



Monitoring and sustainable management of oil polluting wrecks and chemical munitions dump sites in the Baltic Sea

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The Baltic Sea region contains a dark legacy of about 100 000 tons of dumped chemical warfare agents. As time passes the gun shells corrode and the risks of release of contaminants increase. A major goal of the EU-flagship project Daimon is to support governmental organisations with case-to-case adapted methods for sustainable management of dumped toxic munitions. At the Chalmers University of Technology, a partner of Daimon, a unique ISO 31000 adapted method was developed to provide decision support regarding potentially oilpolluting shipwrecks. The method is called VRAKA and is based on probability calculations. It includes site-specific information as well as expert knowledge. VRAKA is now being adapted to dumped chemical munitions. To estimate corrosion potential of gun shells and ship wrecks along with sediment re-suspension and transport multiparameter instruments are deployed at dump sites. Parameters measured include Currents, Salinity, Temperature, Oxygen, Depth, Waves and Suspended particles. These measurements have revealed how trawling at dump sites seems to have large implications in spreading toxic substances (Arsenic) over larger areas. This presentation will shortly describe the decision support model, the used instrumentation and discuss some of the obtain results.