



State of play on the new Mercury Regulation and application of the Minamata Convention

Chris Allen
Deputy Head of Unit Industrial Emissions & Safety
European Commission
Directorate General – Environment

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To cover

- 1. Mercury policy framework*
- 2. Best Available Techniques Conclusions*
- 3. New Mercury Regulation*
- 4. Waste mercury conversion and disposal*



EU Mercury policy

Policy framework

Legal framework

2000

2005

2008

2017

Minamata
ratification

Address remaining
& new uses



Main EU mercury policy milestones (I)

- Over last 15 years:
 - **Extensive products law (e.g. REACH, RoHS)**
 - **Emissions regulated (Industrial Emissions Directive, water legislation)**
 - **Phase out of mercury from industrial processes (REACH, Industrial Emissions Directive/BAT)**
- 2005: Mercury Strategy - EU & international action
- 2008: Mercury Regulation - main provisions:
 - **Mercury ore is waste for disposal**
 - **Mercury from key industries is waste for disposal**
 - **Mercury export ban from 15/3/2011**

Main EU mercury policy milestones (II)

- 2009: UNEP Governing Council launches negotiations
- 2010: Review of mercury strategy
- 2013: Minamata negotiations concluded in January
 - **Largely inspired by EU law**
 - **Full Hg life-cycle from mining to waste management, including trade and emissions**
 - **Global phase out of mercury use in CAK by 2025**
excess CAK mercury is waste for disposal

Minamata Convention – Main Provisions

I. Result-oriented



**Mercury
mining**



**Mercury use in
manufacturing**



**Mercury use
in products**

II. Process-oriented



**Fossil fuel
combustion**



**Artisanal &
small-scale
gold mining**

**5% of global mercury
emissions from EU**
**40-80% deposition in
EU originates from
third countries**



Minamata Convention

- By October 2014, signed by 128 Parties including the EU and 26 MS
- EIF after 50th ratification - Currently 44
- Imminent ratification by EU and several Member States will trigger entry into force (planned 18/5)
- First Conference of the Parties-COP1: 23-29/2017
 - **Adoption of implementation documents including (1) guidance on inventory of stocks, (2) guidance on reducing air emissions by using BAT and (3) a format for reporting by the Parties**



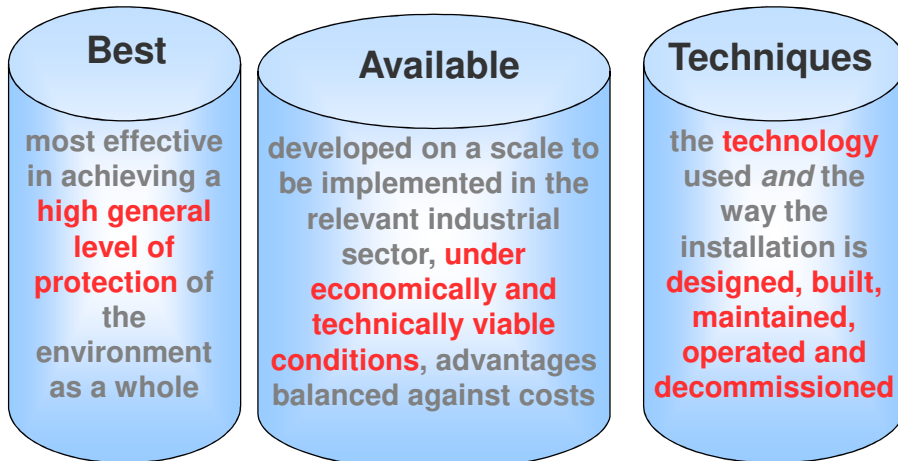
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Industrial Emissions Directive (IED) 2010/75/EU

Operator to apply Best Available Techniques (BAT)



BAT conclusions in permitting

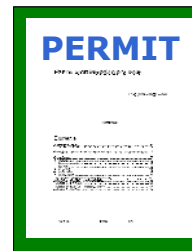
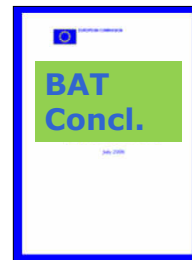
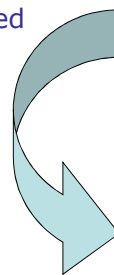
BAT to be applied by operator irrespective of whether BAT conclusions have been adopted

