Overall comment No	Comments from (Forum Member)	Chapter No. / section No. (if available)							Chapter title (only if there is no section or chapter No.)	BAT # (if applicable)	Page # (PDF version)	Comment description	Rationale	Proposed amendment
1	Denmark								General			We welcome EIPPCB focus in addressing BAT conclusions that only specify specific technologies be used without a conversion into an achievable emission limit value. The attempt to elaborate these BAT conclusions with specific emission limit values are fully recognized, as it is not possible under IED to require that a particular technology be used; only that specific emission limit values to be complied. If a BAT conclusion only holds a list of possible techniques to be applied then the BREFs will actually define which processes that the industry need to use. This is of cause not the intent of the documents.		A suggestion to make it more apparant that the technigues listed are not prescriptive could be to add "for instance" at each BAT conclusion holding such a list. Thus the text will read: "…, BAT is for instance to use one or a combination of the following techniques:"
2	Portugal								General			The whole work of reviewing this BREF was based on the previous directive IPPC. BAT and respective ELVs did not take into consideration the new guidelines, which were developed later. The approach of DEI, reinforcing the role of BREF in setting permit conditions in IPPC installations, requires the need of a rigorous evaluation of the data used to set BAT conclusions. Even taking into consideration that the definition of BAT was not altered, the guidance document sets important rules to take into account for establishing BAT and ELV, and that didn't exist under the IPPC Directive. As the quality control was established only in 2012, rather later then the data collection period of this BREF, it is not possible to verify that this methodology was always followed. So we do not question the technical work of the TWG or EIPPCB. However, we have doubts if the BAT conclusions meet the requirements of IED and of Decision 2012/119/EU. Therefore we consider that BAT conclusions for BREF CLM should only be set when a new revision of this BREF takes place.		
3	Bulgaria	4										The BAT conclusions do not contain specific consumption levels for use of raw materials, auxiliary materials and fuels, as for the waste recovery and waste.		According to the definition of BAT conclusion, such consumption levels are mandatory and should be included in the conclusions.
4	Bulgaria	4										There are no specific conclusions regarding the use (or absence of use) of water and the formation (or the absence of formation) of waste water from operations. We propose such information to be included in the BAT conclusions.	The lack of this information provides the basis for the wide application of the IED Art. 14.6.	We propose such information to be included in the BAT conclusions.
5	EEB								Scope		xix	General text is not same as in BREF-GLS and BREF-I&S, in particular regarding other other than prescribed techniques being BAT compliant.	Misunderstandings about BAT compliance of other than the described techniques could occur although achieving same or higher level of protection.	Include same general text, in particular highlighting that other than the techniques described can be considered as BAT if these achive the BATAELs respectively the equivalent level of environmental protection.
6	Germany								Scope		xix	The last para is not the same as in the new Scope text included in the BAT conclusions (which is probably as it should be). The para about techniques listed being non-prescriptive in the new Scope text included in the BAT conclusions should be included here as well.	Many of the BAT conclusions are written in a way which gives the impression that specific mentioned techniques must be used to apply BAT. This is not the case and the principle that described techniques are non-prescriptive, it is the achieved level of environmental protection that determines if BAT is applied or not, is so important that it should be high-lighted.	Insert the para about techniques listed being non-prescriptive in the new Scope text included in the BAT conclusion at the end of the Scope text: The techniques listed and described in the BAT conclusions are neither prescriptive nor exhaustive. Other techniques may be used that ensure at least an equivalent level of environmental protection.
7	Sweden								Scope		xix	The last para is not the same as in the new Scope text included in the BAT conclusions (which is probably as it should be). The para about techniques listed being non-prescriptive in the new Scope text included in the BAT conclusions should be included here as well.	Many of the BAT conclusions are written in a way which gives the impression that specific mentioned techniques must be used to apply BAT. This is not the case as the principle is that described techniques are non-prescriptive. It is the achieved level of environmental protection that determines if BAT is applied or not and this is so important that it should be high-lighted.	Insert the para about techniques listed being non-prescriptive in the new Scope text included in the BAT conclusion under a heading 'BAT conclusions' at the end of the Scope the following text: *The techniques listed and described in the BAT conclusions are neither prescriptive nor exhaustive. Other techniques may be used that ensure at least an equivalent level of environmental protection.*
8	Denmark								Scope		xix	The last para is not the same as in the new Scope text included in the BAT conclusions (which is probably as it should be). The para about techniques listed being non-prescriptive in the new Scope text included in the BAT conclusions should be included here as well.	It is not possible under IED to require that a particular technology be used; only that specific emission limit values to be complied. A list of possible techniques to be applied can be misinterpreted as a definition on which processes that the industry need to use. This is not the intend of the documents. Therefore it is importent for this paragraph to be highly visible.	Insert the para about techniques listed being non-prescriptive in the new Scope text included in the BAT conclusion under a heading 'BAT conclusions' at the end of the Scope the following text: *The techniques listed and described in the BAT conclusions are neither prescriptive nor exhaustive. Other techniques may be used that ensure at least an equivalent level of environmental protection.*
9	EEB										0	Avoid using additions as "when possible" in BAT descriptions	It is a task of permit writers to define specific conditions where normal applications are not possible. The BAT texts should describe the best available techniques (which have as a condition that they can usually applied in the sector). If restrictions of the technique are known they should be precise. A wording like "where possible" could be misinterpreted as an open door to a broad range of reasons hindering the installation at a specific plant.	Delete "when possible", "whenever practicable" and similar expressions in all BAT descriptions.
10	Denmark								Quality			The adding of applicability have been used in several BAT conclusions under a description of the technique, making the wording of the BAT conclusions imprecise: (Concernes BAT 15 d +f, 29b, 41g, 54a+b and 67.)	Technical restriction of a technique should be listed under "applicability" (if considered necessary). The phrase "when possible" shouldn`t be used without additional explanations on the possible limitations. Local restrictions on the level of an individual plant are normally not addressed by the BREFs which describe BAT in a general sense for the sector as a whole.	Delete the text: "if possible" or "when possible"

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11	Denmark								Quality			The wording of the BAT conclusions are imprecise, given the wording of some of the footnotes: "…for xx the level might be even higher" for instance in BAT conclusion 21 (table 4.3 footnote (1)), BAT 48 and BAT 50 of wording like "if possible", "when possible". As is the use "<" in the range prescribing BAT AELs, which should be transeformed to true ranges. More focus on this will be anticipated in future BREFs.	Imprecise wording in the BAT conclusions poses a problem for the permit writers, since permit writers are forced to find the original and possibly more precise text in the previous chapters (chapter 1, 2 and 3). It also poses another more serious problem, since imprecise wording opens up for the permit writers own interpretation of the wording, thus risking a different implementation of the BAT conclusion in permits. See also our comment number 8.	See proposal in comment number 7, 8, 19 og 20.
12	Slovakia	1	1									The document did not mention directly the BAT on sustainable development, but provides some principles: reducing the availability of primary raw materials and energy-boosting the use of alternative fuels, raw materials/--reducing greenhouse gas emissions (CO2)	In the manufacture of cement is 60% of the CO2 emissions from the calcination of limestone, which is currently technologically unable to work without changes to the mineralogy of the clinker.	Accordingly, it was more clearly referred to.
