

SELECT UNIREMTECH CASE STUDIES

Situation	Application	Products	Application Location	Application Type	Results
A train carrying salvage automobiles derailed along a picturesque bay in the north of the Republic of Ireland. Many of the automobiles fell into the bay and substantial oil spills and slicking occurred.	Cold Water Bay Cleanup - After containment failed, PRP booms and powder were deployed	PRP, Bioboom	Open	Water	After two weeks the bay was clean of the slicks and oil.
Abandoned flexible pipelines had substantial residual hydrocarbons, posing hazards to nearby communities.	A PRP slurry was pumped into these pipelines and left for a period. The PRP captured hydrocarbons were then drained	PRP	Industrial	Special	After two weeks the pipelines and the cleaning solution were largely free of hydrocarbons.
A barge containing 400 metric tons of fuel oil sank in a storm, severely polluting several beaches and mangroves.	Warm Water Mangrove/Beach Cleanup PRP was sprayed on two mangroves and beaches.	PRP	Open	Water/Marsh/Mangrove	After two weeks, the sites were free of oil and PRP.
A fracking well leaked into a pond on a farm that was used as water for cattle and irrigation.	PRP was selected as the least harmful and best option for site cleanup. PRP booms and powder were deployed on the pond.	PRP, Bioboom	Open	Water	After two weeks, the pond was virtually free of hydrocarbons.
A polluted former underground storage tank (UST) Site in Atlantic Beach, NC was not able to be used until remediated and deemed safe by the state regulators.	PRP Wellbooms were placed in an array of boreholes that were drilled around the site. Air was pumped into holes on one end of the site, forcing water to rise across the site. As the water moved throughout the site, subsurface hydrocarbons were trapped in the Wellbooms.	Wellboom	Gas Station	Subsurface	After a few months, critical hydrocarbon counts were in the single digits PPM allowing for a "NFA" classification. Traditional methods typically take in excess of a year.
UST Superfund Site near important waterway	PRP Wellbooms were used as a standard for an EPA "Superfund" refinery site near an important waterway. Wellbooms were deployed in all underground test wells.	Wellboom	Refinery	Subsurface	Wellbooms remained deployed as a precautionary and long term remediation solution
A severely polluted port was resulting in fines from shipping lines that were required to clean their hulls after departing port	PRP was approved as the best and least harmful option for cleaning the oil from the port waters after tests showed that spilled oil and PRP were gone and the water healthier after just 48 hours.	PRP	Port	Water	PRP was used on a one-time site cleanup for each port and is required on all port vessels in spill kits to manage port spills.
Major municipal rail system needed a systematic remedy for petroleum pollutants on rail ballast	PRP Oilbuster powder was applied to rail ballast	PRP, Oilbuster	Rail	Land	After the 40 day test period, 95% reduction of hydrocarbons
Major Rail and Diesel Engine Repair yard needed a system to manage pollutant saturation of ballast, ties and rails	PRP Oilbuster powder was applied to rail ballast	Oilbuster	Rail	Land	After the 40 day test period, 93% reduction of hydrocarbons
Heavy oil spilled into a lagoon in Villahermosa, covering 95% of the water surface.	PRP was applied to the water surface and shoreline .using a hydroseeder	PRP	Open	Water/Marsh/Mangrove	After 18 days, noticeable reduction in oil volume. After 26 days, 75% of oil remediated on water and on land.
100 gallon diesel spill from a truck rollover into a wet marshland	PRP was applied manually using buckets to the spill area	PRP	Open	Water/Marsh/Mangrove	Water tested clean after first application
Mining company rail maintenance yard had extensive contamination from lubricating and diesel oil. Soil concentration of TPH was 21,260mg/kg	PRP was applied manually using buckets to the spill area	PRP, Oilbuster	Rail	Land	After 60 days, soil TPH concentration had dropped to 2916mg/kg, an 86% reduction
Fuel Tank Depot had both soil and runoff ponds contaminated by fuel oils. TPH concentration was 10,886mg/kg.	PRP was applied manually and using hydroseeders	PRP	Refinery	Land	After 35 days, TPH concentration had dropped to 325mg/kg, a 97% reduction. Total cost was less than 50% compared to removal.
Several acres of mangrove was contaminated by several hundred liters of crude. Total TPH concentration was 74,431mg/kg.	PRP was applied manually and in booms	PRP, Bioboom	Refinery	Water/Marsh/Mangrove	After 22 days, TPH concentration was reduced to 2293mg/kg, a 97% reduction
At a power station, 2000 liters of insulating oil spilled from a transformer, contaminating a collection pool and sump. TPH concentration was 15,764 mg/litre	PRP was applied manually and in booms	PRP, Bioboom	Power Station	Water	After 21 days, TPH concentration was reduced to 131mg/litre, a 99% reduction
Large electric utility needed a solution for managing sump pump oil and grease leaks at their power plants.	PRP is applied manually in all sumps to absorb and remediate slicks and standing oil	PRP	Power Station	Water	Application cycle is every 6 months
A polluted former underground storage tank (UST) Site in Beaufort, NC was not able to be used until remediated and deemed safe by the state regulators.	PRP Wellbooms were placed in an array of boreholes that were drilled around the site. Air was pumped into holes on one end of the site, forcing water to rise across the site. As the water moved throughout the site, subsurface hydrocarbons were trapped in the Wellbooms.	Wellboom	Gas Station	Subsurface	After a few months, critical hydrocarbon counts were in the single digits PPM allowing for a "NFA" classification. Traditional methods typically take in excess of a year.
A gas station in Rose Hill, NC was dealing with a multi-year remediation action plan. Natural attenuation was not yielding the expected results after several years.	PRP Wellbooms were deployed in several groundwater test wells after many years of slow attenuation.	Wellboom	Gas Station	Subsurface	98% reduction in Benzene, Toluene and other ground water contaminants over 10 months
A gas station in Liberty, NC was dealing with a multi-year remediation action plan. Natural attenuation was not yielding the expected results after several years.	PRP Wellbooms were deployed in several groundwater test wells after many years of slow attenuation.	Wellboom	Gas Station	Subsurface	98% reduction in Benzene, Toluene and other ground water contaminants over 8 months
Naval construction yard in Gulfport, Mississippi, had experienced diesel and jetfuel releases from leaking above ground pipelines and tanks and were required to remediate the site.	PRP Wellbooms were deployed in several groundwater test wells and replaced semi-annually as a means to manage residual free product.	Wellboom	Industrial	Subsurface	98% reduction in contaminants of concern over 36 months

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