BAT conclusions are the reference for setting permit conditions

Permits reviewed within 4 years to align with BAT conclusions; emission limits to respect BAT Associated Emission Levels (BAT-AELs)

Derogation from BAT-AELs possible in specific and justified cases:

- costs are disproportionately higher than benefits due to local / installation specific situation
- Member States report to the public / Commission on use derogations



CAK BAT conclusions – aspects on mercury cells Commission Implementing Decision 2013/732/EU



- Mercury cell technique is not considered as BAT under any circumstances
- Decommissioning of mercury cell plants - performance level for emissions to water
- Implementation deadline 11 December 2017

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New Regulation on mercury

State of play

- Signed in Strasbourg today (17 May 2017) by the EP and Council Presidents
- Published in EU Official Journal latest by 24 May
- Enters into force 20 days after publication
- Applicable on 1 January 2018 except the prohibition of use of mercury electrodes in CAK that enters into force on 11 December 2017



New Regulation: Main provisions (I)

- Maintains existing provisions including
 - **Export ban applying to mercury, including waste**
 - **Certain flows of mercury are waste to be disposed of**
 - **Reporting by operators on those flows of waste**
- Prohibits manufacturing and trade of certain mercury containing products
- Regulates phase down of use of dental amalgam, the last large use of mercury in the EU
- Prohibits use of mercury in artisanal and small scale gold mining



New Regulation: Main provisions (II)

- Control of imports
- Surplus mercury from CAK sector imported from third countries subject to the same rules as such mercury generated within the EU
- End uses of mercury in industrial processes
 - **Catalysts: 1/1/2018, except VCM: 1/1/2022**
 - **Electrodes: 1/1/2022, except CAK: 11/12/2017 and alcoholates: 1/1/2028**
- Permanent storage of mercury waste



New Regulation: Main provisions (III)

- Prohibits novel uses of mercury in mercury-added products and manufacturing processes (products and processes that do not exist yet) unless:
 - **It is proven that such products/processes will bring significant benefits to human health or the environment and that there is no available mercury-free alternative**
 - **Authorised by means of a Commission Decision**



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Basic obligations

- CAK BAT conclusions require cessation of mercury cells use by 11 December 2017
- Expected 6000 tonnes of mercury waste
- Conversion to mercury sulphide prior to disposal
- Disposal only in following installations licensed for disposal of hazardous waste:
 - **Salt mines**
 - **Deep underground hard rock formations providing equivalent protection**
 - **After solidification into blocks, above ground facilities providing equivalent protection**



Temporary storage

- Storage more than a year is a landfill. Placing of liquid waste into landfill is however prohibited
- Given the lack of sufficient conversion capacity a derogation from this prohibition was needed
 - **Liquid mercury waste allowed under landfill directive**
 - **Precautions to address liquid nature of the waste**
- Temporary storage allowed 5 years starting 1/1/2018. Commission can extend to end 2025
- Where waste mercury is temporarily stored
 - **Until one year storage: general waste law applies**
 - **After one year storage: landfill directive also applies**



Example

- CAK plant converts to non-mercury process on 1/6/2017 - mercury waste is generated
- Mercury waste can be stored on site up to one year, until 31 May 2018, without falling under the landfill directive
- After that year, the mercury waste may be temporarily stored in line with landfill directive
- Mercury waste converted to mercury sulphide and disposed of 31/12/22 – unless Commission has extended the derogation period



Traceability

- CAK operator reports (May) on mercury waste stored on site and sent for temporary storage, conversion, solidification and disposal, including certificates
- Register kept and reported (January) by operators of:
 - **Temporary storage**
 - **Conversion and/or solidification**
 - **Permanent storage**
- Register includes per shipment: amount, origin, destination, disposal operation, certificates
- Certificate cascade: each operator provides certificate to all previous operators in the chain



Final comments

- EU firmly on path to mercury free society
- CAK industry major contributor to this objective
- Minamata Convention will reduce mercury pollution globally and level global playing field
- Commission aware of upcoming challenges and will support implementation efforts
- Information paper on waste mercury provisions in preparation



**Thank you for your
attention !**

Christopher.Allen@ec.europa.eu

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