

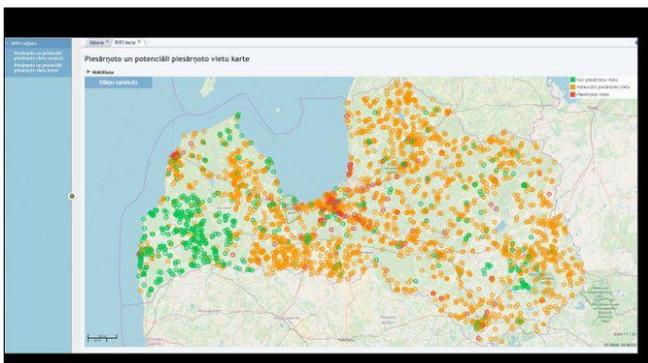
Newsletter 5, August 2018

Project INSURE (“*Inovative Sustainable Remediation*”) is a 4-year Interreg Central Baltic project (September 2015 – August 2019), aimed on improvement of sustainable remediation of contaminated sites in project region, thus decreasing runoff of polluting substances into Baltic Sea. Vidzeme Planning Region (VPR) is one of the 7 partners involved in project implementation. Project Lead Partner is County Administrative Board of Östergötland (CAB), other partners are Motala Municipality (MM), University of Helsinki (UHEL), Populus Group Oy (POP), Latvian Environment, Geology and Meteorology Centre (LEGMC) and Valmiera City Council (VAL). Now project is at the 6th implementation period (01.03.2018 - 31.08.2018).

THE NEW DATA BASE OF LATVIAN CONTAMINATED AND POTENTIALLY CONTAMINATED SITES IS READY

Latvian contaminated and potentially contaminated sites new data base is published in LEGMC website

(<https://www.meteo.lv/lapas/vide/piesarnoto-un-potenciali-piesarnoto-vietu-registrs/piesarnoto-un-potenciali-piesarnoto-vietu-registrs?id=1527&nid=37>). Now data base is available for all public users. Also, mobile applications with sites location are publicly available. To use applications, they need to be downloaded from App Store and Google play.



ADVANCED METHODS FOR SUPERVISION AND ENFORCEMENT ON AREAS WITH SEVERAL RESPONSIBLE PARTIES

Since the start of INSURE, MM and CAB have been working in an activity focusing on supervision and enforcement where there are more than one responsible party. MM and CAB have produced two handbooks especially for supervisory authorities - [more efficient liability assessment for a geographic area](#) and [investigations and remediation on areas with several responsible parties](#), and afterwards twelve liability investigations were made. A liability investigation is based on the polluter pays principle – the one who has caused a contaminated site should also pay for the remediation. A liability investigation describes the contaminated area and the enterprises who may have caused the pollution. How much responsibility is due to various factors such as how long ago the contamination occurred. If the enterprise does not follow the legislation it can lead to increased responsibility. Even property owners can get a responsibility if they bought the property after 1999.



The liability investigations in Sweden have been communicated with the enterprises and they have given their point of view of the investigations and

there are even some effects after the communications. Some of the contaminated sites have been investigated by the responsible parties. The soil nearby a surface treatment plant and the soil in a pasture cattle for cows nearby an old barn, where they earlier stored DDT, have been investigated.

OXYGEN ADDING ACTIVITY IN PILOT AREA IN MOTALA



The pilot test activities are still ongoing at the MM pilot site and for now there is no or very little degradation of the oil contamination. To increase the degradation UHEL suggested to higher the levels of oxygen. This will give the bacteria a better chance to degrade the oil. The method involves mixing a 25 kg package of calcium nitrate with 1000 liters of water in a cipax tank and distribute over the test area. This is done every other week for twelve weeks so a total of six times. Before the activity with the calcium nitrate begun the groundwater was tested to see the state before the activity. The test was taken from the middle of the area and will represent the whole area.

INVESTIGATION IN VALMIERA PILOT SITE

At the beginning of 2018 the Geo-Ecological Research at the pilot site “Former Heavy Fuel Oil Facilities of SIA Valmieras Siltums” in Valmiera, Latvia was finished. It showed that the area of most polluted soil (pollution over threshold) is approximately 200-250 m² large. Thickness of polluted soil layer is around 3 meters (from approx. 1.0 to 4.0 meters) and the main pollutant is tar

(heavy oil), also some BTEX compounds is discovered (benzene, toluene, ethylbenzene and xylenes). There are low filtration properties of the soil at the site (sandy clay, silt, etc.), so migration of pollutant in soil is to be considered insignificant – most of pollutant is located close to the points of its origin – tanks, pipes, etc.



The part of the soluble contamination in groundwater is migrating with the groundwater flow. Modelling results considering natural groundwater purification process show pollution concentration reduction to insignificant levels before it reaches Gauja River. Contaminated soil remediation would prevent groundwater from further contamination. Now VAL with the assistance of UHEL are going to start the pilot tests at the site.

REGIONAL SEMINAR FOR ENVIRONMENTAL INSPECTORS



On 8th of May 2018 MM were hosting a regional meeting for CAB and environmental inspectors working in other municipalities of county of Östergötland. At this meeting the strategies and management methods of complex contaminated sites were presented, and representative of CAB held a seminar about risk valuation, involving participants to do the risk valuation. This practical exercise was a good way to make the participants aware of the challenges making a risk valuation.



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PROJECT MANAGEMENT MEETING IN CESIS, LATVIA, APRIL 2018



At the beginning of VPR hosted a three-day project meeting in Cesis, Latvia. During the meeting partners presented their strategies for prioritization of contaminated sites and LEGMC presented their findings about activity “Model development and implementation”. Practical workshops on risk valuation and cost effectiveness analyses of contaminated sites were organized by responsible partners, were all other partners took part. Partners discussed about progress of each pilot site and went to the Valmiera pilot site visit, where not only investigation was made but LEGMC piloted groundwater modelling as well.

Contacts:

INSURE home page: www.insureproject.se

This newsletter was made by VPR



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