

**OPINION OF THE FORUM FOR THE EXCHANGE OF INFORMATION PURSUANT  
TO ARTICLE 13 OF THE DIRECTIVE 2010/75/EU ON INDUSTRIAL EMISSIONS  
(IED ARTICLE 13 FORUM)**

**CONCERNING THE DRAFT BEST AVAILABLE TECHNIQUES (BAT) REFERENCE  
DOCUMENT FOR THE INTENSIVE REARING OF POULTRY OR PIGS**

**MEETING OF 19 OCTOBER 2015**

**Background**

Article 13(1) of Directive 2010/75/EU on industrial emissions (the Directive) requires the Commission to organise an exchange of information between Member States, the industries concerned, non-governmental organisations promoting environmental protection and the Commission.

Article 13(3) of the Directive requires the Commission to establish and regularly convene a forum composed of representatives of Member States, the industries concerned and non-governmental organisations promoting environmental protection and to obtain the opinion of the forum on the practical arrangements for the exchange of information foreseen under that Article. In accordance with Article 13(3) of the Directive, the guidance referred to in points (c) and (d) of the second subparagraph of that Article shall take account of the opinion of the forum and shall be adopted in accordance with the regulatory procedure referred to in Article 75(2).

Commission Decision 2011/C 146/03 of 16 May 2011 established the forum for the exchange of information pursuant to Article 13 of the Directive (the forum). In accordance with Article 3 of this Decision, the forum may be consulted on any matter relating to Article 13 of the Directive or on any matter relating to BAT as defined in Article 3(10) of the Directive.

**Opinion of the forum on the draft Best Available Techniques (BAT) reference document for the Intensive Rearing of Poultry or Pigs (version of 14 August 2015, with alternative wording of BAT 30-34 as provided by the Commission on 15 September 2015)**

In accordance with Article 13(3) of the Directive the forum hereby gives its opinion on the draft Best Available Techniques (BAT) reference document for the Intensive Rearing of Poultry or Pigs as presented at the meeting of the forum of 19 October 2015:

1. The forum welcomes the draft Best Available Techniques (BAT) reference document for the Intensive Rearing of Poultry or Pigs as presented by the Commission <https://circabc.europa.eu/w/browse/dda32892-56b8-4d47-a8e6-7fca979c5d36>.
2. The forum acknowledges the discussions held at its meeting of 19 October 2015 and agrees that the changes to the draft Best Available Techniques (BAT) reference document

for the Intensive Rearing of Poultry or Pigs, as proposed in Annex A, should be included in the final document.

3. The forum reaffirms the comments in Annex B as representing the views of certain members of the forum but, on which, no consensus exists within the forum to include them in the final document.

Brussels, 19 October 2015

**Annex A:** Comments on the draft Best Available Techniques (BAT) reference document for the Intensive Rearing of Poultry or Pigs that are consensual within the forum.

**Annex B:** Comments on the draft Best Available Techniques (BAT) reference document for the Intensive Rearing of Poultry or Pigs representing the view of certain members of the forum.