13	Slovakia	1	1									Use of the term waste fuels or raw materials. In the document stating saving of primary energy/raw materials or material recovery through the ashes. Is a list of conventional fuels in cement industry where (Tab. 1. 7., e.g. also petrolkoks we could include in between the waste fuel. This brings chaos into legislation, whether it is waste fuel, by-product fuel or alternative fuel. In the list of waste fuels, table 1.14. -bone meal as a waste of fuel, which is referred to it is a veterinary product intended to cause.Governed by the EU veterinary legislation, not the legislation relating to waste.	In the cement industry uses the term alternative fuels/raw materials, by-products...	Align the terminology and legislation concerning waste fuels or materials referred to in the document with the practice.
14	Slovakia	1	1								4	In table 1.2, it is stated that Slovakia is currently in operation with rotary oven 6 cement plants for the production of clinker. In fact, there are 4 cement plants works.		Repair the indicated number of Slovakia from 6 to 4.
15	Sweden	4									341	The para about techniques listed being non-prescriptive at the bottom of page 341 should be moved up to the top of the page to make it more visible.	Many of the BAT conclusions are written in a way which gives the impression that specific mentioned techniques must be used to apply BAT. This is not the case as the principle is that described techniques are non-prescriptive. It is the achieved level of environmental protection that determines if BAT is applied or not and this is so important that it should be high-lighted.	Insert the para about techniques listed being non-prescriptive above the Heading Scope and under the heading BAT conclusions): "*The techniques listed and described in these BAT conclusions are neither prescriptive nor exhaustive. Other techniques may be used that ensure at least an equivalent level of environmental protection."*
16	Denmark								General		341	The para about techniques listed being non-prescriptive at the bottom of page 341 should be moved up before the section defining the scope.	It is not possible under IED to require that a particular technology be used; only that specific emission limit values to be complied. A list of possible techniques to be applied can be misinterpreted as a definition on which processes that the industry need to use. This is not the intend of the documents. Therefore it is importent for this paragraph to be highly visible.	Insert the para about techniques listed being non-prescriptive above the Scope heading (under the heading *BAT conclusions*): "*The techniques listed and described in these BAT conclusions are neither prescriptive nor exhaustive. Other techniques may be used that ensure at least an equivalent level of environmental protection."*
17	Austria	4							Scope		342	Please check if to add to the definition of the term called "Sintered dolime" the PRODCOM-number 14.12.20.50.	check definition	Please check if to add to the definition of the term called "Sintered dolime" the PRODCOM-number 14.12.20.50.
18	Sweden	4									342	Clarifying definitions	*"Channelled emissions"* is an important term in some BAT-conclusions. The definition is taken from page 395 in the BREF. "*Normal operating conditions*" is another important term for a correct and uniform implementation of the BAT-AELs given in this document	Add a definition of "channelled emissions" = *Emissions of pollutants into the environment through any kind of pipe, regardless of the shape of its cross-section.* Add a definition of "*normal operating conditions".*
19	Austria	4							Definitions		342	The definition of major upgrade is a sensible one, because a major upgrade usually goes along with a change of permit requirements. We also would like to stress, that this definition is relevant for more than one Bref. -- In CLM-BREF 2010 there were no definition of the term "major upgrade". Thus, the EIPPCB proposal in EIPPCB proposed (in the background paper prior to the TWG (may 2012)) to add a definition of the term "major upgrade" = "An upgrade of the plant/kiln involving a major change in the kiln requirements or technology, or replacement of the kiln and associated equipment". When discussing the definition, the industry wanted to remove "and associated equipment" from the proposed definition. At least Denmark and EEB were against deletion of the text. Sweden proposed to add a definition or description of the term "and associated equipment". EIPPCB responded, to move foreward in the process, to "'keep it open in the following with the possibility to delete". The Danish delegation perceived this so, that the matter would be discussed again when EIPPCB/DG Environment had processed it, like it was the case with many other issues. But they never returned, and during the final presentation of the BAT conclusions on the last day, we regretfully noticed, that the text "and associated equipment" was deleted. When opposing the BAT conclusion we were informed that the matter was never raised again, therefore the deletion was accepted by EIPPCB.	Consistency within the BAT Conclusions text. Avoid interference/misunderstanding with "substantial change" defined in Art. 3 (9) IED and subsequently (different) MS permitting practice. Little added value for BAT Conclusions CLM, because BAT 7 c) makes clear, that a change of the preheater cyclones in a cement kiln is only done for new plants and major upgrades. This definition also makes clear, that a major upgrade may be only related to the cyclone preheater while keeping the rotary kiln, thus supporting the original definition. BAT 35 b) is unmistakable about kiln replacement in the lime industry.	Keep the original EIPPCB Proposal which is supported by text in BAT 7c) or avoid a definition, as the only mentioning in the BAT conclusions CLM is BAT 6 (the energy consumption value for cement), BAT 7 c) (changing the cyclone stages in cement plants - which supports the original definition) and BAT 35b) about selection of lime kilns. Instead of a definition for "major upgrade"a solution may be to add on p. 348, BAT 6 "Description" or "Applicability" a cross reference to BAT 7, p.349). This because BAT 6 is the only place where it is not clear from the text what in meant by major upgrade and BAT 7 is about techniques to reduce energy consumption and their applicability, providing the explanation in 7 c).

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20	Denmark	4							Transeveral Definitions Major upgrade		342	Denmark wish to stress that the handling, and overruling of amongst others Denmarks request, concerning the change to the definition of major upgrade, calls for a better description on the procedure for negotiations.	In CLM-BREF 2010 there were no definition of the term "major upgrade". Thus, the EIPPCB proposal in EIPPCB proposed (in the background paper prior to the TWG (may 2012)) to add a definition of the term "major upgrade" = "An upgrade of the plant/kiln involving a major change in the kiln requirements or technology, or replacement of the kiln and associated equipment". When discussing the definition, the industry wanted to remove "and associated equipment" from the proposed definition. At least Denmark and EEB were against deletion of the text. Sweden proposed to add a definition or description of the term "and associated equipment". EIPPCB responded, to move foreward in the process, to "'keep it open in the following with the possibility to delete". The Danish delegation perceived this so, that the matter would be discussed again when EIPPCB/DG Environment had processed it, like it was the case with many other issues. But they never returned, and during the final presentation of the BAT conclusions on the last day, we regretfully noticed, that the text "and associated equipment" was deleted. When opposing the BAT conclusion we were informed that the matter was never raised again, therefore the deletion was accepted by EIPPCB.	Denmark requests a clarification on the procedure for negotiations, especially on the powers of the chair, dealing with conflicting views, and therefore suggest this to be discussed by the art 13 forum, and would like to make a proposal to be incorporated in the guideline at its first revision in section 4.6.2.3 prior to addressing split views: *1. The TWG shall make every effort to reach agreement on all matters of substance by consensus. If all efforts to reach consensus have been exhausted and no agreement reached, the decision shall, as a last resort, be taken by a two-thirds majority of the representatives present and voting.* *2. A TWG member may appeal against the Chair's ruling. The appeal shall be put to the vote immediately and the Chair's ruling shall stand unless overruled by a majority vote of the representatives present and voting.* Further, as the issue of how to define a major upgrade is equally important at other BREFs then we would like propose that the forum considers the following definition for major upgades:"major upgrade" = "An upgrade of the plant/kiln involving a major change in the kiln requirements or technology, or replacement of the kiln and associated equipment"
21	Denmark								List of reference		342	References in BAT conclusions to previous chapters (1, 2 and 3) have been deleted.	Many of the newly defined BAT conclusions are imprecise for permit writers and thus cannot be directly implementet as reference for setting the permit conditions. Example: Define a new term for ELV for ammonia slip for plants using SNCR: BAT 20 defines BAT-AEL for NH3. BAT AEL is <30-50 mg NH3/Nm3. A footnote states that "the ammonia slip depends on the initial NOx level and on the NOx abatement efficiency, and that for Lepol and long rotary kilns, the level may be ven higher". It is obvious that the permit writer needs knowledge of "initial NOx level" and "NOX abatement efficiency" in order to define the exact ELV. In the original BREF (May 2010) there was a reference to section 1.4.5.1.7), but this reference is missing in the new BAT conclusions. Thus, the permit writer is forced to go through and search the whole of chapter 1 to find info about initial NOx level and NOx abatement efficiency. We acknowledge that BAT conclusions cannot have references, since the BAT conclusion shall be the reference for setting the permit conditions. See also our comment number 6.	Since many of the BAT conclusions are imprecise (at least from the permit writers perspective) we propose to add a list of references from the BAT conclusions to the previous, relevant chapters. References are already given in chapters 1.5, 2.5 and 3.5 of the BREF (May 2010). This list is proposed to include all references stated in the BAT sections 1.5, 2.5 and 3.5 of the CLM BREF (May 2010).
