



INDUSTRIAL WW LEGISLATION AND IMPLEMENTATION

HELMUT FRISCHENSCHLAGER

CONTENT

- Principles of IED - the integrated approach
- Better Application of BAT - BAT conclusions shall be the reference for setting the permit conditions
- Wastewater Emission Ordinances (AAEV & AEVs)
- Direct and indirect emissions

SUBJECT MATTER OF THE INDUSTRIAL EMISSIONS DIRECTIVE & OBJECTIVE (ART 1 AND RECITALS IED)

- This Directive lays down rules on **integrated prevention and control** of pollution arising from industrial activities.
- It also lays down rules designed to prevent or, where that is not practicable, to reduce emissions into air, water and land and to prevent the generation of waste, in order to achieve a **high level of protection of the environment taken as a whole** (integrated approach).
- Protection of **human health**.

PRINCIPLES OF THE INDUSTRIAL EMISSIONS DIRECTIVE (IED)

- Integrated approach
- BAT – Best Available Techniques, BREFs, BAT Conclusions
- Elements of flexibility
- Monitoring, environmental inspections, reporting
- Public participation

ENVIRONMENTAL REQUIREMENTS (ART. 11 IED)

Any industrial installation which carries out the activities listed in Annex I to the IED must meet certain **general principles governing the basic obligations of the operator**:

- a) all the appropriate **preventive measures** are taken against pollution;
- b) the **Best Available Techniques (BAT)** are applied;
- c) **no significant pollution** is caused;
- d) the generation of **waste is prevented** in accordance with Directive 2008/98/EC;
- e) where **waste** is generated, it is, in order of priority and in accordance with Directive 2008/98/EC, **prepared for re-use, recycled, recovered** or, where that is technically and economically impossible, it is **disposed** of while avoiding or reducing any impact on the environment;
- f) **energy** is used efficiently;
- g) the necessary measures are taken to **prevent accidents** and limit their consequences;
- h) the necessary measures are taken upon **definitive cessation of activities** to avoid any risk of pollution and return the site of operation to the satisfactory state defined in accordance with Article 22.

DEFINITION OF 'INSTALLATION' – ART. 3(3) IED

'**installation**' means a **stationary technical unit** within which

- one or more activities listed in [Annex I](#) or
- in Part 1 of Annex VII¹⁾ are carried out,

and any other **directly associated activities** on the same site which have a technical connection with the activities listed in those Annexes and which could have an **effect on emissions and pollution**;

1) activities using organic solvents

OBLIGATION TO HOLD A PERMIT & GRANTING OF A PERMIT (ART. 4 & 5 IED)

- Member States shall take the necessary measures to ensure that **no installation** or combustion plant, waste incineration plant or waste co-incineration plant **is operated without a permit**.
- The competent authority shall grant a permit if the installation complies with the requirements of IED
- Member States shall take the measures necessary to ensure that the **conditions** of, and the **procedures** for the granting of, the permit are **fully coordinated** where
 - more than one competent authority or
 - more than one operator is involved or
 - more than one permit is granted,in order to **guarantee an effective integrated approach** by all authorities competent for this procedure.

PERMIT CONDITIONS – AN INTEGRATED APPROACH (ART. 14 IED)

The purpose of the Directive is to ensure a high level of **protection of the environment taken as a whole**.

→ **Permits** must take into account the **whole environmental performance** of the plant, based on appropriate information given in the application for a permit (Art. 12 IED), covering e.g.

- emissions to air, water and land (ELVs) and suitable emission monitoring requirements,
- monitoring and management of waste generated,
- use of raw materials, energy efficiency, noise,
- prevention of accidents, and restoration of the site upon closure.
- permit includes reporting obligations on basis of results of emission monitoring

