**Danish Legislation**

Non carcinogenic substances:

Things to review:

1. Executive order on the reduction of emissions of so2, nox, voc, pm and ammonia. <https://www.retsinformation.dk/eli/lta/2021/1421>
2. executive order on pesticides <https://www.retsinformation.dk/eli/lta/2009/545>
3. executive order on the concentration of certain air pollutants in the air of cities <https://www.retsinformation.dk/eli/lta/2007/137> (it seems that the epa starts monitoring the concentration of this substances so as to ensure that they are below certain thresholds.)

Carcinogenic substances:

1. Executive orders on the plants that incinerate waste.
2. Executive orders on occupational diseases.
3. Executive order to prevent the risk of cancer when working with substances and materials.
4. Executive order on the limit values for substances and materials. <https://www.retsinformation.dk/eli/lta/2012/976>
5. You definitely to see the evolution of this executive order over time: <https://www.retsinformation.dk/eli/lta/1984/692> (executive order on the registration of substances and materials that are considered to be carcinogenic). (I guess is the one you have already looked at, in which substances are associated with 0.1%).

Plants that incinerate waste:

**The starting point is 1991:** <https://www.retsinformation.dk/eli/lta/1991/10>

The executive order sets emission limit values for plants that incinerate waste. It just includes these substances:

Parameter Number value Control period Control method

mg/norm. (\* 3)

(m3)

--------------------------------------------------------------------

CO 100 time K

CO 150 90 pct. fractal of

24-hour period,

time K

HCl 50 weeks K

HCl 65 døgn K

Particles 30 weeks K

Particles 40 days K

Pb + Cr + Cu + Mn (\* 1) 5 år S

Pb (\* 1) 1 year S

Ni + As (\* 1) 1 year S

Cd + Hg (\* 1) 0.2 years S

HF 2 years S

SO2 300 years S

TOC (\* 2) 20 years S

**1997:** [**https://www.retsinformation.dk/eli/lta/1997/41**](https://www.retsinformation.dk/eli/lta/1997/41)

No changes.

---------------------------------------------------------------------

Parameter Number value Control period Control method 3)

mg/norm.(m3)

--------------------------------------------------------------------

CO 100 time K

CO 150 90 pct. fractile of K

døgnperiode, time

HCl 50 weeks K 4)

HCl 65 d Kgn K 4)

Particles 30 weeks K

Particles 40 days K

Pb + Cr + Cu + Mn 1) 5 å S

Pb 1) 1 year S

Ni + As 1) 1 year S

Cd + Hg 1) 0.2 years S

HF 2 years S

SO2 300 years S

TOC 2) 20 years S

---------------------------------------------------------------------

**In 2003 there is a big change:** [**https://www.retsinformation.dk/eli/lta/2003/162**](https://www.retsinformation.dk/eli/lta/2003/162)

**new subsances are considered. In addition, there is the distinction between incineration plants and co-inciniration plants; they are associated with different limits. Importantly, there is the inclusion of dioxins, which are by far the most toxic substance included in the prtr regulation.**

**Co-incineration:**

**Special provisions for combustion plants which co-incinerate waste**

*1) Daily mean values*

Half-hourly mean values ​​are only necessary for the purpose of calculating the daily mean values.

*C procfor solid fuels expressed in mg / normal m 3dry flue gas (O 2content 6%):*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Pollutants** | **< 50 MWth** | **50-100 MWth** | **100-300 MWth** | **> 300 MWth** |
| SO 2in general |  | 850 | 850-200 (linear decrease from 100 to 300 MWth) | 200 |
| SO 2- domestic fuel |  | degree of desulfurization ³ 90% | desulphurisation rate ³ 92% | desulphurisation rate ³ 95% |
| NO x |  | 400 | 300 | 200 |
| dust | 50 | 50 | 30 | 30 |

*C procfor biomass (ie the waste fractions mentioned in the Ministry of the Environment and Energy's executive order on biomass waste), expressed in mg / normal m 3dry flue gas (O 2content 6%):*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Pollutants** | **< 50 MWth** | **50-100 MWth** | **100-300 MWth** | **> 300 MWth** |
| SO 2 |  | 200 | 200 | 200 |
| NO x |  | 350 | 300 | 300 |
| dust | 50 | 50 | 30 | 30 |

