

## CLASSIFICATION OF INDUSTRIAL WASTE WATER & MAJOR WATER POLLUTANTS

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# PRTR-REGULATION I

- PRTR: REGULATION (EC) No 166/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 18 January 2006 concerning the establishment of a European Pollutant Release and Transfer Register and amending Council Directives 91/689/EEC and 96/61/EC
- Goal: to establish an integrated pollutant release and transfer register at Community level in the form of an publicly accessible electronic database
- 65 activities in 9 sectors:
- Regulation: Legally binding and directly

1. Energy sector	6. Paper and wood production and processing
2. Production and processing of metals	7. Intensive livestock production and aquaculture
3. Mineral industry	8. Animal and vegetable products from the food and beverage sector
4. Chemical industry	9. Other activities
5. Waste and wastewater management	

# PRTR-REGULATION II

- The Register includes
  - pollutant releases to air, water and land
  - off-site transfers of hazardous and non-hazardous waste and of pollutants in waste water
  - from a list of 91 key pollutants including heavy metals, pesticides, greenhouse gases and dioxins
  - for the year 2007 onwards
- Information on releases and transfers resulting as totals of all deliberate, accidental, routine and non-routine activities at the site of the facility
- For each pollutant it has to be indicated whether the data has been measured (M), calculated (C) or estimated (E)

# PRTR-REGULATION III

- Operators have to report in the case that:
  - activities that are listed in Annex I of the EU PRTR Regulation are carried out and the capacity thresholds for the Annex I activity is exceeded
  - If the first point applies:  
the annual pollutant releases and transfers to air, water and soil exceeding the Annex II pollutant thresholds
- About 280 facilities in Austria
- About 28,000 facilities in EU and EFTA countries

# ACTIVITIES ACCORDING TO PRTR

- Annex I, Regulation (EC) No 166/2006 & [E-PRTR Guidance Document](#)

L 33/8	EN	Official Journal of the European Union	4.2.2006
ANNEX I			
Activities			
No	Activity	Capacity threshold	
1.	Energy sector		
(a)	Mineral oil and gas refineries	* (*)	
(b)	Installations for gasification and liquefaction	*	
(c)	Thermal power stations and other combustion installations	With a heat input of 50 megawatts (MW)	
(d)	Coke ovens	*	
(e)	Coal rolling mills	With a capacity of 1 tonne per hour	
(f)	Installations for the manufacture of coal products and solid smokeless fuel	*	
2.	Production and processing of metals		
(a)	Metal ore (including sulphide ore) roasting or sintering installations	*	
(b)	Installations for the production of pig iron or steel (primary or	With a capacity of 2,5 tonnes per hour	

## Appendix 5: Indicative sector specific sub-list of water pollutants








Pollutant no			12	13	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50				
		Pollutant name	Total nitrogen	Total phosphorus	Arsenic and compounds (as As)	Cadmium and compounds (as Cd)	Chromium and compounds (as Cr)	Copper and compounds (as Cu)	Mercury and compounds (as Hg)	Nickel and compounds (as Ni)	Lead and compounds (as Pb)	Zinc and compounds (as Zn)	Alachlor	Aldrin	Atrazine	Chlordane	Chlordane	Chlorfenvinphos	Chloro-alkanes, C <sub>6</sub> -C <sub>13</sub>	Chlorpyrifos	DDT	1,2-dichloroethane (EDC)	Dichloromethane (DCM)	Dieldrin	Duron	Endo sulphathion	Endrin	Halogenated organic compounds (as AOX)	Heptachlor	Hexachlorobenzene (HCB)	Hexachlorobutadiene (HCBD)	1,2,3,4,5,6-hexachlorocyclohexane (HCH)	Lindane	Mirex	PCDD + PCDF (dioxins + furans) (as Teq)	Pentachlorobenzene	Pentachlorophenol (PCP)	Polychlorinated biphenyls (PCBs)				
no	b	activity																																								
1		<b>Energy sector</b>																																								
	(a)	Mineral oil and gas refineries	•	•	•	•	•	•	•	•	•	•											•													•	•					
	(b)	Installations for gasification and liquefaction	•	•	•	•	•	•	•	•	•	•											•														•	•				
	(c)	Thermal power stations and other combustion installations	•	•	•	•	•	•	•	•	•	•																									•					
	(d)	Coke ovens	•	•	•						•	•																									•					
	(e)	Coal rolling mills																																								
	(f)	Installations for the manufacture of coal products and solid smokeless fuel	•	•	•	•	•	•	•	•	•	•								•			•																			
2		<b>Production and processing of metals</b>																																								
	(a)	Metal ore (including sulphide ore) roasting or sintering installations	•	•	•	•	•	•	•	•	•	•																														
	(b)	Installations for the production of pig iron or steel (primary or secondary melting) including continuous casting	•	•	•	•	•	•	•	•	•	•																														
	(c)	Installations for the processing of ferrous metals	•	•	•	•	•	•	•	•	•	•																														
	(d)	Ferrous metal foundries	•	•	•	•	•	•	•	•	•	•																														
	(e)	Installations for the production of non-ferrous crude metals from ore, concentrates or secondary raw materials by metallurgical, chemical or electrolytic processes and for the smelting, including the alloying, of non-ferrous metals, including recovered products (refining, foundry casting, etc.)	•	•	•	•	•	•	•	•	•	•																														
	(f)	Installations for surface treatment of metals and plastic materials using an electrolytic or chemical process	•	•	•	•	•	•	•	•	•	•																														

