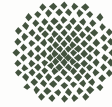




Universität Stuttgart



PT for microbiological parameters

in the Public Health Authority
of Lower Saxony

Dr.-Ing. Michael Koch

Institute for Sanitary Engineering, Water Quality and Solid
Waste Management, Universität Stuttgart

Dep. Hydrochemistry

Bandtäle 2, 70569 Stuttgart

Tel.: +49 711/685-5444 Fax: +49 711/685-7809

E-mail: Michael.Koch@iswa.uni-stuttgart.de

<http://www.uni-stuttgart.de/siwa/ch>

Microbiological PT

- The Public Health Authority of Lower Saxony is PT provider for microbiological measurements in drinking water in Germany
- Each year:
 - 4 PT rounds for E. coli, coliformic bacteria, enterococci, colony forming units
 - 2 PT rounds for pseudomonas aeruginosa, clostridium perfringens, legionella



Public Health Authority of Lower Saxony

Institute for Sanitary Engineering, Water Quality and Solid Waste Management, Universität Stuttgart



2 Possibilities

- NLGA-method
 - preparation of fresh samples in a mineral salt solution
 - the laboratory must be able to cultivate the microorganisms
 - cold room must be available
 - with permanent cooling stable for 2-4 days
 - relatively cheap
- UK-method
 - freeze-dried samples
 - longer stability
 - equipment must be available
 - expensive



Public Health Authority of Lower Saxony

Institute for Sanitary Engineering, Water Quality and Solid Waste Management, Universität Stuttgart



20-Liter-bottles for preparing the lots



Public Health Authority of Lower Saxony

Institute for Sanitary Engineering, Water Quality and Solid Waste Management, Universität Stuttgart



Homogenisation – 3 days!!



Public Health Authority of Lower Saxony

Institute for Sanitary Engineering, Water Quality and Solid Waste Management, Universität Stuttgart



Bottling under special care



Public Health Authority of Lower Saxony

Institute for Sanitary Engineering, Water Quality and Solid Waste Management, Universität Stuttgart



Prepared and labeled bottles



Public Health Authority of Lower Saxony

Institute for Sanitary Engineering, Water Quality and Solid Waste Management, Universität Stuttgart



View into a shipping container



Public Health Authority of Lower Saxony

Institute for Sanitary Engineering, Water Quality and Solid Waste Management, Universität Stuttgart



Packaging



Public Health Authority of Lower Saxony

Institute for Sanitary Engineering, Water Quality and Solid Waste Management, Universität Stuttgart



Shipping

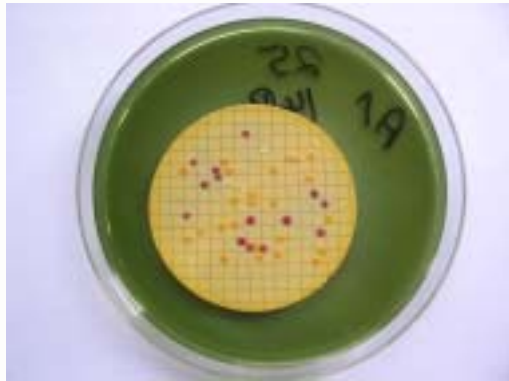


Public Health Authority of Lower Saxony

Institute for Sanitary Engineering, Water Quality and Solid Waste Management, Universität Stuttgart



Quality control



Coliformic and other bacteria on a lactose-TTC agar



Public Health Authority of Lower Saxony

Institute for Sanitary Engineering, Water Quality and Solid Waste Management, Universität Stuttgart



Possibilities for know-how-transfer

- The NLGA people are willing to come to Africa to teach a possible PT provider here
- or to host people from Africa in their lab in Northern Germany
- provided that there is funding



Public Health Authority of Lower Saxony

Institute for Sanitary Engineering, Water Quality and Solid Waste Management, Universität Stuttgart

