

SpillAway Projects

Bioremediation of hydrocarbon and FOG contamination

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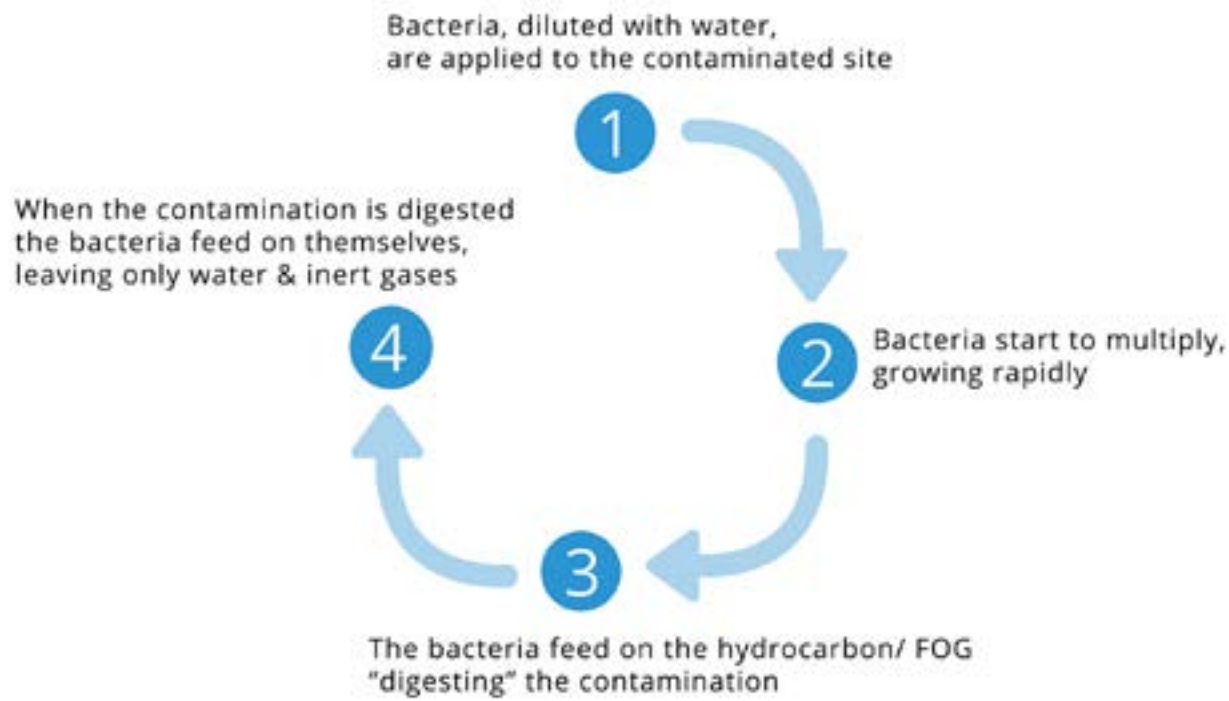
SpillAway Brand™ and Bioremediation

Bioremediation is a natural process which has been harnessed in the SpillAway Brand product range to provide a solution to contamination by hydrocarbons and FOG.



In the natural world micro-organisms are present which will biodegrade hydrocarbons and other contaminants and digest them. However, depending on how big the spill of oil and the amount of the right type of bacteria present, this process can take an extremely long time. The SpillAway Brand™ products enhance the bioremediation process by supplying the right bacteria to the site of the contamination in a large enough quantity to speed up the process, eradicating or reducing the contamination to an acceptable and safe level in a relatively short period of time.

The benefits of bioremediation using SpillAway Brand™ products include cost-savings, both monetary and environmental. By taking products to site to use either in-situ or in a contained area, there is no requirement for costly specialist removal of the hazardous hydrocarbons for disposal or treatment elsewhere.



The process is not labour intensive; for many projects, the initial application is all that is required. Most of the SpillAway Brand™ products are supplied in easy to handle packs in concentrated form requiring the addition of water to activate the microorganisms. The process of bioremediation starts as soon as the micro-organisms come into contact with the hydrocarbon. It is usual to see a massive reduction in the level of hydrocarbons within the first 2 weeks, with the process normally producing acceptable levels by 45- 60 days.

These products are not hazardous to the environment and are pH Neutral.

Hydrocarbon contamination - Land and Water Remediation

For spills into soil, the depth, type and severity of the contamination plus the size of the area involved normally determine how our products should be applied. Typically for a small spill it is a simple matter of the product being dug into the ground and over-spraying the surface area to ensure that the whole area is remains moist. For bigger and deeper sites the use of a geo-probe or industrial digger may be needed and if the contamination is severe a couple of different product applications may be required at different times.