*C procfor liquid fuel expressed in mg / normal m 3dry flue gas (O 2content 3%):*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Pollutants** | **< 50 MWth** | **50-100 MWth** | **100-300 MWth** | **> 300 MWth** |
| SO 2 |  | 850 | 850-200 (linear decrease from 100 to 300 MWth) | 200 |
| NO x |  | 400 | 300 | 200 |
| dust | 50 | 50 | 30 | 30 |

*2) C - total emission limit values*

*C expressed in mg / normal m 3dry flue gas (O 2content 6%). All mean values ​​are measured over a period of at least 30 minutes and at most eight hours:*

|  |  |
| --- | --- |
| **Pollutant** | **C** |
| Cd + Tl | 0,05 |
| Hg | 0,05 |
| Sb + As + Pb + Cr + Co + Cu + Mn + Ni + V | 0,5 |

*C expressed in ng / normal m 3dry flue gas (O 2content 6%). All mean values ​​are measured over a period of at least 6 hours and at most eight hours:*

|  |  |
| --- | --- |
| **Pollutant** | **C** |
| Dioxins and furans (calculated according to Annex 1) | 0,1 |

Appendix 8 shows when the limit values ​​are considered to have been complied with.

**Section III**

**Other industrial sectors that co-incinerate waste**

*C - Total emission limits:*

|  |  |
| --- | --- |
| **Pollutant** | **C** |
| Dioxins and furans, calculated in accordance with Annex 1 | 0,1 ng/normal m 3 |
| Cd + Tl | 0,05 mg/normal m 3 |
| Hg | 0,05 mg/normal m 3 |

The mean values ​​for dioxins and furans are measured over a period of not less than six and not more than eight hours. The mean values ​​for Cd + Tl and Hg are measured over a period of at least 30 minutes and at most eight hours.

Appendix 8 shows when the limit values ​​are considered to have been complied with.

**Incineration:**

*a) Daily mean values*

|  |  |
| --- | --- |
| Total dust | 10 mg/normal m 3 |
| Gaseous and vaporous organic substances, expressed as total organic carbon (TOC) | 10 mg/normal m 3 |
| Hydrogen chloride (HCl) | 10 mg/normal m 3 |
| Hydrogenfluorid (HF) | 1 mg/normal m 3 |
| Sulfur dioxide (SO 2) | 50 mg/normal m 3 |
| Nitrogen monoxide (NO) and nitrogen dioxide (NO 2) expressed as nitrogen dioxide | 200 mg/normal m 3 |
| Nitrogen monoxide (NO) and nitrogen dioxide (NO 2), expressed as nitrogen dioxide in plants, operating on 28 December 2002, with a nominal capacity of 6 tonnes / hour or less | 400 mg/normal m 3 |

*b) Half-hour average values*

|  |  |  |
| --- | --- | --- |
|  | **(100%) A** | **(97%) B** |
| Total dust | 30 mg/normal m 3 | 10 mg/normal m 3 |
| Gaseous and vaporous organic substances expressed as total carbon (TOC) | 20 mg/normal m 3 | 10 mg/normal m 3 |
| Hydrogen chloride (HCl) | 60 mg/normal m 3 | 10 mg/normal m 3 |
| Hydrogenfluorid (HF) | 4 mg/normal m 3 | 2 mg/normal m 3 |
| Sulfur dioxide (SO 2) | 200 mg/normal m 3 | 50 mg/normal m 3 |
| Nitrogen monoxide (NO) and nitrogen dioxide (NO 2), expressed as nitrogen dioxide, excluding incineration plants with a nominal capacity of 6 tonnes / hour or less, which were in operation on 28 December 2002 | 400 mg/normal m 3 | 200 mg/normal m 3 |

*(c) All mean values ​​are measured over a sampling period of not less than 30 minutes and not more than eight hours:*

|  |  |
| --- | --- |
| Cadmium and cadmium compounds expressed as cadmium (Cd) | i alt 0,05 mg/normal m 3 |
| Thallium and thallium compounds expressed as thallium (Tl) |  |
| Mercury and mercury compounds expressed as mercury (Hg) | 0,05 mg/normal m 3 |
| Antimony and antimony compounds expressed as antimony (Sb) | i alt 0,5 mg/normal m 3 |
| Arsenic and arsenic compounds expressed as arsenic (As) |  |
| Lead and lead compounds expressed as lead (Pb) |  |
| Chromium and chromium compounds expressed as chromium (Cr) |  |
| Cobalt and cobalt compounds expressed as cobalt (Co) |  |
| Copper and copper compounds expressed as copper (Cu) |  |
| Manganese and manganese compounds expressed as manganese (Mn) |  |
| Nickel and nickel compounds expressed as nickel (Ni) |  |
| Vanadium and vanadium compounds expressed as vanadium (V) |  |

These mean values ​​also include gaseous and vapor emissions of the relevant heavy metals and their compounds.