22	Germany	4									344	The sentence under the heading 'Monitoring of emissions' suggests a free choice between EN/ISO and other national/international standards, which does not correspond to the European standardisation policy, as regulated by Directive 98/34/EC ('laying down a procedure for the provision of information in the field of technical standards and regulations and of rules on information society services').	According to the European standardisation policy, as regulated by Directive 98/34/EC, there is a clear hierarchy between international and national norms in order to avoid barriers to trade caused by deviating national standards. I.e. if a subject is covered by an ISO or EN norm, no deviating national oder international standards should be applied. By contrast, the current wording in the draft CLM conclusions suggests a free choice between EN/ISO and other national/international standards, which might lead to an undue application of deviating standards in emission monitoring. The corresponding sentence from the BAT Conclusions for Iron and Steel production (BAT 15) is more clear and thus should be used instead.	Please take over the corresponding sentence from BAT 15 of the BAT Conclusions for Iron and Steel production: 'Monitoring should be done according to the relevant EN or ISO standards. If EN or ISO standards are not available, national or other international standards should be used that ensure the provision of data of an equivalent scientific quality.'
23	Denmark	4							Transeversal definitions EN/national standards		344	During the final TWG meeting it was discussed if national standards could be mentioned as equivalent to European standards. At the end of the discussion EIPPCB ruled that this matter was a issue to be brought forward at the Article 13 forum meeting, because of the transversal nature.	The negotiated resulting text is not coherent with IED and previous negotiated BAT conclusions from other BREFs. Denmark wishes to stress that national standards is not equivalent to European standards, therefore the wording as it is now is imprecise and should instead follow the wording from IED when addressed.The sentence used in BAT conclusions for Iron and steel is: Monitoring should be done according to the relevant EN or ISO standards. If EN or ISO standards are not available, national or other international standards should be used that ensure the provision of data of an equivalent scientific quality. If it is possible for permit writers for monitoring using national standards on emissions, even though CEN standards are available, then the level playing field in the Union by aligning environmental performance requirements for industrial installations is not met.	Add the text in bold under general considerations, monitoring of emissions: Such procedures shall use relevant CEN standards or, if CEN standards are not available, ISO, national or other international standards which ensure the provision of data of an equivalent scientific quality
24	Austria	4							EN/national standards		344	During the final TWG meeting it was discussed if national standards could be mentioned as equivalent to European standards. At the end of the discussion EIPPCB ruled that this matter was a issue to be brought forward at the Article 13 forum meeting, because of the transversal nature. There is already a text in the Iron and Steel BAT Conclusions. We prefer this Version because it makes clear what is the hierarchy in the application of norms which is required for norm conformity, anyway. But as this is not common knowledge even in a TWG - remembering the discussions in Seville - we would like to see it in the BAT conclusions.	Clarification of a requirement of the norms to be used. Consistent wording for the same issue in the Brefs; Use of wording that already was agreed in the forum and the committee - as it is done for other matters, too (e.g. "may be subject to MS energy policy"). We are still at the beginning of the BRef revision process and where the TWG naturally cannot, the Art. 13 forum shall ensure consistency between the Brefs on common issues.	Add the text in bold under general considerations, monitoring of emissions: Such procedures shall use relevant CEN standards or, if CEN standards are not available, ISO, national or other international standards which ensure the provision of data of an equivalent scientific quality
25	Sweden	4									344	Proposal aiming at "Better regulation"	The current text is not coherent with previous negotiated BAT conclusions from other BREFs. The proposal would contribute to a uniform implementation. The sentence used in the BAT conclusions for Iron and steel is: *Monitoring should be done according to the relevant EN or ISO standards. If EN or ISO standards are not available, national or other international standards should be used that ensure the provision of data of an equivalent scientific quality.*	Add the following text under the heading Monitoring of emissions after "....in accordance with": *relevant CEN standards or, if CEN standards are not available, ISO, national or other international standards which ensure the provision of data of an equivalent scientific quality*

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26	EEB	4							Monitoring of Emissions		344	BAT should generally require that national standards can only be used for emissions monitoring if CEN or ISO standards are not available.	Ensure a European level playing field when monitoring compliance with BATAELs.	Use text of the BREF-I&S (page 491): Monitoring should be done according to the relevant EN or ISO standards. If EN or ISO standards are not available, national or other international standards should be used that ensure the provision of data of an equivalent scientific quality.
27	Sweden	4	1	1						1	345	Proposal for improvement	As can be seen under “Applicability” the level and details of an EMS depend on a number of things in the installation concerned. It is clear and less complicated just to refer to such management systems.	Delete the text in the heading after "... environmental management system" and add instead: e.g. EMAS or ISO 14001 and delete all the rest on page 345.
28	Sweden	4									345-374	Proposal aiming at "Better regulation"	As written, the reader can wrongly get the impression that (exactly) technologies listed in BAT-conclusions are prescriptive, which is clearly not the case given what is said in IED and on page 341. Moreover, BAT conclusions without AELs often mention not only technologies but also measures. Any known applicability restriction should be clearly described in the Applicability columns. Vague general phrases make a uniform implementation more difficult.	All BAT-Conclusions without AELs should start with the following statement: *BAT is to use a suitable combination of the following technologies/measures. Other technologies/measures may be used that ensure at least an equivalent level of environmental protection.* Delete terms like "*when possible", "if possible", "whenever practicable* " when they appear in the "Techniques" columns in table on BAT-technologies. If there are applicability problems they should be clearly described in the applicability column.
29	Sweden	4	1	2							346	An example of how a BAT-conclusion without AELs should be written.	As written, the reader can wrongly get the impression that technologies/measures listed in this BAT-conclusion are prescriptive, which is clearly not the case given what is said in IED and on page 341. Some of the measures might be sufficient but the operator might find other measures which are just as, or even more, effective.	The introductory text should "after is to use " read: a suitable combination of some or all of the following technologies/measures. Other technologies/measures may be used that ensure at least an equivalent level of environmental protection.