# ACTIVITIES ACCORDING TO IED

- BREFs/BATC of several activities according to Annex I, Directive 2010/75/EU

17.12.2010	EN	Official Journal of the European Union	L 334/51
<i>ANNEX I</i>			
<b>Categories of activities referred to in Article 10</b>			
<p>The threshold values given below generally refer to production capacities or outputs. Where several activities falling under the same activity description containing a threshold are operated in the same installation, the capacities of such activities are added together. For waste management activities, this calculation shall apply at the level of activities 5.1, 5.3(a) and 5.3(b).</p>			
<p>The Commission shall establish guidance on:</p>			
<p>(a) the relationship between waste management activities described in this Annex and those described in Annexes I and II to Directive 2008/98/EC; and</p>			
<p>(b) the interpretation of the term 'industrial scale' regarding the description of chemical industry activities described in this Annex.</p>			
<p>1. Energy industries</p>			
<p>1.1. Combustion of fuels in installations with a total rated thermal input of 50 MW or more</p>			

# REFERENCE DOCUMENTS UNDER THE IPPC DIRECTIVE AND THE IED

Best available techniques Reference document (BREFs) developed under the IPPC Directive and the IED		Code	Adopted/Published Document	Formal draft (*)	Meeting report	Estimated review start (**)
	Ceramic Manufacturing Industry	CER	BREF (08.2007)			2018/2019
	Common Waste Water and Waste Gas Treatment/ Management Systems in the Chemical Sector	CWW	<a href="#">BATC</a> (06.2016) BREF			
	Common Waste Gas Treatment in the Chemical Sector	WGC			<b>MR</b> ( 09.2017 and 03.2018)	Drawing up started
	Emissions from Storage	EFS	BREF (07.2006)			
	Energy Efficiency	ENE	BREF (02.2009)			
	Ferrous Metals Processing Industry	FMP	BREF (12.2001)		<b>MR</b> (11.2016)	
						



# MAJOR WATER POLLUTANTS IN CWW BREF I

## 2. Monitoring

BAT 3. For relevant emissions to water as identified by the inventory of waste water streams (see BAT 2), BAT is to monitor key process parameters (including continuous monitoring of waste water flow, pH and temperature) at key locations (e.g. influent to pretreatment and influent to final treatment).

BAT 4. BAT is to monitor emissions to water in accordance with EN standards with at least the minimum frequency given below. If EN standards are not available, BAT is to use ISO, national or other international standards that ensure the provision of data of an equivalent scientific quality.