ONE PRINCIPLE OF IED - BETTER APPLICATION OF BAT

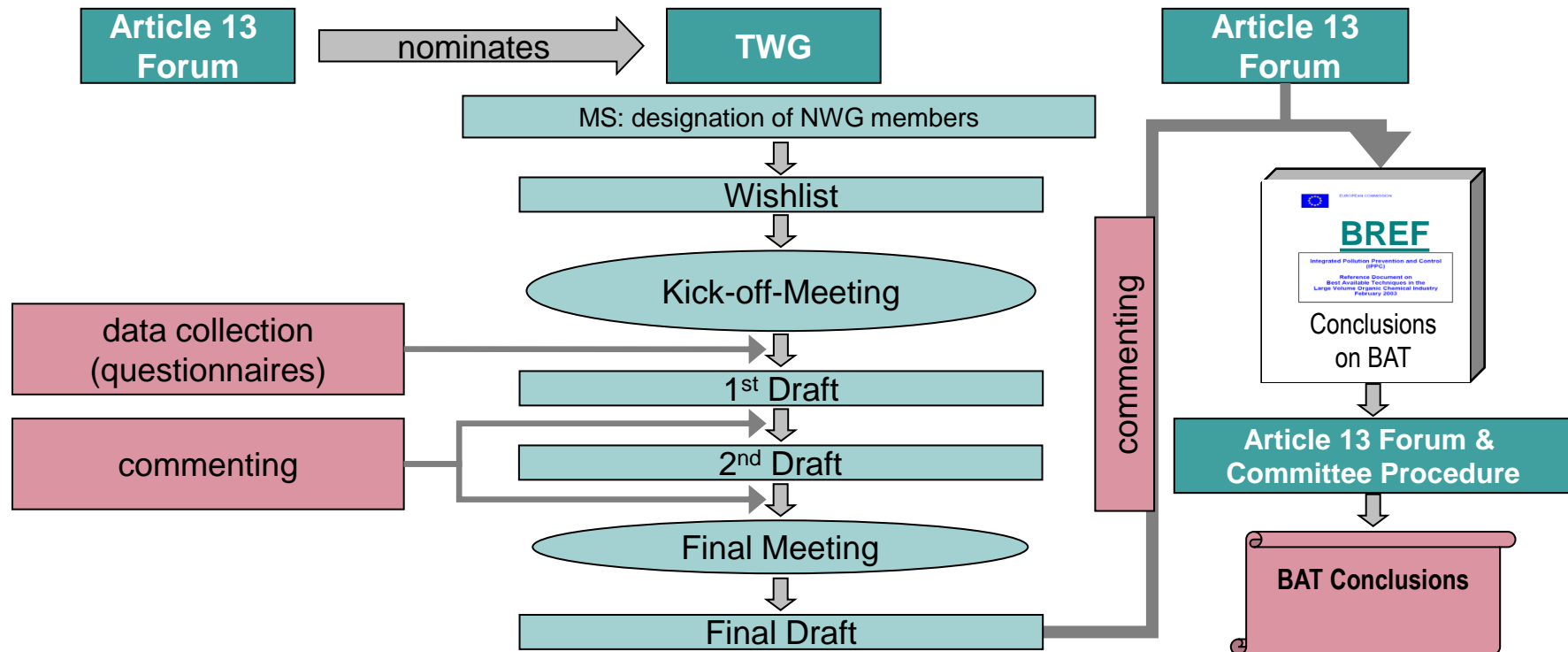
- **Strengthening the BAT principle**

- BAT conclusions shall be the reference for setting the permit conditions (Art. 14(3))
- Competent authority shall set ELVs that ensure that, under normal operating conditions, emissions do not exceed the BAT AELs (Art. 15(3))

- **BAT Conclusions** particularly containing the parts of a BREF laying down the conclusions on BAT incl. BAT AELs

- Decisions on the BAT conclusions shall be adopted in accordance with the regulatory procedure referred to in Art.75(2).
→ **implementing act** (Art. 13(5 & 6))

SEVILLA PROCESS (ART. 13 IED)