30	Denmark	4	2	2					Monitoring		347	If the date on the BREF is maintained to be 2012 then the frequency of periodic measurement of BAT AELs should be determined. Relevant for BAT 5, 32 and 55.	It was determined by EIPPCB that the negotiations already took place in 2008 so no new information causing changes to BAT conclusions in the BREF were granted.	Denmark suggested semi yearly. And if no previous measuring exists then the periodic measuring should be itensified for the first two years to every 3rd month. When measuring have showed that the BAT AELs can be met then normal periodic monitoring frequency
31	Germany	4	2	2						5	348	The description of BAT 5 is incomplete: Periodic measurements are not defined. For harmonized implementation, a description is neccessary.	For consistency with BAT 32 (lime industry) and 55 (magnesium oxide), a description for periodic monitoring should be added. If the requirements for periodic measurements in cement plants remain unclear, different practices and less comparable results of emission monitoring are very likely. An indication for the frequency of mesurements would facilitate a harmonized interpretation. Our proposal tries to avoid discussion by putting the definition less precise as possible but still precise enough to improve the situation.	Please add a description for periodic monitoring: 'Discontinuous (periodic) monitoring means to measure some spot samples during normal operating conditions including the time of the highest expected emissions. A measurement frequency of once a year up to once every 3 years is given as an indication.'
32	Slovakia	4	2	2							347	The continuous measurement of the dust, NOx, SO2, and CO. The directive allows the measurement SO2 of discontinuous, whereas the raw material is the washing machine of SO2, exception of some materials, e.g. pyrite.	The directive allows the measurement SO2 of discontinuous, whereas the raw material is the washing machine of SO2, exception of some raw materials, e.g. pyrite.	Accordingly.
33	Denmark	4	2	2					Monitoring	5, 32, 55	348, 362, 375	The description of BAT 5, 32 and 55 needs further clarification: For the selection between continuous and periodic measurements, the **mass flow** is more relevant than the emission source.	For small contributions to the environment of a pollutant, with low mass flow - periodic measurements may be sufficient. But for large contributions to the environment, a high mass flow, continuous measurements should be considered.	Please add mass flow in the Sentence (German Proposal): 'The selection between continuous or periodic measurements mentioned in BAT (*5 (f), 32 (c), 32 (f) and 55 (c)*) depends on the mass flow and type of pollutant expected.'
34	Austria	4	2	2						5	348	The description of BAT 5 needs further clarification: For the selection between continuous and periodic measurements, the **mass flow** and not so much the emission source is the relevant factor.	For a low mass flow of a certain pollutant periodic measurements may be sufficient, but in case of a high mass flow continuous measurements should be considered. In other words: A given emission source may once be monitored by periodic measurement (low mass flow) and another time by continuous measurement (large mass flow).	Please add mass flow in the Sentence: 'The selection between continuous or periodic measurements mentioned in BAT 5 (f) is based on the emission source and the type of pollutant expected and its mass flow.' or change Description as follows (German Proposal): 'The selection between continuous or periodic measurements mentioned in BAT 5 (f) depends on the mass flow and type of pollutant expected.'
35	Germany	4	2	2						5	348	The description of BAT 5 needs clarification: For the selection between continuous and periodic measurements, the **mass flow** and not the emission source is the relevant factor.	For a low mass flow of a certain pollutant periodic measurements may be sufficient, but in case of a high mass flow continuous measurements should be considered. In other words: A given emission source may once be monitored by periodic measurement (low mass flow) and another time by continuous measurement (large mass flow).	Please change Description as follows: 'The selection between continuous or periodic measurements mentioned in BAT 5 (f) depends on the mass flow and type of pollutant expected.'
36	Sweden	4	2	2						5	348	Clarification of row f in the table and under the heading **Description**	The mass flow, not the source of the emission, is the relevant factor.	The text under the heading Description should after "BAT 5 (f) read: *..depends on the mass flow and type of pollutant expected.*
37	Slovakia	4	2	3	1					6	348	From table 4.1 is not clear, whether the specific consumption achieved by using alternative fuels/raw materials or not.		Define more clearly.
38	Sweden	4	2	3	1					6	348	Clarification	An important factual addition, see page 48 in the BREF from May 2010.	Add a new foot-note to table 4.1: *(4)* ” *The fuel mix will influence the energy consumption level. An increase in the use of alternative fuels, especially those containing a high proportion of biomass, may impact energy consumption levels negatively.”*
39	Sweden	4	2	3	2					7	349	An example of how BAT-conclusions without AELs should be written.	As written, the reader can wrongly get the impression that technologies/measures listed in this BAT-conclusion are prescriptive, which is clearly not the case given what is said in IED and on page 341. Some of the measures might be sufficient or other measures might be just as, or even more, effective.	The introductory text should after "BAT is to use " read: a suitable combination of some or all of the following technologies/measures. Other technologies/measures may be used that ensure at least an equivalent level of environmental protection.

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40	Sweden	4									353-374	Proposal aiming at "Better regulation"	As written, the competent authorities, the operators and the public can wrongly get the impression that technologies listed in BAT-conclusions are prescriptive, which is clearly not the case given what is said in IED and the last para of page 341. Moreover, the way the conclusions are written today risks hampering the development of new technologies as the text implies that only the technologies listed can be regarded as BAT. In Decision 2012/119/EU on guidance for the BREF-work, the figure 3.1 is *"an example"* of how individual BAT conclusions can be written. The requirement under 3.2 is that BAT conclusions should be presented using a standard format, without stating which. Each BAT conclusion *"will include a description of techniques"* that can be used to achieve the levels. A table with reference to where more information can be found would be valuable when the BAT-conclusions are to be implemented.	Start <u>all</u> BAT-Cs having AELs with the BAT-AELs and then add <u>examples</u> of technologies that can be used to achieve the values. As an illustration, BAT 19 would start with the BAT-associated emission levels in table 4.2. And then a new para starting with:*The BAT-AELs above can e.g. be achieved by using a suitable combination of the technologies in the table below The technologies in the table are however neither prescriptive nor exhaustive. Other technologies may be used that ensure at least an equivalent level of environmental protection.* Followed by the table with the technologies now in the beginning of BAT 19. Add a cross-reference table between all BAT-conclusions and the pages where more information can be found in the BREF itself
41	Germany	4	2	5	1					15	353	BAT 15 d) The column "technique" of a certain BAT conclusion is the wrong place to use a phrase such as "when possible. Technical restriction of a technique should be listed under "applicability" (if considered necessary). Furthermore the phrase "when possible" shouldn`t be used without additional explanations on the possible limitation of their application. The accessory 'if possible' actually may always be justified (or never). For certain techniques it may reflect possible local restrictions on the level of an individual plant which are normally not addressed by the BREFs which describe BAT in a general sense for the sector as a whole.	If there are known technical restrictions for application, they should be listed under applicability. General phrases such as "if appropriate", " if possible" etc. do not contribute to clear BAT conclusions. Remove vague statements which may make more difficult or hinder an equal implementation. The BAT Conclusion should give a clear guidance on BAT für operators and permit writers.	Delete "when possible" .
42	Germany	4	2	5	1					15	353	BAT 15 f) The column "technique" is the wrong place to use the phrase "if possible". Furthermore the phrase "if possible" shouldn`t be used without any explanation. See our comment on BAT 15 d), BAT 29 b), BAT 41 g), BAT 54 a) and b), and BAT 67.	See the text of the rationale given with regard to BAT 15 d), BAT 29 b), BAT 41 g), BAT 54 and BAT 67.	Delete "if possible".
