

BALTEX Project Identification

1. Title of Project:

Modelling the deposition of persistent organic pollutants into the Baltic Sea at long time scales

2. Principle Investigator:

Dr. Armin Aulinger

Participants: Dr. Volker Matthias, Dr. Markus Quante

3. Institute:

Institute for Coastal Research, GKSS Research Center Geesthacht

Department:

Environmental Chemistry

Mailing address:

Max-Planck-Strasse 1, 21502 Geesthacht, Germany

E-mail : Aulinger@gkss.de

4. Duration of the project (at least start date):

Begin 01.01.2007

5. Scientific Objective:

Assessment of atmospheric input of POPs into the Baltic Sea under consideration of long term trends and scenario analysis (climate and emission scenarios).

Source apportionment.

6. Methodology and Approach:

The atmospheric modelling tool is the fully 3D Eulerian one atmosphere chemistry transport model CMAQ developed by EPA and extended for POPs and configured for Europe by our research group. Emissions of POPs received from EMEP as yearly bulk emissions are processed to provide time variant model ready emissions in one hour resolution dependent on emission profiles of single POPs. The meteorological parameters to drive the chemistry and transport processes will be derived from mesoscale meteorological models (e.g. MM5, LM).

7. BALTEX Phase II objective(s) addressed:

Gradual extension of BALTEX methodologies to air and water quality studies

8. Project internet address

8.1 Additional remarks

9. Communicated by BALTEX SSG member (name):

10. Registered at BALTEX Secretariat