

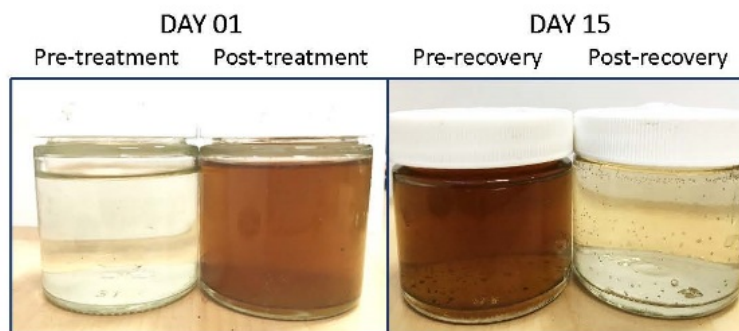
KAPSDIDS application of PetroCleanze™

EAR utilized the Badger Cub Express equipped with a Kinetically Adjustable Pore Space Dilation Injection Delivery System (KAPSDIDS) at a site in Island Park, NY to deliver a 1,250 gallon mixture of REGENESIS® PetroCleanze™ to the subsurface in a single day. Injecting into the shallow water table at this site is typically a challenge. However, the Badger Cub Express delivered all of the treatment solution to the subsurface.

RegenOx® Part A and PetroCleanze were selected as a remedial approach for this site to reduce residual petroleum hydrocarbon impact in soil that could not be excavated due to proximity to on-site structures. The PetroCleanze treatment mixture was mixed in a specialized tank and delivered to the subsurface via five temporary boreholes at a rate of 29 gpm to cover an area of over 4,000 square feet (~36% overlap of injection radii). Monitoring of site wells suggests a radius of contact of over 20 feet from the injection point. Directional nozzles were utilized to cover areas of 360° at some locations and restricted to 270° at other locations to avoid the onsite building foundation. Equipment set-up, chemical mixing and injection activities were completed in 6.5 hours.

Fifteen days after the PetroCleanze injection, vacuum enhanced fluid extraction methods were employed to remove desorbed hydrocarbon mass. Approximately 120% of the injection volume was recovered from existing onsite wells in close proximity to the injection points. The following are photos of grab groundwater samples collected from the same monitoring well at various stages of the injection and recovery processes.

Site Monitoring Well Grab Samples



EAR is proudly the Northeast Delivery Service Provider for Badger Injection Solutions, LLC. Badger is a remedial injection delivery service that provides subcontractors the most current innovative subsurface delivery technology. Visit Badger's website, badgerinjectionsolution.com, or call Jaime Allen at 631-447-6400 ext. 153 for more information. Project updates are available on our Facebook timeline, search for Badger Injection Solutions – Northeast.