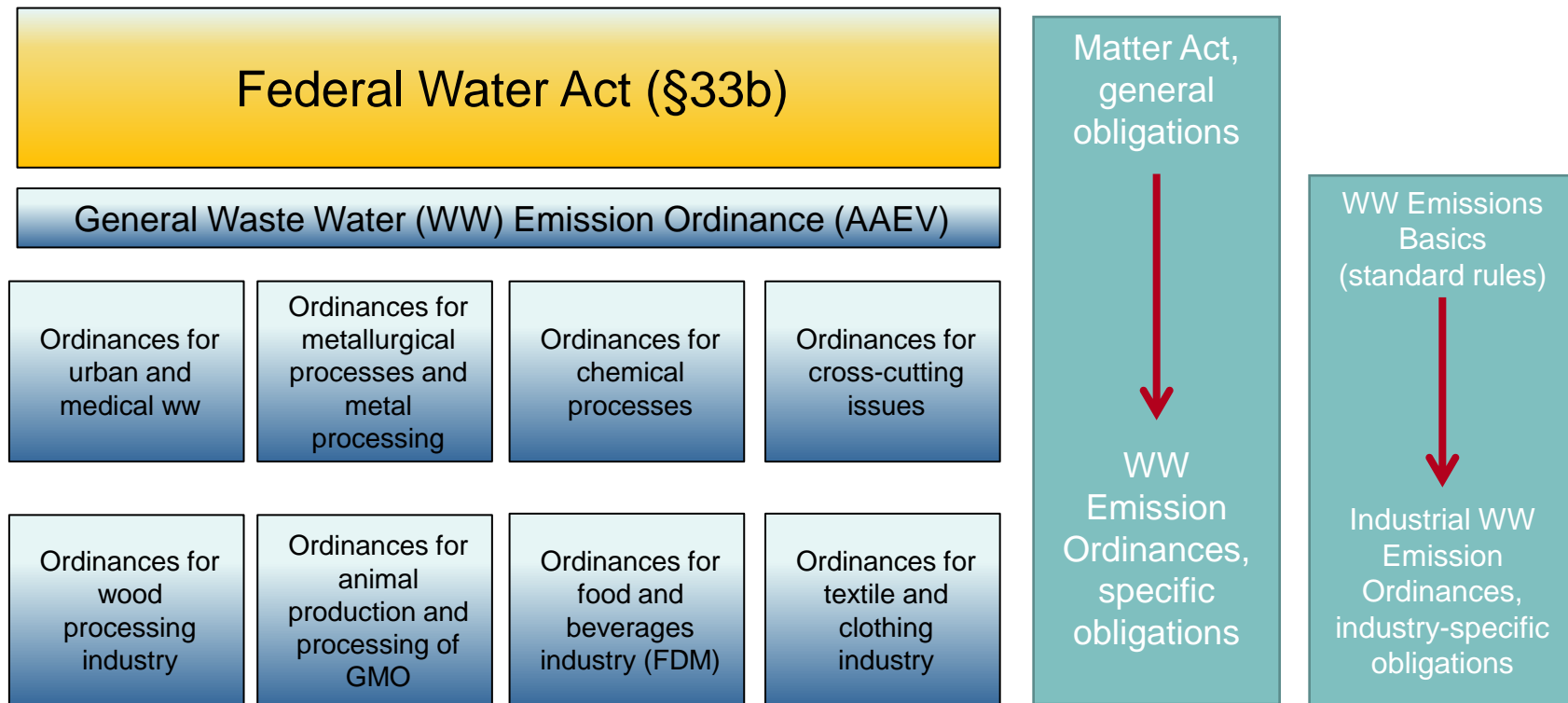
BAT CONCLUSIONS – PUBLICATION & IMPLEMENTATION

Best Available Techniques Reference Document (BREF)	Date of BATC publication	Implementing BATC in permit until
<u>Iron and Steel Production</u>	08.03.2012	08.03.2016
<u>Manufacture of Glass</u>	08.03.2012	08.03.2016
<u>Tanning of Hides and Skins</u>	16.02.2013	16.02.2017
<u>Production of Cement, Lime and Magnesium Oxide</u>	09.04.2013	09.04.2017
<u>Production of Chlor-alkali</u>	11.12.2013	11.12.2017
<u>Production of Pulp, Paper and Board</u>	30.09.2014	30.09.2018
<u>Refining of Mineral Oil and Gas</u>	28.10.2014	28.10.2018
<u>Wood-based Panels Production</u>	24.11.2015	24.11.2019
<u>Common Waste Water and Waste Gas Treatment/ Management Systems in the Chemical Sector</u>	09.06.2016	09.06.2020
<u>Non-ferrous Metals Industries</u>	30.06.2016	30.06.2020
<u>Intensive Rearing of Poultry and Pigs</u>	21.02.2017	21.02.2021
<u>Large Combustion Plants</u>	17.08.2017	17.08.2021
<u>Production of Large Volume Organic Chemicals</u>	07.12.2017	07.12.2021

BEST AVAILABLE TECHNIQUE CONCLUSIONS

- BATC to be implemented 4 years after publication in legal gazette
- BATC regarding WW are implemented in sector specific WWEOs (Art. 6 IED implementing in general binding legal regulations)

WASTEWATER EMISSION ORDINANCES I



BAT CONCLUSION IMPLEMENTATION IN AUSTRIA (WATER)