Substance/parameter	Standard(s)	Minimum monitoring frequency <sup>(1)</sup> <sup>(2)</sup>
Total organic carbon (TOC) <sup>(3)</sup>	EN 1484	Daily
Chemical oxygen demand (COD) <sup>(3)</sup>	No EN standard available	
Total suspended solids (TSS)	EN 872	
Total nitrogen (TN) <sup>(4)</sup>	EN 12260	

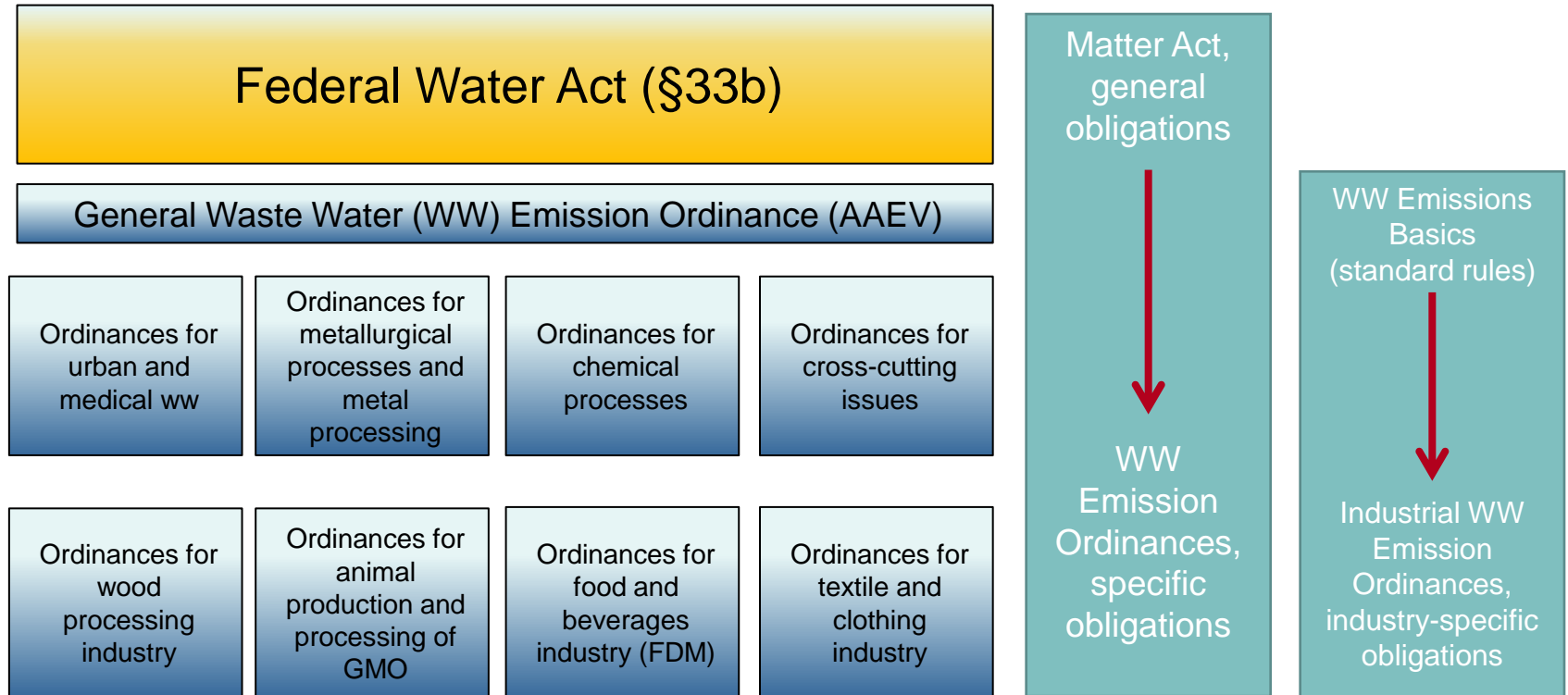
# MAJOR WATER POLLUTANTS IN CWW BREF II

Table 3

## BAT-AELs for direct emission of AOX and metals to a receiving water body

Parameter	BAT-AEL (yearly average)	Conditions
Adsorbable organically bound halogens (AOX)	0,20-1,0 mg/l <sup>(1)</sup> <sup>(2)</sup>	The BAT-AEL applies if the emission exceeds 100 kg/yr.
Chromium (expressed as Cr)	5,0-25 µg/l <sup>(3)</sup> <sup>(4)</sup> <sup>(5)</sup> <sup>(6)</sup>	The BAT-AEL applies if the emission exceeds 2,5 kg/yr.
Copper (expressed as Cu)	5,0-50 µg/l <sup>(3)</sup> <sup>(4)</sup> <sup>(5)</sup> <sup>(7)</sup>	The BAT-AEL applies if the emission exceeds 5,0 kg/yr.
Nickel (expressed as Ni)	5,0-50 µg/l <sup>(3)</sup> <sup>(4)</sup> <sup>(5)</sup>	The BAT-AEL applies if the emission exceeds 5,0 kg/yr.
Zinc (expressed as Zn)	20-300 µg/l <sup>(3)</sup> <sup>(4)</sup> <sup>(5)</sup> <sup>(8)</sup>	The BAT-AEL applies if the emission exceeds 30 kg/yr.

