

SCREENING FOR CONTAMINANTS OF EMERGING CONCERN IN THE NORWEGIAN ENVIRONMENT¹

THOMAS K.V.

Norwegian Institute for Water Research (NIVA), Norway E-mail: kth@niva.no

The Norwegian Environment Agency annually supports the screening for selected contaminants of emerging concern with the purpose of achieving the goal of a contaminant-free environment. As such it is very important to detect and regulate new contaminants before they are dispersed into the environment and become an environmental problem. The overall objective of the Norwegian screening program is to establish the occurrence and environmental impact of CECs in the Norwegian environment and use the data to assess the implementation of local, national and international actions. Such data is also used to help determine whether a substance requires continuous monitoring. A new contaminant typically has one or more of the following characteristics; is non-regulated, environmental properties (PBT) that are cause for concern, a use that provides the potential for adverse effects in the environment, not included in routine monitoring, lacking or incomplete environmental risk assessment, and a potential candidate for future regulation. The screening programme is often analytically challenging with a need to quantify novel CECs in many different matrices. Over the past years screening has included human and veterinary pharmaceuticals, bisphenols, musks, chlorinated paraffins, brominated and phosphorus organic flame retardants, cyclic volatile methyl siloxanes, current use pesticides, second generation anticoagulants, and organic peroxides. The Norwegian screening studies have successfully identified a number of harmful CECs and provided data to support restrictions in their use. These, as well as potential future analytical strategies to meet the goals of such screening programmes will be presented.

-

¹ Invited speech