

EKOGRID In-Situ Remediation Removes Oil Pollution at Tallinn Site in Just Three Months

Oil pollution discovered after work began on a five story apartment building

HELSINKI, FINLAND, August 21, 2018 /EINPresswire.com/ -- Greentech remediation specialists Eko Harden Technologies (EHT) Oy today announces that it has completed an in-situ soil remediation contract at a five-story apartment block under construction in Tallinn, Estonia using its EKOGRID™ technology. The contract was undertaken with remediation partner Corena Group and took just three months to bring oil pollution levels down to acceptable norms.

Before construction began on the new five story apartment block with underground parking and technical facilities in the basement, the site was home to an 8.35MW boiler house with an underground oil reservoir with four 50m3 containers and heated by shale oil.

When construction began on the new building, oil pollution was discovered near the old oil reservoir. The soil was polluted at a depth of 1.65-3.8m by petroleum products and phenols and was treated with simple excavation and mass transfer.

However, it was subsequently found that the natural sand layer beneath the already constructed new building was polluted with PAH compounds and exceeded limits for residential land. With the building and underground communications already completed, the builder decided that further mass transfer was not possible without damaging the new building's structures.



Sami Humala, Sales Director of Eko Harden Technologies

“

This oil remediation project in Tallinn demonstrates once again the sheer ingenuity of EKOGRID to solve many of the world's polluted sites in-situ and in the shortest timeframe”

Sami Humala, Sales Director of Eko Harden Technologies

EHT's EKOGRID technology was selected to clean the soil in-situ. The technology uses electrokinetic and chemical reactions to promote bioremediation and oxidation of pollutants in soil and/or groundwater. An electrokinetic field is created using interconnected steel electrodes installed in the polluted ground with a control unit providing pulsed power output.

Electrolysis of water happens as the pulsed current makes the charged contents of the pore water move quickly back and forward with short electro-osmotic pulses, and freshly formed free radicals and oxygen promote oxidation of contaminants.

As a result of electron displacement, free electron donors act as an energy source to microbes that break down various organic pollutants. This means that EKOGRID is used not only for breaking down hydrocarbons, but also promotes bioremediation.

23 EKOGRID electrodes were installed in the Tallinn building's basement through the concrete flooring and insulated for the part inside the concrete.

The remediation process that begun earlier this year lasted three months before the analysis showed that the polluted site met the norms of the Tallinn City Government. During the remediation period, construction continued as planned allowing the new site to be completed on time.

"This oil remediation project in Tallinn demonstrates once again the sheer ingenuity of EKOGRID to solve many of the world's polluted sites in-situ and in the shortest timeframe," says Sami Humala, Sales Director of Eko Harden Technologies. "In this particular case, exporting polluted soil by mass transfer to another site was not feasible and the first phase of remediation by excavation did not eliminate all pollutants and only gave temporary relief."

"Companies operating in oil & gas, extractive, manufacturing and chemicals industries, as well as ports & harbors, transportation and selected state sectors are increasingly dependent on outsourced services for emergency spill and environmental pollution response operations and hazardous waste management solutions," says Rasmus Guldbland, Vice President of the Corena Group. "We're delighted to partner with EHT and use EKOGRID in our global service operations."

About EKOGRID™

Eko Harden and its groundbreaking in-situ remediation technology EKOGRID is fast becoming the in-situ remediation solution of choice of government agencies, municipalities, land developers and energy companies alike to eliminate environmental disasters. EKOGRID electro kinetic oxidation technology produces a controlled low voltage electric field in a polluted area. The technology supports the growth of global wealth and health in a sustainable manner by removing chemical pollutants in both land and water "in situ" by advanced oxidation and enhanced bioremediation. The patented technology has already proven to be an ecological, sustainable and cost-efficient way for remediating the environment across the globe. Visit <https://ekogrid.fi/>.

Ends

Hugh Paterson
Whoosh PR
+447768175452
email us here

This press release can be viewed online at: <http://www.einpresswire.com>

Disclaimer: If you have any questions regarding information in this press release please contact the company listed in the press release. Please do not contact EIN Presswire. We will be unable to assist you with your inquiry. EIN Presswire disclaims any content contained in these releases. © 1995-2018 IPD Group, Inc. All Right Reserved.