43	Sweden	4	2	5	3					17	354	Proposal aiming at "Better regulation"	The Guidance document 2012/119/EU states: *For defining the lower end of the range, it is necessary to take the performance of plant(s) achieved under normal operating conditions by the BAT obtaining the best environmental performance as provided in the information exchange.* Furthermore the Guidance states that : *The upper end of the BAT-associated environmental performance level range is derived by considering the range of performance associated with the application of the BAT (1) under normal operating conditions.* According to para 3.3 in the Guidance BAT-AELs given as < X are acceptable when the lower end cannot accurately be defined. In this case it is possible to state that fabric filters can achieve 5 mg/m3 under normal operating conditions. Moreover, the second sentence starting with *"When applying...."* can create problems when implementing it. Does it mean that if fabric filters and new or upgraded ESPs (should probably read "advanced ESPs") are used, the requirement following from Art 15.3 in IED is <10 (i.e. 5?) mg/m3? And that <10 (i.e. 5?)mg/m3 applies to new (advanced!) ESPs but after some years 20 mg/m3 applies due to the fact that ESPs perform less well after some years in operation.	Following comment # 6 above the first sentence under the heading BAT-associated emission levels should read: *T* *he BAT-AELs for dust emissions from flue gases of kiln firing processes is 5--20 mg/Nm3 as a daily average value.* Clarify the legal consequences of the last sentence.
44	Sweden	4	2	5	4					18	354	Proposal aiming at "Better regulation"	See comment # 13 on using <. Moreover, it would generally be valuable if it can be clarified why the BAT-AELs in many BAT-Cs are the same regardless if the averaging period is half an hour or a daily average. Theoretically, a daily average should be lower than a 30 min average if both are to be equally strict.	The text under the heading BAT-associated emission levels should read:*The BAT-AELs for dust emissions from flue gases of cooling and milling processes is 5-20 mg/Nm3 as a daily average value or average over the sampling period (spot measurements for at least half an hour)* Followed by as said above in comment # 5 and the table in the beginning of BAT 18
45	Denmark	4	2	6					Staged combustion	19	355	If the date on the BREF is maintained to be 2012 then the updating of applicability presented at the meeting in may 2012 should be added: Staged combustion can be applied on long wet/dry kilns if process conditions allow. This technology is already in operation at Aalborg Portland, Denmark (on 5 long wet kilns). The technology is called "Mixing Air" and has been developed in the USA by Cadence. Mixing Air is similar to staged combustion and can be applied on preheater/precalciner kilns as well as long kilns (dry/wet).	The technology "Mixing Air" has been in full operation at five wet kilns for several years at Aalborg Portland, Denmark. The test phase has long ended and the technology is fully implemented. The product is commercially available from Cadence.	In the column [Applicability], 18b, first sentence: Delete: "only". Add a new phrase: "Can be applied on long wet/dry kilns if process conditions allow".

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46	Austria	4	2	6	1					19	355	As the foot note 2 describes the BAT AEL range, providing reference for it, important information in this description must be added to reflect the accurate situation. Please add the following sentence to Footnote 2: "In 2012, the lower value of 200 mg/Nm³ has been reported as a daily average value for 3 plants using SCR."	Correct reference of the Austrian and German situation, where three plants operate with SCR and achieve the 200 mg/Nm3 NOx daily average according to the permitting authorities and the operators. This value is also laid down in the permit as emission limit value. Guidance Document (IED) Section 2.3.7.2.4 called: "Environmental performance and operational data" requires that actual plant performance data from well performing plants shall be reported. Guidance Document (IED) Section 1.3 states, that the opinion of the forum may contain inter alia (point 4) textual revisions that reflect more accurately the conclusion reached by the TWG. The publically available EIA-permit of Mannersdorf (link) and information about the German SCR plants (links) in this excel file. LInks provided: http://www5.umweltbundesamt.at/uvpdb/docs/Bescheide/SCR_Anlage_Mannersdorf/Genehmigungsbescheid.pdf http://www.elex-cemcat.com/references/ http://www.vdi-nachrichten.com/artikel/Energieeffiziente-Waermeschaukel-im-Zementwerk/58067/2 www.rfo.de/.../SCR_Anlage_im_Zementwerk_Rohrdorf-15429.html http://mplusg.de/sites/default/files/resize/images/DOC051011.pdf http://www.zkg.de/de/artikel/zkg_Neue_SCR-Entstickungsanlage_1344011.html http://www.industrieanzeiger.de/automation/-/article/32571342/37255666/Innovativer-W%C3%A4rmetransfer-in-der-Zementindustrie/art_co_INSTANCE_0000/maximized/ http://www.vdi-nachrichten.com/artikel/Katalysator-halbiert-Stickstoffoxide-bei-Zementherstellung/51092/2	BAT 19, table 4.2 (NOx), FN 2: Add the sentence: "In 2012, the lower value of 200 mg/Nm³ has been reported as a daily average value for 3 plants using SCR."
47	Germany	4	2	6	1					19	355	BAT 19 states that both SNCR and SCR are BAT for the (secondary) reduction of NOx emissions. But Table 4.2, Footnote No. 2 does not mirror the actual state of NOx abatement by SCR. For clarification and consistency, additional information should be given on installations that actually achieve the lower end of the BAT-AEL range by application of SCR.	As Footnote No. 2 does not mirror the actual state of NOx abatement by SCR, it leads to the misconception that the lower end of the BAT-AEL range were only achieved by application of SNCR, under favourable conditions. For consistency with the BAT conclusion itself, additional information should be included on installations that actually achieve the lower end of the BAT-AEL range by application of SCR. In Section 2.3.7.2.4, the BREF Guidance Document provides that under "Environmental performance and operational data" actual plant performance data from well performing plants is reported. Section 1.3 of the same document states that the opinion of the forum may contain inter alia (point 4) textual revisions that reflect more accurately the conclusion reached by the TWG. Please note that our proposal only complements BAT 19, without altering neither the BAT conclusion itself, nor the BAT-AELs. It only provides correct reference of the Austrian and German situation, where three plants equipped with SCR achieve daily average values below 200 mg/Nm^3 NO_x. Reports on the two German installations are publically available and have been provided to the EIPPCB.	Please insert the following sentence at the end of footnote No. 2 under Table 4.2: 'In 2012, the lower value of 200 mg/Nm³ has been reported as a daily average value for 3 plants using SCR.'
48	EEB	4	2	6	1					19	355	BAT 19 - table 4.2 does not mention that SCR installations also comply with the BATAEL "<200 mg/Nm3".	The text proposed for deletion does not give added value. In contrary: it confuses as no statement about SCR ist made (although in recent years three installations have been equipped with SCR, achieving values below 200 mg/Nm3 as daily average). Information on SCR plants and its performance is known in the TWG and public on the internet (see VDI article on Rohrdorf of 30.03.2012: http://www.vdi-nachrichten.com/artikel/Energieeffiziente-Waermeschaukel-im-Zementwerk/58067/2) (see Rohrdorf Website 2012: http://www.rohrdorfer.eu/aktuelles-im-detail/items/scr-anlage-selective)	Delete the following part of the footnote: "Levels below 350 mg/Nm3 are achieved at kilns with favourable conditions when using SNCR. In 2008, the lower value of 200 mg/Nm3 has been reported as a monthly average for three plants (easy burning mix used) using SNCR." As an alternative, the values < 200 mg/Nm3 achieved as daily average by SCR could additionally be mentioned.