In all contamination issues containment is important, but especially so when dealing with contaminated water. Without containment there is no way to stop either the spread and risk of contaminating additional areas or the likelihood of further contamination coming into the site.

SpillAway Brand™ has developed products which can work singly or in conjunction to bioremediate hydrocarbon contamination in both land and water.

Liquid Remediact™ is used for shallow spills in soil and small spills in water.
Its degreasing properties release any bonded hydrocarbons and bioremediates them leaving behind water and small traces of inert gases. It is often used to overspray both soil and water as a final step to help quickly remove the more visible signs of the contamination. Liquid Remediact must be diluted with a minimum of 10 parts water to one part product to activate the microorganisms and get the best results.

For hydrocarbon contamination that is severe and deep our HC300 product is required. This remediates most hydrocarbons including major gasoline range organiics, DROs from #2 to #6 fuel oils, crude, tar, creosote and PAHs.

For severe water based contamination we have HC200 which was developed to rapidly degrade the major components of BTEX and higher range aromatic and aliphatic compounds

Both HC products and Liquid Remediact are often used in conjunction with our highly absorbent Dry Remediact powder which helps contain the hydrocarbons, removing the VOCs and thus the odour. This product is normally applied by tilling into the soil and then overspraying the area with the Liquid Remediact solution. It is important that the soil is kept moist to allow the microorganisms to access the contamination and to bioremediate it.

For this project, where the oil pipeline had leaked into the farmland, the products were simply dug into the soil. Finally, Liquid Remediact was over-sprayed across the whole contaminated area. Within days the hydrocarbon contamination had been reduced by 40%, by the end of the project reduced to less than 1%.





Application using a geo-probe to tackle deep-seated contamination.

Other methods of application include geo-probe, gravity feed, well-injection, digging-in, over-spraying. The key thing to remember is that the microbes require the addition of water to be activated. They are at their most effective in temperatures between 5°C and 48°C and the soil should be kept moist.

Industrial Cleaning with Benefits of Bioremediation

SpillAway Brands™ has a range of products developed for everyday industrial cleaning that contain micro-organisms for the bioremediation of either hydrocarbons or FOG or both. The benefit or using bioremediation for industrial cleaning is that the contaminants are remediated on site, normally in oil/water separators or fat traps. This means less emptying by specialist companies and reduction in both monetary and environmental costs.

The normal cleaner/degreaser products on the market remove hydrocarbons such as oil and grease from tools, industrial machinery and floors, but they simply move that waste to gullies, drains and interceptors. Disposal of that hazardous waste requires employment of a specialist company to collect it, transport it off site and dispose of it in line with current regulations.

Using FleetKleen™, our cleaner/degreaser for general industry which has bioremedial capability for hydrocarbon waste, as part of your routine maintenance provides clean, slip-free surfaces and disposal of the hazardous hydrocarbon waste in-house. As the run-off from the floor washing is swept into gullies and drains, FleetKleen is bioremediating the hydrocarbons and it continues this even in the oil/waste separator. The process reduces the amount of hazardous hydrocarbon waste and therefore reduces the regularity of it requiring emptying by the specialist waste contractor.



This solution saves time, effort and money in comparison to having the waste taken off-site for disposal elsewhere.



Forecourt before using FleetKleen



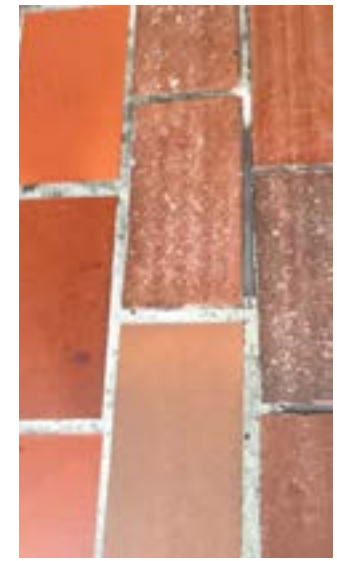
Forecourt after using FleetKleen

SpillAway Brands also has a cleaner/degreaser product for food processing plants, FPT-400/500/600 with different levels of microorganisms to bioremediate FOG from floors, drains and fat traps.





Before FPT-600



After FPT-600



Other Products in the SpillAway Brands range

- BioW – water repellent absorbent for spill clean up on water (with or without bacteria for hydrocarbon bioremediation)
- GTO – for shock treatment of FOG contamination
- NavalKleen – for hydrocarbon clean-up in ships' bilges
- OWS – for oil/water separators, simply pour in and stir
- OFM500 – for hydrocarbon clean up in oil fields
- PAH – for clean-up of PAH
- Sep700 – for septic tank clean-up
- SpillAway+ powder – powerful absorbent (with or without bacteria for hydrocarbon remediation)

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