BAT Conclusions	Waste Water Emission Ordinances
<u>Iron and Steel Production</u>	<u>AEV Eisen - Metallindustrie (BGBl. II Nr. 202/2014)</u>
<u>Manufacture of Glass</u>	<u>AEV Glasindustrie (BGBl. II Nr. 203/2014)</u>
<u>Tanning of Hides and Skins</u>	<u>AEV Gerberei (BGBl. II Nr. 329/2014)</u>
<u>Production of Cement, Lime and Magnesium Oxide</u>	no BAT conclusions for water
<u>Production of Chlor-alkali</u>	<u>AEV Chlor-Alkali-Elektrolyse (BGBl. II Nr. 59/2017)</u>
<u>Production of Pulp, Paper and Board</u>	<u>AEV Zellstoff und Papier (BGBl. II Nr. 62/2018)</u>
<u>Refining of Mineral Oil and Gas</u>	„AEV Erdölverarbeitung“ not yet adjusted
<u>Wood-based Panels Production</u>	„AEV Holzwerkstoffe“ not yet adjusted
<u>Common Waste Water and Waste Gas Treatment/ Management Systems in the Chemical Sector</u>	CWW BAT Conclusions do not trigger any need for adjustment
<u>Non-ferrous Metals Industries</u>	„AEV Nichteisen-Metallindustrie“ not yet adjusted
<u>Intensive Rearing of Poultry and Pigs</u>	(no) waste water
<u>Large Combustion Plants</u>	„AEV-Rauchgasreinigung und AEV-Abluftreinigung“ not yet adjusted
<u>Production of Large Volume Organic Chemicals</u>	„AEV-Organische Chemikalien“ not yet adjusted

UPDATING OF ORDINANCES I

- Requirements and recommendations of EU (zB BAT Conclusions)
- Revision of permits
- Data (EmReg, self-monitoring, extern monitoring...)
- State of the Art Study (e.g. Umweltbundesamt)
- Literature

UPDATING OF ORDINANCES II - COMPOSITION OF WORKING GROUP

- Legal department of BMNT
- Technical department of BMNT
- Experts from competent authorities
- Chamber of commerce
- Representatives of IED installations and not-IED installations
- Specialized institutions (if required)

UPDATING OF ORDINANCES III - POLITICAL PROCESS

- Commenting, opinion phase
- Mutual agreement between Ministries
- Announcement

WASTEWATER EMISSION ORDINANCES II

- Scope & principles of wastewater (WW) treatment
- State of the WW treatment techniques (BAT)
- Emission limit values (ELVs)
 - Direct discharge
 - Indirect discharge
- Monitoring
- Analytical standards, methods

WASTEWATER EMISSION ORDINANCES III

- Emission limit values direct discharge
 - Not binding per se
 - Binding if included in permit

WASTEWATER EMISSION ORDINANCES IV - STRUCTURE

- § 1 **Scope** (for which emission applies the AEV, for which it does not apply),
State of avoidance, retention and cleaning/treatment technology...
- § 2 List of hazardous wastewater pollutants (relevant priority substances)...
- § 3 and 4 Compliance convention for self-monitoring and external monitoring;
e.g. 4 of 5 rule...
- § 5 Transitional provisions (when does the VO apply, when does a company
have to amend?)...
- § 6 (if applicable) Implementation of legal acts of the European Union

WASTEWATER EMISSION ORDINANCES V - STRUCTURE

Appendix A

- Emission limit values for direct and indirect discharge
- For heterogenous sectors more appendices

Appendix B

- Analytical/measurement methods

<https://www.bmnt.gv.at/wasser/wasserqualitaet/abwasserreinigung/nahrungsproduktion.html>

WASTEWATER EMISSION ORDINANCES VI - ADVANTAGES OF SECTOR SPECIFIC ORDINANCES

- Focus on characteristic wastewater parameters
- Emission limit values in consideration of sector specific wastewater composition
- Focus on relevant hazardous & non-hazardous priority substances
- Abatement techniques in consideration of sector specific wastewater composition

WASTEWATER EMISSION ORDINANCES VII - CHALLENGES OF SECTOR SPECIFIC ORDINANCES

- Sector determination
- Heterogenous sectors
- Incorporation of BATC due to different sector determination (scopes - IED vs sector specific WWEOs)
 - 33 BREFs and/or BATC
 - 62 sector specific WWEOs

CHALLENGES OF BATC IMPLEMENTATION I

- One BREF can affect more than one WWEO
 - e.g. BREF Non-ferrous Metals Industries vs WWEO on Non-ferrous Metals Industries, WWEO on Precious Metals and Mercury, WWO on Coal Processing
- Several BREFs can affect one WWEO
 - e.g. WWEO on Inorganic Chemicals vs BREF Production of Speciality Inorganic Chemicals, BREF Large Volume Inorganic Chemicals – Ammonia, Acids and Fertilisers, BREF Large Volume Inorganic Chemicals – Solids and Others Industry

