Dear Madam or Sir,

We have not been in touch for quite some time now, as we all had to adjust to operating in a world with the COVID-19 pandemic. Whilst we hope you are well and believe that individual health is of the outmost importance, we also believe that we must start getting engaged again and move forward, albeit with necessary caution. The world, however, faces many threats, not just the imminent one of COVID-19. We believe that our eco-system in general 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.

We would in the future like to stay engaged with you by providing you with newsletters from Alpha Cleantec informing you about our latest developments and applications of our technologies. As we are sure you can re-call we provide two technologies, AFA and SOA, achieving decontamination ratios of up to 97% for a wide range of contaminants 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, wastewater and railway ballast treatment.



Successful Pilot completed with a large Swiss soil treatment company

The Problem: The pilot project was with a large Swiss soil treatment company in the area of soil

decontamination. One of the issues they are facing is that their own processes for soil decontamination are not efficient enough for Soil Type E or higher under Swiss regulation and

the disposal of this soil is very costly.

The Objective It is therefore the intention of our potential customer to cost-effectively decontaminate the soil

in such a degree that it can be classified as Soil Type C or lower under Swiss regulation and, hence,

be disposed or retreated at much more economic rates.

The Solution: We have implemented a series of pilots treating 550 kg of contaminated soil thereby

 $demonstrating\ that\ through\ a\ simple\ process\ our\ SOA\ technology\ could\ be\ applied\ providing\ up$

to 30% savings by reclassifying the soil to lower Soil Types according to Swiss regulation.

Pilot Results

Contamination	Pollution degree (ppm mg/kg)	After treatment (ppm mg/kg)	Reduction of pollution in %
C10-C40	1500	65-400*	73%-96%
PAH	40	10-35*	12%-75%

^{*}Depends on the treatment procedure.

Table of contaminants treatable by our technologies

	IN-SITU		ON SITE	
CONTAMINANTS	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	-	•	•	•
Chloromethane	-	•	•	•
Methylene chloride	- :	•	•	•
	•		•	•
PCBS	•	•	•	
DIOXINS	•	•	•	•
PESTICIDES AND HERBICIDES		1		
Glyphosate	•		•	
Goal	•		•	

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

We plan to inform you in future whenever we accomplished projects, pilots or case studies. If you do not wish to get the emails with our company news, please let us know.

Sincerely,

Your Alpha Cleantec Team

Kind regards

Mit freundlichen Grüßen

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