*d) Mean values ​​measured over a sampling period of not less than six hours and not more than eight hours*

The emission limit values ​​refer to the total concentration of dioxins and furans, calculated using the concept of toxic equivalence as described in Annex 1.

|  |  |
| --- | --- |
| Dioxins and furans, calculated in accordance with Annex 1 | 0,1 ng/normal m 3 |

*(e) The following emission limit values ​​for carbon monoxide (CO) concentrations shall not be exceeded in the combustion gases (except during the ignition and combustion phase):*

- 50 mg / normal m 3combustion gas, determined as daily mean value

- 150 mg / normal m 3flue gas for at least 95% of all measurements determined as hourly average values or 100 mg / m 3flue gas for all measurements determined as half-hourly average values for any 24-hour period.

The approval authority may, for incineration plants using fluidized bed technology, set an emission limit value for carbon monoxide (CO) of not more than 100 mg / m 3as an hourly average value, and at the same time deviate from the above-mentioned emission limits.

**In 2011 there is another modification:** [**https://www.retsinformation.dk/eli/lta/2011/1356**](https://www.retsinformation.dk/eli/lta/2011/1356)

**Special provisions for cement kilns which co-incinerate waste**

Daily mean values ​​(AMS control). Sampling periods as specified in Annex 7 and other measurement requirements as specified in Annex 4. Only half-hourly mean values ​​are required for the calculation of daily mean values.

*1) C - total emission limit values ​​(O 2 content 10%):*

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| |  |  | | --- | --- | | **Pollutant** | **C** | | Total dust | 30 mg/normal m 3 | | HCl | 10 mg/normal m 3 | | HF | 1 mg/normal m 3 | | NOx | 500 mg/normal m 3 | | NO x at co-incineration plants in operation on 28 December 2002, | 800 mg/normal m 3 | | Cd + Tl | 0.05 mg/normal m 3 | | Hg | 0.05 mg/normal m 3 | | Sb + As + Pb + Cr + Co + Cu + Mn + Ni + V | 0.5 mg/normal m 3 | | Dioxins and furans | 0,1 ng/normal m 3 | |

*2) Total emission limit values ​​for SO 2 and TOC (O 2 content 10%):*

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| |  |  | | --- | --- | | **Pollutant** | **C** | | SO 2 | 50 mg/normal m 3 | | heel | 10 mg/normal m 3 | |

Deviations may be permitted by the competent authority when TOC and SO 2 do not originate from the incineration of waste.

*3) Emission limit value for CO (O 2 content 10%):*

The emission limit value for CO is set in the environmental approval.

Appendix 8 shows when the limit values ​​are considered to have been complied with.

**Section II**

**Special provisions for combustion plants which co-incinerate waste**

*1) Daily mean values*

Half-hourly mean values ​​are only necessary for the purpose of calculating the daily mean values.

*C proc for solid fuels expressed in mg / normal m 3 dry flue gas (O 2 content 6%):*

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| |  |  |  |  |  | | --- | --- | --- | --- | --- | | **Pollutants** | **< 50 MWth** | **50-100 MWth** | **100-300 MWth** | **> 300 MWth** | | SO 2 in general |  | 850 | 850-200 (linear decrease from 100 to 300 MWth) | 200 | | SO 2 - domestic fuel |  | desulphurisation rate ≥90% | desulphurisation rate ≥92% | desulphurisation rate ≥95% | | NOx |  | 400 | 300 | 200 | | dust | 50 | 50 | 30 | 30 | |

*C proc for biomass (ie the waste fractions mentioned in the executive order on biomass waste), expressed in mg / normal m 3 dry flue gas (O 2 content 6%):*

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| |  |  |  |  |  | | --- | --- | --- | --- | --- | | **Pollutants** | **< 50 MWth** | **50-100 MWth** | **100-300 MWth** | **> 300 MWth** | | SO 2 |  | 200 | 200 | 200 | | NOx |  | 350 | 300 | 300 | | dust | 50 | 50 | 30 | 30 | |

*C proc for liquid fuel expressed in mg / normal m 3 dry flue gas (O 2 content 3%):*

