3 The foamed bitumen base (FBB) is generally placed beneath a low permeability wearing course, which:
  - Protects the treated RAP from wear
  - Reduces contact with surface water
  - Reduces volatilisation risk from solar heating



PFAS impacted RAP is treated



At end of life, RAP is recovered, retreated and returned to new projects

Treated RAP is reused in new pavements, reducing costs and improving sustainability

During construction and operation, PFAS leaching and volatilisation risks are actively managed

### THE PARTNERSHIP BEHIND REMRAP™

RemRAP™ brings together two specialist organisations:

- **RemBind®** – supplier of specialised sorbents for immobilising PFAS and other contaminants in soil, water and waste
- **Fulton Hogan** – civil construction company with extensive experience delivering asphalt for roads, runways and other civil infrastructure