

Annex B - Comments on the draft CAK BREF representing the view of certain members of the forum

Comment No.	Comments from (forum Member)	Chapter No. / section No. (if available)						Chapter title	Page # (pdf version)	BATC #	Comment description	Rationale	Proposed amendment
1	Austria						General			In the Final Draft BREF there are many links to the CWW BREF which is currently under revision.	Care has to be taken that the waste water issues not handled in the BREF CAK will be dealt in the CWW BREF.		
2	Slovakia	4	1	2				142		Table 4.6: Some of the published costs of conversion are now quite too old and not really relevant anymore (inflation).	There is a wide range depending on the individual circumstances.	A sentence should emphasise that these costs are only examples, to avoid raising erroneous expectations from Authorities/NGOs that conversion is easily affordable!	
3	Bulgaria	5						253		The BAT conclusions do not contain specific consumption levels for use of water, energy, raw materials, auxiliary materials and fuels, as for the waste recovery and waste.	The lack of this information provides the basis for the wide application of the IED Art. 14.6. According to the definition of BAT conclusion, such consumption levels are mandatory and should be included in the conclusions.		
4	Spain	5	2					257	2	In the scope of the BREF document, conversion of mercury cell plants to membrane cell plants is included. This is a process and therefore should be included. Also there is a detailed description in chapter two of mercury cell process (section 2.2.) and in chapter three consumption and emission data is provided for mercury cell plants, therefore they have been given consideration. Furthermore In determining BATAEL's data from mercury cell plants was included in this determination. This is not consistent with the principal of not including them in the BAT conclusions.	The objective is this proposal is to provide information in order to control and even, to reduce the level of emissions of the existing mercury cell plants during their remaining life. Clearly expressing that mercury cell technology is not BAT.	The proposal is to include in BAT 2, not only the decommissioning of mercury cell plants, but also the phase out period before decommissioning of such installations. It was the intention of those delegations to include information about how to operate those plants according to the best performance techniques applicable to them, and also to detail Indicative levels of the emissions that could be achieved.	
5	Czech Republic, Slovakia	5	6					262	10	It is good it will be used only for new cells (installations). But our opinion is: the matter concerning refrigeration should be covered in the horizontal BREF (Industrial Cooling Systems).	The matter concerning refrigeration for other chemical industrial processes is covered in the horizontal BREF (Industrial Cooling systems).	No 10 in chapter 5.6. should be excluded.	
6	Czech Republic, Slovakia	5	7					264	13	It is not clear how the level BAT-AEL was determined. In the chapters (4.3.6.3.3 - 4.3.6.3.7) other input data are described. These data have no unit of concentration.	Level of BAT - AEL must be described for every suitable technique. Only this approach is possible. If this is not done when some technique is applied, some can be in advantage of another. It is not possible to determine only (0,05 - 0,2 mg/l).	Revise level of BAT-AEL for all techniques that are used in chapter (5.7.13.)	
7	Germany	5	7					264	13	In particular the point where the BAT-AEL refers to. The reference point to which the BAT-AEL for free chlorine refers seems to be unclear to us. On the one hand, BAT 13 states that it has to be ensured that the treatment of waste water streams containing free chlorine is carried out as close as possible to the source. (The rationale for that is that only at this point the undesirable stripping of Cl2 into air and the unwanted formation of chlorinated organic substances downstream of the release of free Cl2 into water can be avoided.) On the other hand, and obviously seeking a compromise, BAT # 13 includes the sentence that the BAT-AEL refers to the point "where the emission leaves the installation" (a wording taken from the IED Art. 15(1)). We think this is either confusing or contradicts at least partially the rest of the sentence.	The elimination of free chlorine in water is considered to be a process-integrated technique which shall be applied as close as possible to the point where free chlorine is first released from the chlor alkali plant into water. Otherwise there is a risk that Cl2 is shifted from water to air (stripping) or that it reacts with available organic substances in the water forming halogenated organics (AOX). In this sense, "emissions of free chlorine in water" are possibly not correctly described as an "emission" in the sense of IED and Art. 3 (4) in connection with Art. 15(1) IED. We think it is not appropriate to establish a BAT-AEL for free Cl2 and consequently an emission limit value at the point where Cl2 leaves the "installation" as defined in Art. 3(3). From the technical point of view, the BAT-AEL in this case shall apply at the source of the pollution. We therefore think, it should be presented as such, i.e. as emission level that applies to the stationary technical unit where the chlorine production is carried out and the pollutant is first released. This shall not include, in this case, other directly associated activities on the same site which have a technical connection with the chlor alkali plant (e.g. a biological waste water treatment plant) because before, it would be either stripped to the atmosphere or have reacted with other pollutants. This is obviously not what the BAT# 13 is aiming at. In order to avoid confusion of "normal BAT-AELs" with this process-integrated technique, possibly it would be preferable to look for another way of presentation for this pollutant.	We think it would be clearer and technically more appropriate to delete the concerned part of the sentence so that BAT 13 would read better: "The BAT-associated emission level for free chlorine, expressed as Cl2, is 0.05 – 0.2 mg/l in spot samples taken at least once every month while ensuring that the treatment of waste water streams containing free chlorine is carried out as close as possible to the source, to prevent stripping of chlorine and/or the formation of halogenated organic compounds." Accordingly the monitoring of free chlorine shall be carried out as close to the source. As a consequence, the requirement to the sampling point for free chlorine in BAT 7 should be changed from "where the emission leaves the installation" to "close to the source". Another option could be not to use a BAT-AEL for free chlorine in water at all, and use a wording that describes the BAT and the associated level, but not in the sense of a BAT-AEL. This would allow for referring to a process-integrated technique and its performance and make it possible to set a reasonable reference point close to the source. This also would follow the spirit of the IE Directive, i.e. its integrated approach, giving priority to intervention at source, and avoiding the shifting of pollution from one medium to another.	
8	Austria	5						266	15	More waste water parameters (halogenated organic compounds - AOX, chlorate, bromate, sulphate, Fe, Ni and chloride) should be regulated under the revised Draft than in the BREF 2001, not less.	Relevant emission parameters should be regulated through BAT-AELs, even if only few emission data (from well performing plants) are available. Especially, it should not be possible that there are BAT-AELs in the old BREF (2001) and that there are none in the revised Draft BREF of 2013. E.g. there was a chlorate and bromate level associated with BAT in the brine circuit in the BREF of 2001, but there is none in the Draft BREF of 2013.		
9	Austria, Slovakia	7						280		Agree that chlorine and sodium hydroxide are inorganic chemicals produced in large volume with continuous process. But in favour of a stand alone CAK BREF and not merger of the CAK BREF with another chemical BREF (e.g. LVIC AAF or LVIC S).	The review of the BREF CAK showed that the results of the review process are better if the scope of the BREF is clearly defined and not too wide (like e.g. Draft BREF on Non Ferrous metals which is divided into many sub-chapters).		