# 62 BRANCH-SPECIFIC WASTEWATER EMISSION ORDINANCES I



# 62 BRANCH-SPECIFIC WASTEWATER EMISSION ORDINANCES II (E.G. WWEO TANNERIES)

		<b>Anlage A</b>	
		<b>Emissionsbegrenzungen gemäß § 1</b>	
		I) Anforderungen an Einleitungen in ein Fließgewässer	II) Anforderungen an Einleitungen in eine öffentliche Kanalisation
<b>A 1</b>	<b>Allgemeine Parameter</b>		
1.	Temperatur	30 °C	30 °C
2.	Fischtoxizität G <sub>F</sub> a)	4	keine Beeinträchtigungen der biologischen Abbau- vorgänge
3.	Absetzbare Stoffe b)	0,3 ml/l	10 ml/l c)
4.	pH-Wert	6,5–8,5	6,0–9,5
<b>A 2</b>	<b>Anorganische Parameter</b>		
5.	Aluminium ber. als Al	2,0 mg/l	durch Absetzbare Stoffe begrenzt
6.	Arsen ber. als As	0,1 mg/l	0,1 mg/l
7.	Chrom – Gesamt	1,0 mg/l	3,0 mg/l

# MAJOR WATER POLLUTANTS ACCORDING TO EMREG (EMREGV-OW, BGBl. II 207/2017)

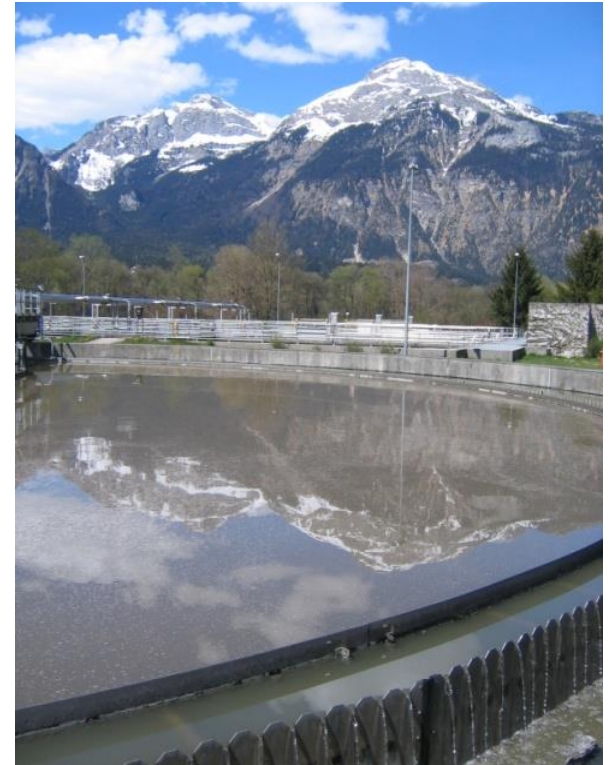
- emission data such as
- the annual wastewater volume in cubic meters
- annual loads of substances in kilograms for the reporting year (notification parameters)
  - regulated in the permit,
  - the sector-specific priority substances (Annex C of the EmRegV-OW)
  - other relevant substances in accordance with Annex B of the [EmRegV-OW](#)

# CONTACT & INFORMATION

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Study Visit Tour Austria in the Frame of SEIS  
Vienna ● 16 - 20.07.2018