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| |  |  |  |  |  | | --- | --- | --- | --- | --- | | **Pollutants** | **< 50 MWth** | **50-100 MWth** | **100-300 MWth** | **> 300 MWth** | | SO 2 |  | 850 | 850-200 (linear decrease from 100 to 300 MWth) | 200 | | NOx |  | 400 | 300 | 200 | | dust | 50 | 50 | 30 | 30 | |

*2) C - total emission limit values*

*C expressed in mg / normal m 3 dry flue gas (O 2 content 6%). All mean values ​​are measured over a period of at least 30 minutes and at most eight hours:*

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| |  |  | | --- | --- | | **Pollutant** | **C** | | Cd + Tl | 0,05 | | Hg | 0,05 | | Sb + As + Pb + Cr + Co + Cu + Mn + Ni + V | 0,5 | |

*C expressed in ng / normal m 3 dry flue gas (O 2 content 6%). All mean values ​​are measured over a period of at least 6 hours and at most eight hours:*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| |  |  | | --- | --- | | **Pollutant** | **C** | | Dioxins and furans (calculated according to Annex 1) | 0,1 | |

Appendix 8 shows when the limit values ​​are considered to have been complied with.

**Section III**

**Other industrial sectors that co-incinerate waste**

*C - Total emission limits:*

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| |  |  | | --- | --- | | **Pollutant** | **C** | | Dioxins and furans, calculated in accordance with Annex 1 | 0,1 ng/normal m 3 | | Cd + Tl | 0.05 mg/normal m 3 | | Hg | 0.05 mg/normal m 3 | |

The mean values ​​for dioxins and furans are measured over a period of not less than six and not more than eight hours. The mean values ​​for Cd + Tl and Hg are measured over a period of at least 30 minutes and at most eight hours.

Appendix 8 shows when the limit values ​​are considered to have been complied wi

**Limit values ​​for air emissions from incineration plants**

*a) Daily mean values*

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| |  |  | | --- | --- | | Total dust | 10 mg/normal m 3 | | Gaseous and vaporous organic substances, expressed as total organic carbon (TOC) | 10 mg/normal m 3 | | Hydrogen chloride (HCl) | 10 mg/normal m 3 | | Hydrogenfluorid (HF) | 1 mg/normal m 3 | | Sulfur dioxide (SO 2 ) | 50 mg/normal m 3 | | Nitrogen monoxide (NO) and nitrogen dioxide (NO 2 ) expressed as nitrogen dioxide | 200 mg/normal m 3 | | Nitrogen monoxide (NO) and nitrogen dioxide (NO 2 ), expressed as nitrogen dioxide in plants, operating on 28 December 2002, with a nominal capacity of 6 tonnes / hour or less | 400 mg/normal m 3 | |

*b) Half-hour average values*

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| |  |  |  | | --- | --- | --- | |  | **(100%) A** | **(97%) B** | | Total dust | 30 mg/normal m 3 | 10 mg/normal m 3 | | Gaseous and vaporous organic substances expressed as total carbon (TOC) | 20 mg/normal m 3 | 10 mg/normal m 3 | | Hydrogen chloride (HCl) | 60 mg/normal m 3 | 10 mg/normal m 3 | | Hydrogenfluorid (HF) | 4 mg/normal m 3 | 2 mg/normal m 3 | | Sulfur dioxide (SO 2 ) | 200 mg/normal m 3 | 50 mg/normal m 3 | | Nitrogen monoxide (NO) and nitrogen dioxide (NO 2 ), expressed as nitrogen dioxide, excluding incineration plants with a nominal capacity of 6 tonnes / hour or less, which were in operation on 28 December 2002 | 400 mg/normal m 3 | 200 mg/normal m 3 | |

*(c) All mean values ​​are measured over a sampling period of not less than 30 minutes and not more than eight hours:*

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| |  |  | | --- | --- | | Cadmium and cadmium compounds expressed as cadmium (Cd) | i alt 0,05 mg/normal m 3 | | Thallium and thallium compounds expressed as thallium (Tl) |  | | Mercury and mercury compounds expressed as mercury (Hg) | 0.05 mg/normal m 3 | | Antimony and antimony compounds expressed as antimony (Sb) | i alt 0,5 mg/normal m 3 | | Arsenic and arsenic compounds expressed as arsenic (As) |  | | Lead and lead compounds expressed as lead (Pb) |  | | Chromium and chromium compounds expressed as chromium (Cr) |  | | Cobalt and cobalt compounds expressed as cobalt (Co) |  | | Copper and copper compounds expressed as copper (Cu) |  | | Manganese and manganese compounds expressed as manganese (Mn) |  | | Nickel and nickel compounds expressed as nickel (Ni) |  | | Vanadium and vanadium compounds expressed as vanadium (V) |  | |

These mean values ​​also include gaseous and vapor emissions of the relevant heavy metals and their compounds.

