

# Press Release No. 25/2010

**Press Relations Officer:** Martin Ittershagen  
**PR-staff:** Stephan Gabriel Haufe, Dieter Leutert,  
Fotini Mavromati, Doreen Redlich, Martin Stallmann  
**Address:** Postfach 1406, 06813 Dessau-Roßlau  
**Telephone:** +49 340/2103-2122, -6625, -2250, -2318, - 2367, -2507  
**E-Mail:** [pressestelle@uba.de](mailto:pressestelle@uba.de)  
**Internet:** [www.umweltbundesamt.de](http://www.umweltbundesamt.de)



## **Environmental Specimen Bank: Looking for evidence in Germany's environmental archive**

### **New web application provides comprehensive information**

**Have human and environmental exposure to lead been reduced since the ban on leaded petrol? Why has there been no sustainable decline in the PCB count in fish in the lower course of the Rhine? What to make of the concentrations of mercury in young shoots of spruce, seagull eggs, and bream? The federal Environmental Specimen Bank (ESB), Germany's archive documenting environmental quality, provides exhaustive public information. Since 1981 it has collected environmental and human specimens which it analyses for pollutant substances, and put them in long-term storage. In the meantime, the Bank has secured some 200,000 human samples and about 350,000 environmental subsamples. The new web application at [www.umweltprobenbank.de](http://www.umweltprobenbank.de) provides private citizens, scientists, policy and administration officials alike with user-friendly and easily navigable access to topics and data contained in the ESB as follows:**

- Clearly structured and interlinked information in uniform, short profile format provides an overview of sample types tested, sampling regions, and analysed substances;
- Commented examples of select analyses explain testing results and link to selectable data research;
- Greater flexibility in research with recently updated data;
- Improved diagrams featuring a number of options;
- Export of researched information for editing in spreadsheets and statistical tools;
- All content offered and every selected research option provides single real web addresses that can be bookmarked;
- Contemporary barrier-free web design.

The Federal Environment Agency (UBA) has operated the Environmental Specimen Bank on behalf of the Federal Ministry for Environment for over 30 years. It comprises one of the central components of environmental observation in Germany. Regular sampling occurs in 13 typical areas within six different eco-system types, ranging from coastal regions to conurbations and mountainous terrain. Care is taken with the environmental samples to include organisms from every link in the food chain, for example algae, mussel, fish, seagull. Soil and suspended particle samples are also included. Students from the universities of

Münster, Halle, Greifswald, and Ulm make annual donations of blood and urine samples to the ESB.

Analysing yesterday's samples with tomorrow's methods: The representative environmental and human samples have in part been stored permanently at -150 °C and -85 °C, respectively, since 1981. This allows retrospective trend analyses of substances for which there was no verification procedure at the time of sampling, or which were mistakenly considered harmless at the time. The archive thus provides the Federal Ministry for Environment with ecological and toxicological preservation of evidence that serves as the scientific foundation on which environmental and conservation policy measures are based, and by which their success can be measured.

The research findings of the Environmental Specimen Bank are the result of many years of cooperation with UBA and its partners at the university clinic in Münster, the Fraunhofer Institute for Molecular Biology and Applied Ecology, the Department of Earth Sciences at Freie Universität Berlin, Department VI Biogeography at the University of Trier, and Eurofins GfA GmbH, Hamburg.

A public ESB web application has existed since 2000. This new look lends a new and appropriate outfit to the familiar theme.

For further information see:

<http://www.umweltprobenbank.de>

Dessau-Roßlau, 19 April 2010