

# ALPHA CLEANTEC AG ENVIRONMENTAL TECHNOLOGIES

# Non-Glyphosate vegetation control in railway roads and ballast, subsoil and groundwater decontamination.

#### THE CHALLENGE:

- ► Fast, efficient and cost effective vegetation control with non-Glyphosate herbicide.
- In-situ cleaning of railway ballast and decontamination of subsoil and groundwater from Glyphosat and toxic organic leftovers.

#### THE TECHNOLOGY:

**VC** — Vegetation control, is a process based on an environmental friendly mixture of inorganic salts that generates concentrated (non-Glyphosate) herbicide absorbing water from the plants and drying the plant including the roots (without changing the salinity of the soil).

**RBO** — Railway ballast oxidation technology, is an in-situ physico-chemical technology based on the generation of superoxide radicals with surfactants and phase transfer catalysts that can simultaneously decompose organic left-overs on ballast surface, subsoil and groundwater.

### **VALUE PROPOSITION:**

- ► Rapid and efficient non-Glyphosate based material for vegetation control.
- ► Efficient for Glyphosate resistant vegetation.
- ► High efficiency with up to 94% conversion for a wide range of organic contaminants and herbicide leftovers for all road layers.
- ► High efficiency with up to 99% conversion for a wide range of organic contaminants and herbicide leftovers in groundwater.
- In-situ cleaning of railway bed for a wide range of organic contaminants without removal or replacement.

## **BENEFITS OF OUR SOLUTION:**



One in-situ holistic solution for three challenges of railway maintenance



In-situ cleaning of railway ballast without replacement of stones



Decontamination of water and groundwater from organic materials and Glyphosate leftovers



Vegetation Control with non-Glyphosate based material



High efficiency of treatment with up to 99% conversion for a wide range of organic contaminants



Rapid treatment process (seconds)



Cost effective



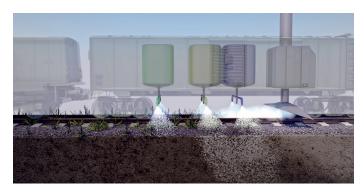
Green with low carbon footprint



Low energy requirement



Non disruptive and safe





FOR FURTHER INFORMATION PLEASE CONTACT US:

**ALPHA CLEANTEC AG** 

Office Switzerland: Steinhauserstrasse 74, CH-6300 Zug, Switzerland

**Office Germany:** Ziegelhäuser Landstrasse 1, D-69120 Heidelberg, Germany Phone: +49 (0) 6221 649240 · info@alphacleantec.com · www.alphacleantec.com