*d) Mean values ​​measured over a sampling period of not less than six hours and not more than eight hours*

The emission limit values ​​refer to the total concentration of dioxins and furans, calculated using the concept of toxic equivalence as described in Annex 1.

|  |  |  |
| --- | --- | --- |
| |  |  | | --- | --- | | Dioxins and furans, calculated in accordance with Annex 1 | 0,1 ng/normal m 3 | |

*(e) The following emission limit values ​​for carbon monoxide (CO) concentrations shall not be exceeded in the combustion gases (except during the ignition and combustion phase):*

- 50 mg / normal m 3 flue gas, determined as daily mean value

- 150 mg / normal m 3 flue gas for at least 95% of all measurements determined as hourly average values or 100 mg / m 3 flue gas for all measurements determined as half-hourly average values for any 24-hour period.

The approval authority may, for incineration plants using fluidized bed technology, set an emission limit value for carbon monoxide (CO) of not more than 100 mg / m 3 as an hourly average value, and at the same time deviate from the above-mentioned emission limits.

**in 2011 there is a further amendment:** [**https://www.retsinformation.dk/eli/lta/2012/1451**](https://www.retsinformation.dk/eli/lta/2012/1451)

Occupational diseases

**Everything starts in 1991:** [**https://www.retsinformation.dk/eli/lta/1991/142**](https://www.retsinformation.dk/eli/lta/1991/142)

Arsenic: skin cancer, lung cancer and cirrhosis of the liver, in the pharmaceutical industry, metal and metallurgical industry, and in the industry of wood impregnation.

Cadmium: kidney diseases compatible with cadmium poisoning, in the industries of galvanizing and painting.

1. Skin diseases caused by substances not mentioned elsewhere
2. Lung diseases by substances not mentioned elsewhere.
3. Infectious diseases
4. All forms of cancer caused by substances mentioned in the IARC
5. Bones for movement
6. Deafness for noise.
7. Fetal injuries.

No variations in actuality.

Executive orders on measures to prevent the risk of cancer

**We start in 1993:** [**https://www.retsinformation.dk/eli/lta/1993/300**](https://www.retsinformation.dk/eli/lta/1993/300)

The orders set the thresholds for the materials processed in the company; if above these thresholds, then the provisions contained in the law apply. The point is that if you work with these materials you use use precautions and you must reduce employees’ exposure to such materials as much as possible.

Alachlor: 0.1%

Arsenic: 0.1%

Cadmium: 0.1%

Diuron: not included

Dioxin: no thresholds

**1997: unchanged**

**1999: there are some modifications, in the sense that the materials trigger the law only if they are use in certain circumstances.**

Alachlor is unchanged.

Arsenic is 0.1% if used in laboratory work, no thresholds if it is used in other contexts.

Cadmium is 0.1% if it is used in solder, 0 if it is used in other works.

Dioxin unchanged

Diuron not included

**2003: there is a change related to nickel**

**2005:**

Arsenic becomes 0.1% for everything.

Cadium becomes 0.1% for everything.

Alachlor is unchanged.

The regulation goes on and includes more substances.

Executive order on the limit values of air pollutants.

It is related to the limit values of pollutants in the air that can be inhalated at the workplace. The sanctions can be criminal. The limit values refer to the average concentration in the air in the 8 hour workday.

**2010:**

**Alachlor:** no limits (probably it is a water pollutant)

**Arsenic:** 0.01 mg/m3

**Cadmium**: 0.005

Diuron: 5 (considered as carcinogenic)

This is the time line of regulation of asbestos in Denmark <http://www.ibasecretariat.org/chron_ban_list.php>

according to this paper <https://www.scielosp.org/pdf/bwho/2014.v92n11/790-797/en> the average use of asbestos per capita is zero after 2000 ( it should be zero during our entire sample, so it’s not worth it).