49	Sweden	4	2	6	1					19	355	Proposal aiming at "Better regulation"	Table 4.2: The reason for using < for the lower BAT-AEL (200 mg/Nm3) for Preheater kilns is unclear and should be removed if not clarified, see above comment 6. Foot-note (2) of table 4.2 has unclear legal consequences when MS are to implement Art 15.3 of IED and should be removed or clarified, perhaps by using additional rows in the table. And how come that levels below 350 are achieved under *favourable conditions* when the lower BAT-end is 200? And what is the consequence and logic behind stating that the lower value has been reported as monthly averages when the lower BAT-AEL is 200 as daily averages. Moreover in 2012 200 mg/m3 has been reported by three mills using SCR as daily averages.	The frame in the second row and third column of table 4.2 should read: *200-450 (1)* The frame in the third row and third column of table 4.2 should read*: 400-800.* *The two first sentences in* Foot-note 2 should as far as possible be replaced by equivalent rows in the table or, if not possible, deleted. The last sentence should be replaced by: *In 2012, the lower value of 200 mg/Nm3 has been reported as daily average by three plants using SCR*
50	Denmark	4	2	6	2				Semidry scrubber	21	356	If the date on the BREF is maintained to be 2012 then the updating of applicability presented at the meeting in may 2012 should be added: The semidry scrubber is widely used, in particular for flue gas volumes below 1 mio Nm3/h. The technique also is operated on two cement producing plants. Semidry scrubbers should be added in the table as technique c.	Approximately 12 wetscrubbers are operated worldwide and two semi-dry installations, both at Norcem plants; at Kjøpsvik and in Brevik since 2009, both in Norway. Data can only be provided from the Brevik plant from 2009. Further, 3 semi-dry scrubbers (GSA – gas suspension absorbere) are under erection in Thailand. Data was sent prior to the may 2012 meeting. The finallisation of the BREF took place in 2010. The present BREF should be updated to the current development in BAT for cement industry.	Please add, Semidry scrubber in the table as technique c: The semidry scrubber is widely used, in particular for flue gas volumes below 1 mio Nm3/h. It is an established technique for cement. The SOx is absorbed by a liquid slurry. The amount of water is controlled to avoid saturation of the flue gas. The absorbent is lime. SOx removal degrees of 97% can be achieved. The residual product can be returned to the kiln, to avoid solid waste
51	Sweden	4	2	6	2					21	357	Proposal aiming at "Better regulation"	For the "<" see above comment number 13. The foot-notes in table 4.4 have unclear legal consequences when MS are to implement Art 15.3 of IED and should be removed or clarified, perhaps by using additional rows in the table.	Delete the "<" in table 4.4. Delete the foot-notes or clarify the table by adding rows for different S content in the raw material and for white cement and special cement clinker.

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52	Denmark	4	2	6	5				Semidry scrubber	25	358	If the date on the BREF is maintained to be 2012 then the updating of applicability presented at the meeting in may 2012 should be added: Under additional techniques for HCl removal please add a reference to semidry scrubbers and pre-treatment of raw material. Semidry scrubbers when capturing SO2 and other gases will at the same time capture HCl.	Approximately 12 wetscrubbers are operated worldwide and two semi-dry installations, both at Norcem plants; at Kjøpsvik and in Brevik since 2009, both in Norway. Data can only be provided from the Brevik plant from 2009. Further, 3 semi-dry scrubbers (GSA – gas suspension absorbere) are under erection in Thailand. Data was sent prior to the may 2012 meeting. The finallisation of the BREF took place in 2010. The present BREF should be updated to the current development in BAT for cement industry.	Please add, Semidry scrubber in the table as technique c: The semidry scrubber is widely used, in particular for flue gas volumes below 1 mio Nm3/h. It is an established technique for cement. The SOx is absorbed by a liquid slurry. The amount of water is controlled to avoid saturation of the flue gas. The absorbent is lime. SOx removal degrees of 97% can be achieved. The residual product can be returned to the kiln, to avoid solid waste
53	Denmark	4	2	6	5				Semidry scrubber	26	358	If the date on the BREF is maintained to be 2012 then the updating of applicability presented at the meeting in may 2012 should be added: Under additional techniques for HF removal please add a reference to semidry scrubbers and pre-treatment of raw material. Semidry scrubbers when capturing SO2 and other gases will at the same time capture HF.	Approximately 12 wetscrubbers are operated worldwide and two semi-dry installations, both at Norcem plants; at Kjøpsvik and in Brevik since 2009, both in Norway. Data can only be provided from the Brevik plant from 2009. Further, 3 semi-dry scrubbers (GSA – gas suspension absorbere) are under erection in Thailand. Data was sent prior to the may 2012 meeting. The finallisation of the BREF took place in 2010. The present BREF should be updated to the current development in BAT for cement industry.	Please add, Semidry scrubber in the table as technique c: The semidry scrubber is widely used, in particular for flue gas volumes below 1 mio Nm3/h. It is an established technique for cement. The SOx is absorbed by a liquid slurry. The amount of water is controlled to avoid saturation of the flue gas. The absorbent is lime. SOx removal degrees of 97% can be achieved. The residual product can be returned to the kiln, to avoid solid waste
54	Denmark	4	2	7					Semidry scrubber	27	359	If the date on the BREF is maintained to be 2012 then the updating of applicability presented at the meeting in may 2012 should be added: Under additional techniques for PCDD/F removal please add a reference to semidry scrubbers and pre-treatment of raw material. Semidry scrubbers when capturing SO2 and other gases will at the same time capture PCDD/F.	Approximately 12 wetscrubbers are operated worldwide and two semi-dry installations, both at Norcem plants; at Kjøpsvik and in Brevik since 2009, both in Norway. Data can only be provided from the Brevik plant from 2009. Further, 3 semi-dry scrubbers (GSA – gas suspension absorbere) are under erection in Thailand. Data was sent prior to the may 2012 meeting. The finallisation of the BREF took place in 2010. The present BREF should be updated to the current development in BAT for cement industry.	Please add, Semidry scrubber in the table as technique c: The semidry scrubber is widely used, in particular for flue gas volumes below 1 mio Nm3/h. It is an established technique for cement. The SOx is absorbed by a liquid slurry. The amount of water is controlled to avoid saturation of the flue gas. The absorbent is lime. SOx removal degrees of 97% can be achieved. The residual product can be returned to the kiln, to avoid solid waste
55	Denmark	4	2	7	1				Semidry scrubber	28	359	If the date on the BREF is maintained to be 2012 then the updating of applicability presented at the meeting in may 2012 should be added: Under additional techniques for Hg removal please add a reference to semidry scrubbers and pre-treatment of raw material. Semidry scrubbers when capturing SO2 and other gases will at the same time capture Hg.	Approximately 12 wetscrubbers are operated worldwide and two semi-dry installations, both at Norcem plants; at Kjøpsvik and in Brevik since 2009, both in Norway. Data can only be provided from the Brevik plant from 2009. Further, 3 semi-dry scrubbers (GSA – gas suspension absorbere) are under erection in Thailand. Data was sent prior to the may 2012 meeting. The finallisation of the BREF took place in 2010. The present BREF should be updated to the current development in BAT for cement industry.	Please add, Semidry scrubber in the table as technique c: The semidry scrubber is widely used, in particular for flue gas volumes below 1 mio Nm3/h. It is an established technique for cement. The SOx is absorbed by a liquid slurry. The amount of water is controlled to avoid saturation of the flue gas. The absorbent is lime. SOx removal degrees of 97% can be achieved. The residual product can be returned to the kiln, to avoid solid waste
56	Denmark	4	2	7	1				List of reference	28	359	In the original CLM-BREF (2010) there were many references to previous sections, describing ELVs or techniques. Since references are removed from BAT conclusions, the EIPPCB merged these ELVs and/or techniques into the draft BAT conclusions for the TWG (May 2012), in the background paper for the TWG (May 2012). E.g. carbon injection. Carbon injection is referred to in the CLM-BREF (2010) in BAT 26 and should be kept as example of technique in BAT conclusions. In the background paper, carbon injection is mentioned in BAT 27 and 47, but carbon injection has been fully deleted in the BAT conclusions in the draft CLM BREF (June 2012).		Where refencences to sections "techniques to be considered in the determination of BAT" have been deleted from BAT conclusions, make sure that prescribed techniques are being implemented in BAT conclusions.
