

Socio-legal responses to the challenge of Chemicals of Emerging Concern (CECs)

Lucille Grout¹, Dr Sarah Hendry¹, Dr Beverley Searle², Dr Rupert Hough³

¹Centre for Water Law, Policy & Science, University of Dundee, UK

²Geography & Environmental science, University of Dundee, UK

³The James Hutton Institute, Craigiebuckler, Aberdeen, UK

Contact: lgrout@dundee.ac.uk

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Introduction

CECs are present in numerous consumer products, ranging from pharmaceuticals to agricultural products, Personal Care Products (PCPs), household and industrial chemicals. They form a class of contaminants for which public awareness is raising regarding their fate in the environment and potential impact on public health.

Suitable “end of the pipe” water treatment options exist, mainly based on membrane technologies, but they are complex and energy extensive, and therefore scarcely implemented. Consequently, **reducing their use at source** seems a more appropriate alternative, but involvement of politicians and industrials is even more key to an efficient implementation.

The EU offers a range of regulation and directives related to chemicals management and the environment. However, this is mainly a case by case approach, regulation and monitoring being only foreseen for a tiny fraction of known contaminants. A more general approach is therefore needed to **develop safer production and consumption modes**.

This research project investigates social and legal options to enhance collaboration between institutions, policymakers and industrials towards this challenge raised by CECs.

The objective is to **improve availability of “safer” products** and **assess feasibility** of potential legal improvements. Furthermore, the project will look for ways to support consumers to make informed choices.

Methods

The following steps are envisaged:

- > Comparative legal analysis of existing regulatory framework;
- > Identification of areas of good practice regarding existing databases and tools;
- > Development of a qualitative database of targeted CECs including alternatives;
- > Social experimentation:

TARGET	EXPERIMENTAL APPROACH	GOAL
Consumers	Large perception questionnaires, Focus groups	<ul style="list-style-type: none"> > Identify usages; > Assess perception of products; > Target offer to be developed.
Key Stakeholders: Policymakers, Regulators, Producers, Suppliers, Water & Environment specialists, Health specialists	Interviews	<ul style="list-style-type: none"> > Assess risk and scale of use; > Evaluate feasibility and efficiency of solutions envisaged, e.g.: <ul style="list-style-type: none"> <input type="checkbox"/> legal barriers, <input type="checkbox"/> development of alternative chemicals. > Assessing the role of corporate responsibility towards environmentally friendly production.

Results

Expected outcomes are in the form of **recommendations for regulation and policy**, such as identifying which legal approaches are worth being developed, which good practices can be spread in industrial sectors, and what kind of messages can be popularised.

The additional development of a **set of tools** can be envisaged to **support behaviour change for producers as well as for consumers**. As an example, the following communication media can be produced:

- > Chemicals summary sheets,
- > Wallet-size informative cards,
- > Interactive scanning mobile application.

Analysis of Que Choisir summary sheet on chemicals to be avoided – Parabens (2017), France, accessed 11/2017, available at <https://www.quechoisir.org/decryptage-produits-cosmetiques-les-fiches-des-molecules-toxiques-a-eviter-n2019/>

Future

This project is still at its early development state. Even though interest for PCPs has already been emphasised, the selection process is in progress to specifically target chemicals or products to be studied.

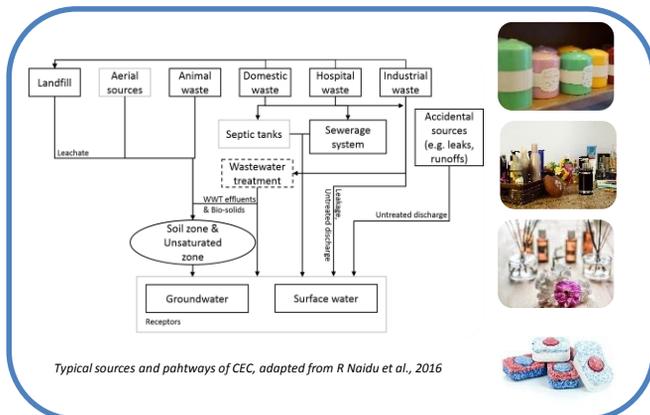
If the consumer-oriented methodology developed is sufficiently conclusive, this socio-legal approach could be **enlarged to a wider class of CECs found in consumer products**, such as: cleaning products, air perfumes, food additives, flame retardants, agricultural products, etc.

With the production of a qualitative database, interactive mobile options or social media interaction are additional potential applications to be further studied in order to help consumer decrypting ingredient list for example.

Finally, the mediation process with producers, suppliers, and any specialists involved with CECs topics is a continuous process to be sustained to ensure availability of safer products and development of suitable alternatives.

References:

- Hendry S. (2016). *Contaminants of Emerging Concern* in: Allan A, Hendry S and Rieu-Clarke A, 2016, *Routeledge Handbook of Water Law and Policy*, pp. 95-108.
 Naidu, R. (2016). Emerging contaminants in the environment: Risk-based analysis for better management, *Chemosphere*, 154, pp. 350-357.



Typical sources and pathways of CEC, adapted from R Naidu et al., 2016

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