Possible shocks and important things to review:

1. Executive order on emissions from plants that incinerate waste
2. Executive order on the concentration of air pollutants at the workplace
3. Chloro alkanes (chlorinated paraffines): it seems that toxicity came out pretty late. They are included in the executive order on measures to prevent cancer just in 1997, and in the list of occupational diseases just in 2000.
4. Chlordecone was banned in 2009.
5. Chlorpyrifos were banned in 2012; they are included in many provisions, very interesting substance because it is relevant to agriculture. However, it is not considered as to be carcinogenic.
6. Dichloromethane: this substance is carcinogenic (liver cancer); nevertheless, it has been included only in the Executive Order on cosmetics, as one of the substances which should not be present in cosmetics.
7. <https://www.retsinformation.dk/eli/mt/1985/96> this is a circular letter which refers to the fact that the environmental protection agency said that it would issue some guidance on limits for emissions of dioxins from incineration plants. There is the possibility that they lobbied.
8. This is very important. Diuron is a toxic substance which is very relevant in Denmark because of agriculture. It is not included in the IARC classification, nevertheless it is considered as carcinogenic in other sources. In 2002 it was not included in the executive order on measures to prevent cancer, whereas it was in 2005. It was banned in 2008 according to the website of the Danish environmental protection agency.
9. executive order on the concentration of certain air pollutants in the air of cities <https://www.retsinformation.dk/eli/lta/2007/137> (it seems that the epa starts monitoring the concentration of this substances so as to ensure that they are below certain thresholds.) this could be a very relevant shock because it directly affects the concentration of pollutants, which is what has an impact on human health. Importantly this order does not include dioxins. You need to understand why dioxins are so toxic and they receive so little attention in the regulation.
10. Apparently, ethyl benzene (which is carcinogenic also according the iarc) has never been considered as such in the Danish legislation.
11. THIS IS SUPER IMPORTANT: IN 2001, FOR THE FIRST TIME, EUROPE SET THE MAXIMUM AMOUNT OF DIOXINS (through the directive you already know). <https://www.efsa.europa.eu/en/topics/topic/dioxins-and-pcbs>

n 2001, the European Union adopted a strategy on dioxins and PCBs aimed at reducing contamination levels of these substances in the environment, in feed and in foodstuffs to ensure a high level of public health protection. The European Commission website summarises the key milestones and provides details on the policy developments and regulatory measures taken since then.

* [Food Contaminants - Dioxins and PCBs](https://ec.europa.eu/food/safety/chemical_safety/contaminants/catalogue_en) – European Commission

This paper is about the convergence in the national regulations of dioxin emission from incineration plants. <https://www.tandfonline.com/doi/pdf/10.1016/S1449-4035%2805%2970055-2> Incineration is the single largest source of dioxins in most industrialized countries.

In the 90s there is the campaing by Green Peace. Denamrk is one of the slowest countries. The reason is that where farming is particularly important, farmers lobby against landfills and they want incinerations plants.

1. Given the new structure of the project, whereby you decided to focus on occupational diseases, you need to consider the executive order on occupational diseases. Basically, it gives you a list of diseases and substances which trigger the regulation on occupational diseases. As far as you understood, there are no great shocks. This is the link to the version of the law which dates back to 1989 <https://www.retsinformation.dk/eli/lta/1989/60>
2. You should review the entire history of the law on registration of dangerous substances <https://www.retsinformation.dk/eli/lta/1984/692>
3. review the lindane case. Apparently, lindane was banned by the Stockholm convention, but its use in pesticides in Denmark was banned in 1999 <https://www.retsinformation.dk/eli/lta/1999/189>
4. you need to review the executive order on the risk of cancer during the transportation of goods and see its relationship with the executive order to prevent the risk of cancer.
5. You need to review if there is a table which tells you when the iarc included a substance also as possible carcinogenic because right now you have too recent years.
6. As for non carcinogenic but famous pollutants, you definitely to look at the law in 2001: <https://www.retsinformation.dk/eli/lta/2001/671> basically Denmark introduced thele limits related to the concentration in the air of famous air pollutants, such as nox and particulate matter.
7. See what is going on with pentachlorophenol in Denmark. According to your review on the Danish legislation, it has basically received no attention. Nevertheless, according to the website of the Danish EPA it is no longer used in Denmark. You need to look for some information on this ban.
8. See if you can study some of the IARC publications; they describe everything, also with reference to occupational exposure and occupational diseases <file:///C:/Users/fmarciano/Downloads/SP165_Chapter_7.pdf>
9. **You definitely to see the evolution of the substances which are included in the executive order on the substances considered as to be carcinogenic** [**https://www.retsinformation.dk/eli/lta/1984/692**](https://www.retsinformation.dk/eli/lta/1984/692)
10. Look at the Executive Order on Chemical Pesticides; it may contain useful information, given the importance of agriculture in Denmark.