57	Sweden	4	2	7	1					28	360	Proposal aiming at "Better regulation"	The foot-notes in table 4.5 have unclear legal consequences when MS are to implement Art 15.3 of IED and should be removed or clarified. e.g. What legal consequence has it that *low levels have been reported* or *Values higher than 0,03 mg/Nm3 have to be further investigated* . (The foot-notes are in the wrong logical order) (Don't we generally use decimal comma, not decimal point, in EU-texts?)	Delete the foot-notes if their legal consequences are not clarified
58	Germany	4	2	8						29	360	BAT 29 b) The column "technique" is the wrong place to use the phrase "when possible. See our comment on BAT 15 d) above.	If there are known technical restrictions for application, they should be listed under applicability. General phrases such as "if appropriate", " if possible" etc. do not contribute to clear BAT conclusions. Remove vague statements which may make more difficult or hinder an equal implementation. The BAT Conclusion should give a clear guidance on BAT für operators and permit writers.	Delete "when possible" .
59	Austria	4	3	2						32	362	The description of BAT 32 needs further clarification: For the selection between continuous and periodic measurements, the **mass flow** and not so much the emission source is the relevant factor.	For a low mass flow of a certain pollutant periodic measurements may be sufficient, but in case of a high mass flow continuous measurements should be considered. In other words: A given emission source may once be monitored by periodic measurement (low mass flow) and another time by continuous measurement (large mass flow).	Please add mass flow in the Sentence: 'The selection between continuous or periodic measurements mentioned in BAT 32 (c) und 32 (f) is based on the emission source and the type of pollutant expected and its mass flow.' or change Description as follows (German Proposal): 'The selection between continuous or periodic measurements mentioned in BAT 32 (c) und 32 (f) depends on the mass flow and type of pollutant expected.'
60	Germany	4	3	3						33	363	BAT 33 b) "... the energy policy of the Member State may impact the applicability of this technique". Remove vague statements under applicability which may weaken or hinder an equal implementation of BATs. The policy of a Member State is not a technical restriction of the applicability of a technique. Possibly it can be discussed under "driving forces" or somewhere else in the BREF but not as part of the BAT conclusions. The policy of a Member State doesn't influence the technical applicability of a technique. Therefore, it should'nt be mentioned here.	The BREF is not a political but a technical document. The policy of a Member State is only one of a number of other factors that may influence the decisionmaking of a company for the selection of fuels. The energy policy of the MS does not influence the technical applicability of a technique. Therefore, it should not be mentioned here. Only if a certain type of fuel is not reasonably accessible to the operator in a Member State it is considered as "not available". However, this does not apply in this case. So, we don't need a reference to the policy of a Member State. If we include under "applicability" the possible impact of sector policies of Member States, this will possibly apply to many techniques and may consequently become a general restricition of BAT conclusions. MS policy that is less favourable for the application of BAT could serve as an excuse not to apply BAT.	Remove "… which may be impacted by the energy policy of the Member State."

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61	Denmark	4	3	3					Quality	33	363	BAT 33 b) "... the energy policy of the Member State may impact the applicability of this technique". The policy of a Member State is not a technical restriction of the applicability of a technique. The wording is imprecise and opens up for the permit writers own interpretation of the wording, thus risking a different implementation of the BAT conclusion in permits. Therefore, it should'nt be mentioned here.	The BREF is not a political but a technical document. Many of the newly defined BAT conclusions are imprecise for permit writers and thus cannot be directly implementet as reference for setting the permit conditions, thus risking a different implementation of the BAT conclusion in permits.	Remove "… which may be impacted by the energy policy of the Member State."
62	Germany	4	3	5						36	365	BAT 36, Applicability: Policy of the Member State: The same comments as given on BAT 33b applies. Remove vague statements under applicability which hinder or weaken an equal implementation of BATs.	See our rationale given with regard to BAT 33 b above.	Remove "… which may be impacted by the energy policy of the Member State."
63	Germany	4	3	6	1					41	366	BAT 41 g) The column "technique" is the wrong place to use the phrase "when possible. See our comment on BAT 15 d) and BAT 29 b) above.	See the text of the rationale given with regard to BAT 15 d) and BAT 29 b) above.	Delete "when possible" .
64	Germany	4	3	6	1					41	366	BAT 41 d) The column "technique" is the wrong place to use the phrase "if possible". Furthermore the phrase "if possible" shouldn`t be used without any explanation . See our comment on BAT 15 d), BAT 15 f) BAT 29 b), BAT 41 g), BAT 54 a) and b), and BAT 67.	See the text of the rationale given with regard to BAT 15 d), BAT 15 f) BAT 29 b), BAT 41 g), BAT 54 a) and b), and BAT 67.	Delete "if possible".
65	Sweden	4	3	6	2					42	367	Proposal aiming at "Better regulation"	See comments 6 and 13. Technologies will not be prescriptive in the BAT conclusions document and thus Table 4.7 should not have different BAT-AELs for different technologies. Are a daily average and a 30 min average really equally strict?	Delete the "<" in table 4.7. Delete the Technique-column in table 4.7 and the third row in the table 4.7. Insert 5-20 mg/Nm3 in the BAT-AELs frame.
66	Denmark	4	3	6	2				Quality	42, 43	367	BAT conclusion 42 and 43 holds different BAT AELS depending on the technique chosen.	Different BAT AELS depending on the technique chosen is not in accordance with the intend of IED, by settiing one or the other emissions limit the permit writer will determine which technology to be used. A BAT conclusion should only hold a list of possible techniques to be applied when a BAT AELs needs to be met.	Change the BAT conclusion to only one BAT AEL: <10- 20 with a footnote to <10 saying: <10 can be obtained using fabric filters.
67	Germany	4	3	6	3					43	367	BAT 43: Fabric filters, ESP and wet scrubber are applicable to all kiln systems but have different BAT-AELs. However, the given BAT-AEL for fabric filters is lower than for other filters. As it stands now, it remains unclear on the basis of which criteria the operator and permit writers should reach a decision. This can be reached by distinguishing BAT for new and existing plants.	Enhances the uniform implementation in Member States. The BAT Conclusion should give a clear guidance on BAT for operators and permit writers.	BAT 43 should read as follows: "In order to reduce dust emissions from the flue-gases of kiln firing processes, BAT is to use fabric filters for new plants and to use fabric filters, ESPs or wet scrubber for existing plants."
