

Dear Madam or Sir,

We hope this email finds you well. In April, we took advantage of the Easter recess to elaborate further on tailor-made cooperation schemes with existing and potential partner clients. We had numerous constructive exchanges with companies met in March at the Aqua-Netherlands, Biogas Expo-Birmingham, MUT-Basel, and SIFER-Lille exhibitions, covering our solutions' offer for vegetation control, soil and water decontamination, and sludge treatment for boosting biogas generation in wastewater plants.

From our R&D department, we are happy to provide you with a new update regarding customer projects.

A Pilot test with one of the EU companies in the field of vegetation control on railway roads.

- The Problem:** Second Pilot with one of the EU companies that are acting in the field of vegetation control on the railway roads. For safety and operational requirements, railway tracks must be largely free of vegetation. The common market solution to prevent and treat vegetation on railway tracks is the use of soil herbicides and leaf herbicides. For decades Glyphosate-based materials were one of the most efficient and cost-effective solutions. For example, in Austria one of the most common materials was **Dominator Ultra**. However, recently because of the environmental impacts and resistance of part of the plants, it was decided to stop using Glyphosate-based materials and new efficient and cost-effective **non- Glyphosate herbicide**, which can be applied with existing equipment, is in great need.
- The Objective** Therefore, the intention of our potential customer is to have a rapid, simple, cost-effective, and non-Glyphosate herbicide that can treat a wide range of weeds, including Glyphosate resistant plants and can be applied with existing spraying equipment based on the current protocols of work.
- The Solution:** The company operational and research team, together with the support of the vegetation control authority and with the supervision of the ACT team, executed a second stage of field test using manual spraying equipment in several slots of railway road, with several different concentrations of VC herbicide. Thereby demonstrating that through a simple process, our VC herbicide could be easily adapted and applied with a very good result.

Pictures from the Pilot test:



Maybe you face similar challenges in your business. Then please feel free to contact us.

<https://www.linkedin.com/company/alpha-cleantec-ag/>



About Alpha Cleantec AG

We believe that our eco-system requires looking after so we have a world worth living in to pass to our next generations. Decontamination of soil and water from hazardous contaminants plays a major role in this regard, in our view. This is why we established Alpha Cleantec AG as an environmental technology company in 2016 with a vision to provide safe, green, rapid, efficient and cost effective technologies to resolve environmental harms and hazards caused by inadequate human and industrial activities.

For Decontamination for a wide range of contaminants, see table of contaminants below, we provide two technologies, AFA and SOA, achieving decontamination ratios of up to 97% in just hours (such as Hydrocarbons, BTEX, Petroleum leftovers, Aromatics, PAHS, Chlorinated Solvents, PCBs, Dioxins as well as Pesticides and Herbicides) to be applied for soil, groundwater, wastewater and railway ballast treatment.

For wastewater facilities we have developed based on our proprietary technology a process allowing to pretreat sludge before the digester, thereby significantly increasing biogas generation (up to 50%) and decreasing dry sludge disposal at the end of the process (up to 20%).

For Vegetation control we have developed a process based on an environmentally 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).

Table of contaminants treatable by our technologies

CONTAMINANTS	IN-SITU		ON SITE	
	SOA	AFA	SOA	AFA
BTEX				
Benzene	*	*	*	*
Toluene	*	*	*	*
Ethylbenzene	*	*	*	*
Xylene	*	*	*	*
PETROLEUM HYDROCARBONS				
Gasoline Range Organics (GRO)	*	*	*	*
Diesel Range Organics (DRO)	*	*	*	*
Oil Range Organics (ORO)	*	*	*	*
AROMATICS				
Chlorobenzene	*	*	*	*
Bromobenzene	*	*	*	*
Dichlorobenzene	*	*	*	*
Nitrobenzene	*	*	*	*
Phenol	*	*	*	*
Styrene	*	*	*	*
Naphthalene	*	*	*	*
Trichlorobenzene	*	*	*	*
Trimethylbenzene	*	*	*	*
PAHS				
Phenathrene	*	*	*	*
Naphthalene	*	*	*	*
Acenaphthylene	*	*	*	*
CHLORINATED SOLVENTS				
Tetrachloroethylene	*	*	*	*
Trichloroethene	*	*	*	*
Dichloroethene	*	*	*	*
Vinyl chloride	*	*	*	*
Tetrachloroethane	*	*	*	*
Trichloroethane	*	*	*	*
Dichloroethane	*	*	*	*
Dibromochloroethane	*	*	*	*
Bromodichloromethane	*	*	*	*
Carbon tetrachloride	*	*	*	*
Chloroethane	*	*	*	*
Chloroform	*	*	*	*
Chloromethane	*	*	*	*
Chlorotoluene	*	*	*	*
Methylene chloride	*	*	*	*
PCBS				
DIOXINS				
PESTICIDES AND HERBICIDES				
Glyphosate	*	*	*	*
Goal	*	*	*	*

We plan to inform you in future whenever we accomplished projects, pilots or case studies. Please let us know if you do not wish to get our company news.

Kind regards/ Mit freundlichem Gruß

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