

## "Next Generation" Remediation Solutions

Like many industries, the remediation field includes many competitors supplying various products, each offering limited or inconsistent results. There is one constant and that is most of these product manufactures fall well behind 3 Tier Technologies in their overall knowledge of soils, soil structure and the biological activity that takes place within the soil under differing conditions. 3 Tier's Science Team has well over 60 years combined experience in the field of soils and agronomic management. 3 Tier leverages this knowledge each and every time it formulates products for remediation of salts, hydrocarbons, hydrogen sulfide gas and heavy metals to name a few.

3 Tier understands effective bio-remediation requires multiple systems to work as an orchestrated ballet to achieve maximum performance. If one of the key systems is compromised in the process the entire process will be affected and the desired results will be inconsistent. To overcome these challenges, 3 Tier Technologies has discovered that current products offered in today's markets offer a single solution, either microbes, oxidation, surfactants or enzymes. The development of a complete regeneration solution would not only enhance the remediation process, but it would also regenerate contaminated soils or wastewater streams to a healthy and active state for effective and safe release or reuse. All of 3 Tier's products are formulated with this singular focus.

3 Tier's Bio-Regen products are formulated to deliver multiple benefits that have been developed and proven in real world applications and offer targeted solutions to a host of industry challenges. The following is just a sample of the key remediation targets:

- **Hydrocarbons Soil Rx** utilizes a new approach to solving soil and water hydrocarbon contamination problems. Soil Rx utilizes a blend of organic bio-polymers, highly concentrated live, hydrocarbon-oxidizing bacteria, and a readily biodegradable natural amino acid. This triple action product works together synergistically to degrade hydrocarbons with minimal use of equipment, labor and cost. Soil Rx is a low-cost liquid, making it an easy-to-use, cost effective means to eliminate hydrocarbon contamination.
- **Sodium Management SA-1000** is the newest treatment product that combines two, next generation, organic bio-polymers with bio-available calcium. This uniquely blended product possess the following properties and functions; optimal molecular mass, active functional groups, hydrophilic and hydrophobic sites, negatively charged sites, non-ionic sites, and specific interactions between molecules themselves and organic/mineral compounds. The combination of these diverse properties and functions provide a product that can detoxify, neutralize, bind, and convert a myriad of salts, chlorides, and toxic metals to benign residual soil mineral compounds.
- **Hydrogen Sulfide PWT-1000 & FOG –** Whether H2S is present in process water, a holding tank or crude oil itself, 3 Tier has the solution to eliminate H2S. 3 Tier's products incorporate a blend of Organic Bio-Polymers and other biological components that control the build-up of H2S through reversing the formation of H2S gas by binding the protons and stopping the formation or conversion to H2S. Each product also has "oxidative" catalytic properties which enables the highly effective oxidation of H2S into elemental sulfur and sulfates thus permanently eliminating H2S from the environment.
- **Wastewater** 3 Tier offers a variety of targeted water solutions. For detailed solutions view "Next Generation Wastewater Solutions". Correct sludge, odors, and water balance and/or discharge violations.
- **Team approach** Unique to 3 Tier is our ability to assemble a team of soil & water remediation specialists that will provide a detailed explanation of the problem(s) with a comprehensive corrective plan and measurable expectations. 3 Tier will provide this service at no charge to our customers and also offer cost effective on-site management and training without long-term, expensive contracts. We are happy to work with engineering consulting firms or directly with the customer to achieve dramatic savings over the span of the project. We focus on solutions.

For additional information or a complete review of your immediate challenges, contact 3 Tier at 877-226-7498 or by email <a href="mailto:dburdette@3tiertech.com">dburdette@3tiertech.com</a>. Visit our website at www.3tiertech.com to learn more or find a distributor in your area.