68	Sweden	4	3	6	3					43	368	Proposal aiming at "Better regulation"	See comments 6 and 13. The situation described by the asterisk might be taken care of as a derogation in accordance with Art 15.4 in IED. The asterisk as it is now would probably cause confusion in the implementation of Art 15.3 of IED	Delete the Technique-column in table 4.8 and the third row. Insert 5-20 mg/Nm3 in the BAT-AELs frame. Delete the asterisk and the accompanying explanation in the fourth row.
69	Germany	4	3	7	1					44	368	BAT 44 b) The column "technique" is the wrong place to use the phrase "if possible". Furthermore the phrase "if possible" shouldn`t be used without further explanation. See similiar comment above	Remove vaguee statements which may hinder a equal implementation. The BAT Conclusion should give a clear guidance on BAT for operators and permit writers.	Delete "if possible".
70	Germany	4	3	7	1					44	368	BAT 44 b II) The column "technique" is the wrong place to use the phrase "if possible. Furthermore the phrase "if possible" shouldn`t be used without further explanation. See similiar comment above.	Remove vague statements which may hinder a equal implementation. The BAT Conclusion should give a clear guidance on BAT for operators and permit writers.	Delete "if possible".
71	Germany	4	3	7	2					45	369	BAT 45 a) I: Policy of the Member State: The same comments as given on BAT 33b and BAT 36 above applies. Remove vague statements under applicability which hinder or weaken an equal implementation of BATs.	See our rationale given with regard to BAT 33 b and BAT 36 above.	Remove "… which may be impacted by the energy policy of the Member State."
72	Sweden	4	3	7	2					45	369	Proposal aiming at "Better regulation"	NOx as NO2 is already defined in the beginning of chapter 4 and "*stated as NO2"* can cause confusion. If the production is not the ones in the foot-note 1 the BAT-AEL upper levels should logically be lower than 350. As now written hard burned lime and dolime have only one BAT-value, 350 mg/Nm3, not a range as is the preferred alternative. The words "up to" are unnecessary and may cause confusion in the implementation phase. To make it clear, give the BAT-AELs for hard burned lime and for the use of biomass as fuel in a separate row	Delete *"stated as NO2 "* in the table and insert NOx Delete foot-note 1 and insert rows with both upper and lower BAT-AELs in the table for each of the different alternatives in the foot-note. In foot-note 2 delete the two words *"up to ".* Delete foot-note 3 and insert a new row for hard burned lime and for the use of biomass as fuel with BAT-AELs: 100-500
73	Sweden	4	3	7	2					46	370	Proposal aiming at "Better regulation"	See comment 13	If there are data to support a range insert it, e.g. 30-50mg/Nm3 , see BAT 20.
74	Sweden	4	3	7	3					47	371	Proposal aiming at "Better regulation"	See comments 6 and 13. (and 14 when it comes to having the same BAT-AELs for 30 minute averages and for daily averages)	Either delete the "<" in the table 4.10 or insert any available data on the best performers. Delete foot-note 1. Either delete foot-note 2 or add the relevant higher value.
75	Sweden	4	3	7	4	1				48	371	Proposal aiming at "Better regulation"	See comments 6 and 13. (and #14 when it comes to having the same BAT-AELs for 30 minute averages and for daily averages) Are daily averages relevant for CO?	Delete foot-note 1 and, if deemed necessary, give BAT-AELs for hydraulic lime. Is foot-note 2 necessary given that kiln types are specified?

Overall comment No	Comments from (Forum Member)	Chapter No. / section No. (if available)							Chapter title (only if there is no section or chapter No.)	BAT # (if applicable)	Page # (PDF version)	Comment description	Rationale	Proposed amendment
76	Sweden	4	3	7	5					50	372	Proposal aiming at "Better regulation"	See comment 6. Foot-note 1 has unclear legal consequences when MS are to implement Art 15.3 of IED and should be removed or clarified. According to page 197 in the BREF it should also cover PFRK. The situation described in foot-note 2 might be taken care of as a derogation in accordance with Art 15.4 in IED. The foot-note as it is now would probably cause confusion in the implementation of Art 15.3 of IED	Add BAT-lower levels if available. Delete foot-note 1 or insert a row with higher BAT-AEL at certain levels of organic matter in the raw material . If foot-note 1 is kept it should be introduced also for PFRK. Delete foot-note 2 or clarify it further
77	Germany	4	3	10						54	374	BAT 54 a and b) Don't use the phrase "whenever practicable" without any explanation. See our comment on BAT 15 d), BAT 29 b), BAT 41 g) and 67 above.	See the text of the rationale given with regard to BAT 15 d), BAT 29 b), BAT 41 g) and BAT 67 above.	Delete "whenever practicable" .
78	Sweden	4	3	9						53	374	Proposal aiming at "Better regulation"	BAT-AELs with only " < X" should be avoided. See comments number 6 and 13 The fifth row has unclear legal consequences. (The foot-notes are in the wrong logical order) (Don't we generally use decimal comma, not decimal point, in EU-texts?)	If there are data to support BAT-AEls with both upper and lower levels add them. Delete the fifth row in table 4.14.
79	Austria	4	4	1						55	375	The description of BAT 55 needs further clarification: For the selection between continuous and periodic measurements, the **mass flow** and not so much the emission source is the relevant factor.	For a low mass flow of a certain pollutant periodic measurements may be sufficient, but in case of a high mass flow continuous measurements should be considered. In other words: A given emission source may once be monitored by periodic measurement (low mass flow) and another time by continuous measurement (large mass flow).	Please add mass flow in the Sentence: 'The selection between continuous or periodic measurements mentioned in BAT 55 (c) is based on the emission source and the type of pollutant expected and its mass flow.' or change Description as follows (German Proposal): 'The selection between continuous or periodic measurements mentioned in BAT 55 (c) depends on the mass flow and type of pollutant expected.'
80	Germany	4	4	4	4					65	381	Bat 65 b): Policy of the Member State: The same comments as given on BAT 33b, BAT 36 and BAT 45 a applies. Remove vague statements under applicability which hinder or weaken an equal implementation of BATs.	See our rationale given with regard to BAT 33 b, BAT 36, BAT 45 a above.	Remove "… which may be impacted by the energy policy of the Member State."
81	Germany	4	4	4	4					65	381	BAT 65 d) Applicability of the wet scrubber: The limitation of the use of wet scrubbers because of climate or geographical aspects (arid areas) should not be presented under 'applicability' that refers normally to technical or econonomic restrictions for the sector as whole. The text should be therefore be replaced.	Referring to the lack of water in extremely arid areas that may not allow the use of wet scrubbers is considered as a specific case (local condition). These aspects are normally considered whithin the permitting process and not within the BAT conclusions. As we see it, the given text under 'applicability' is not relevant for BAT conclusions for the sector as a whole because it does not describe general technical or economical restrictions for the sector. There remains the possibility of derogation from given BATs and BAT-AELs due to geographical location or the local environmental conditions of the installation concerned (Art. 15(4) IED). These aspects seem to apply here.	Replace the text under "applicability" by "generally applicable"
82	Germany	4	4	5						67	382	BAT 67 The phrase "when possible" shouldn`t be used without any explanation and limitation. The phrase reflects to the local conditions of an individual plant. See our comment on BAT 15 d), BAT 29 b) and BAT 41 g) above.	See the text of the rationale given with regard to BAT 15 d), BAT 29 b) and BAT 41 g) above.	Delete "when possible" .