CHALLENGES OF BATC IMPLEMENTATION II

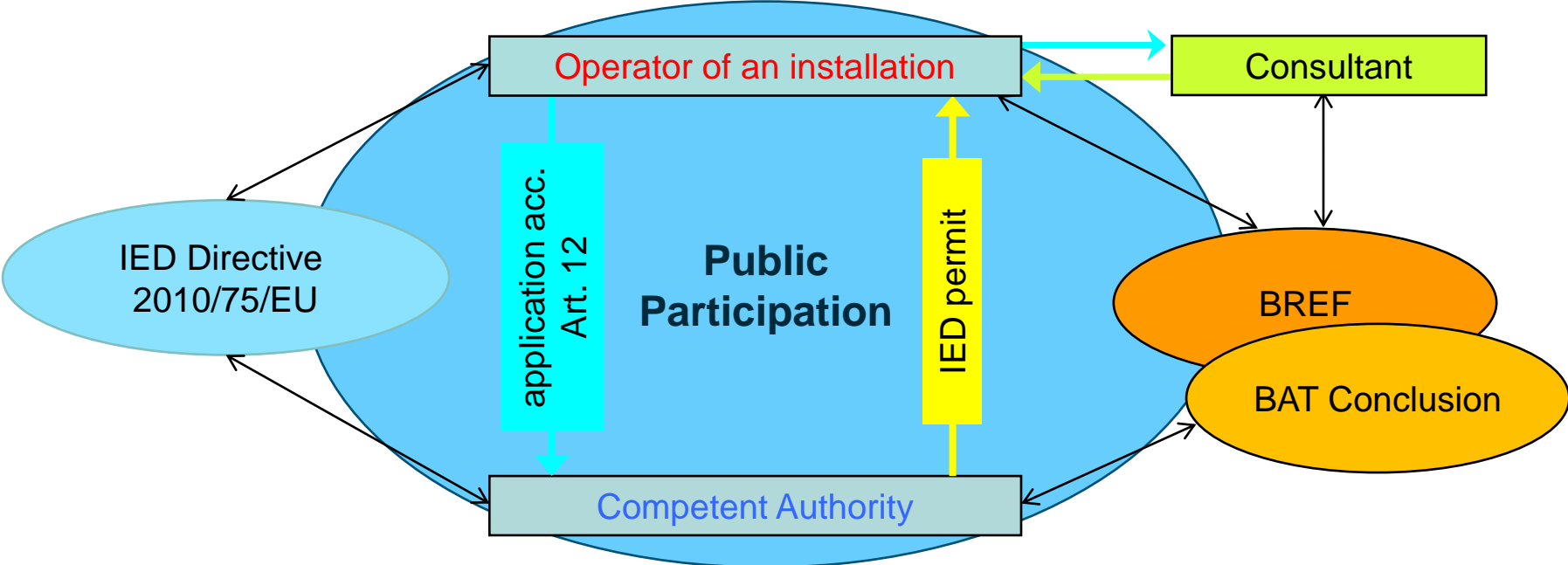
Different averaging periods of emission limit values

- WWEOs: Daily averages, e.g. flow proportional daily composite samples (24 h) or spot samples of one day
- BREFs: Daily averages, monthly averages, annual averages
 - Monthly and annual averages do not allow monitoring of actual state!!!

CHALLENGES OF BATC IMPLEMENTATION III

- BREFs are relevant for IED installations
 - WWEOs are relevant for IED and not-IED installations
- BREFs do not cover indirect discharge
 - WWEOs cover indirect discharge
- BREFs do not specify transgression conventions
 - WWOs specify transgression conventions („4 out of 5“ rule)

PERMIT ISSUANCE PROCESS – APPLICATION OF BAT



PERMIT ISSUANCE PROCESS IN AUSTRIA (FWA)

- An **application** is always needed in order to start the process of granting a permit in accordance with water legislation. This application must be submitted to the competent water legislation authority. (§103)
- **Pre-check process** – effects on public interests expected? (§ 104)
- **Investigation** – wide range of evidence is considered, involvement of experts (§ 108)
- **Hearing** – to be carried out at the concerned location (§ 107)
- **Decision** via administrative ruling (§ 111)
- **Review procedure** after completion

CONTACT & INFORMATION

Helmut Frischenschlager

helmut.frischenschlager@umweltbundesamt.at

Umweltbundesamt

www.umweltbundesamt.at



Study Visit Tour Austria in the Frame of SEIS
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