

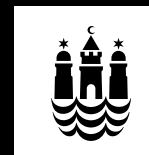


Non-haz Chemicals in Construction **The Copenhagen Method**

Johan Galster, B. Eng. (Chem) jogals@tmf.kk.dk

The Technical and Environmental Administration, Environmental Department

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Environmental influence of CPH municipality

As **authority** in CPH:

- Regulation of construction
- The municipality's purchase for building and construction
- First mover in the market
- Support of environmental labelling

As **benchmark** for other cities

From idea to demand

Environmental Dogmas – 7 cities, 2000

Environmental Policy and Plan of CPH, 2003

City planning of CPH

Environmental Principles for Construction i CPH, 2012

- Methods
- Energy
- Nature in the city
- Water
- Materials

Construction materials, CPH 2012

Principles

Where possible use

Sustainable wood

Reused materials

Materials with environmental or energy label

etc

No chemicals from the List of Unwanted Chemicals:

"No use of products or materials containing chemicals from the Danish EPAs

List of Unwanted Chemicals if alternatives are available."

The Danish EPA's List of Unwanted Chemicals (LUC), 2009

Alkylphenoles and alkylphenolethoxylates

1,4-benzenediol, 2,5-bis(1,1-dimethylethyl)-

Benzylchlorid

Biphenyl

Bisphenol-A

Bisphenol-A-diglycidylether polymers

Lead and lead compounds

Boron compounds (classified)

Certain brominated flameretardants

Cadmium and cadmium compounds

Chlorparaffines (short- og mediumbranched)

N,N-dimethylformamide 2,3-epoxypropylneodecanoate

etc.

[Full list](#)

[Link for Danish EPA and the list](#)

How to use a list like this?

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List of Unwanted Chemicals

Comments

A signal to industry and building companies

Not law or a legal document, just a signal

Demands high knowledge with the builder and architects

Not easy-to-use

CPH Criterias for Environmentally Safe Construction, 2016

No chemicals from the List of Unwanted Chemicals

Selection of 7 groups:

Isocyanates

Styrene

Phthalates

Bisphenol-A

Chloralkanes

Lead

Brominated flame retardants

Background for CPH selection of chemicals

EU and EPA evaluations of all LUC chemicals

[Link to reports \(Danish and English\)](#)

CPH Principles for selection of the 7 chemicals

Used in construction

High volume chemicals

Relevant risk of emission in production, construction or end-use

Identifiable to constructing company

Relevant alternatives

Not covered by other relevant legislation

Example: Isocyanates

Use in construction	Sealings, foams, roads etc.
High volume	Yes
Relevant risk of emission in production, construction or end-use	Production, construction and under removal + landfill/dangerous waste
Identifiable to constructing company	Yes, often
Relevant alternatives	Yes and no: case by case evaluation. Individual demands
Not covered by other legislation	Yes and no. Individual demands

Resulting overall construction demands

2-pages leaflet

Documentation: excel spreadsheet