Comment No.	Chapter No. / section No.	Page No. (PDF version of the document)	Comment description	Proposal for modification	Rationale
<b>Comments on the final draft IRPP BREF (14 August 2015)</b>					
1	2 7	124	The information on manure treatment processes should be revised to better address nutrient recovery.	Modify recommendation for future work: 'Study the environmental performance of the whole farm by collecting nitrogen and phosphorus surplus <b>and nutrient recovery data</b> '	Bio-nutrient recovery from manures is an important element of Circular Economy. Phosphate rock is on the EU list of Critical Raw materials. Phosphorus and nitrogen recovery can contribute both to reducing environmental losses and provide a secondary income for farmers.
2	4 13 1	650	in table 4.199 the unit in second column should be kg N/animal/year in accordance with the reference instead of kg N/animal place/year	change the unit in column 2 of table 4.199 to: kg N/animal/year	Type
3	5 1 2	728	Footnote BAT2: There is no Section 4.1.8 in the BREF	Delete the reference to section 4.1.8	Type
4	5 1 3	729	In the scientific community there is still no agreement about the specification of the crude protein content based on net energy for pigs and digestible aminoacids. Other options are still under discussion.	Modify name of BAT 3.a to read: " Reduce the crude protein content by using a <b>N-balanced diet based on the energy needs and digestible amino acids</b> "	An European-wide agreed method for determination of crude protein content is not yet available. Different Member States use different approaches.
5	5 1 4	731	Footnote BAT5: there is no Section 4.4.1 in the BREF	Section 4.4.1 should be replaced by section 4.4	Type
6	5 1 8	734	A BAT-AEL for dust had been included in Draft 2 of the BREF, but deleted in the Revised Draft for the Final Meeting. The Final Draft now contains no BAT-AELs for dust emissions although enough plant specific data was available to derive sound BAT-AELs for dust (see tables in the techniques to consider chapters).	Dust BAT-AELs need to be included in the next BREF review (see 10 <sup>th</sup> point in chapter 7 - recommendation for future work).	EIPPCB assessed in its Background Paper that "PM10 and PM2.5 can have a direct negative effect on public health. Neighbouring livestock housing can also be affected by the biological compounds that the dust particles may carry. Dust plays an important role as a carrier of odorous compounds. Dust emissions strongly influence air quality. There are relevant techniques to consider chapters including dust data available."
7	5 1 13	743	Table 5.2 BAT-associated time delay between landspreading of manure and incorporation into the soil AEPL - this has been omitted due to the merging of the manure and slurry BATs	Add a definition of manure: 'Slurry and/or solid manure'	AEPLs were agreed at the final TWG meeting for both manure AND slurry.
8	5 1 15	744	Add a footnote to the table with ammonia monitoring in BAT 25 and to the table with dust monitoring in BAT 27	In section 5.4.9.2, modify the penultimate paragraph of the description of 'Calculation by measuring the ammonia (or dust) concentration and ventilation rate using ISO, national or international standard methods ensuring data of an equivalent scientific quality' as follows: "The ventilation rate, necessary to determine the emission mass flow, is determined either by calculation (e.g. fan wheel anemometer, <b>records of ventilation control system</b> ) in forced ventilated houses, or by means of tracer gases (excluding the use of SF6 and any gas containing CFCs) in naturally ventilated houses which allow a proper mixing of air."	In case of non-centralized ventilation system, direct measurement of ventilation rate is a challenging task due to the high number of fans and difficult measurement condition. In consequence the results of such a measurements may not be considered as representative. Second issue is that difficulties were encountered with application of proper standard methods regarding measuring of ventilation rate. Records from ventilation control system can effectively and efficiently substitute direct measurement of ventilation rate.
9	5 2 1	748	technique a14 (V shaped manure belts) and d (slurry acidification) are not generally applicable to existing farms due to technical considerations (construction of manure channel)	Modify the applicability of BAT 30.a14 to: 'This technique may not be generally applicable to existing plants due to technical and/or economic considerations.'	these two techniques have a certain construction of the manure channel as a necessary prerequisite. Thus they may not be generally applicable to existing plants.
10	5 3 1 1	751	Footnote table 5.5: missing section 4.6.5: techniques for housing of broilers breeders	Add reference to section 4.6.5	Type
11	5 4	753	The heading 'Description of Techniques' has no section numbering currently associated with it.	Section 5.4 should read as '5.4 Description of Techniques' . Delete the text '5.4 General BAT Conclusions' as it is unnecessary. Delete the text '5.5 Techniques for the Pig sector' and '5.6 Techniques for the poultry sector'. Consequential effects on the numbering for the sections which follow the existing Section 5.5 Techniques for the pig sector and '5.6 Techniques for the poultry sector'.	The section title as drafted seems to suggest that there are additional 'general BAT conclusions' contained rather than (as is the case) a more detailed description of the general BAT conclusions previously discussed.
<b>Comments on the alternative wording for BAT 30-34 (15 September 2015)</b>					
12	5 2 1		Footnotes 3, 6 and 8 in Table 5.4 have not been updated to reflect changes made to the main body of the text and incorrectly refer to BAT 32	Footnotes should be updated to refer to BAT 30 - pigs rather than BAT 32 - broilers	Typo
13	5 2 1 a 7		Applicability of kennel or hut housing in case of partly slatted floor.	Reword: "May not be applicable to naturally ventilated plants located in warm climates and to existing plants <b>for weaners and fattening pigs</b> with forced ventilation."	Forced ventilation ensures that the animals are provided with a healthy environment. To remove forced ventilation or not allow it could present a welfare risk. In addition, the forced ventilation can ensure that the animals dung and lie in the areas intended for that purpose and not wallow. Wallowing causes dirty animals (health risk) and increases emissions of odour and ammonia. Forced ventilation is a management technique with positive outcomes.
14	5 3 1 1		BAT 31: In footnote (1) to the table 5.5 there seems to be an inconsistency with what is indicated in technique 31.b0.	Modify footnote (1) to the table 5.5 as follows: [...] (1) For existing plants using a forced ventilation system and an infrequent manure removal (in case of deep litter with a manure pit), in combination with <b>a measure achieving a high dry matter content of the manure</b> , the upper end of the BAT-AEL is 0.25 kg NH3/animal place/year.	The footnote (1) to the table 5.5 of BAT 31 should be fully consistent with the descriptive wording related to the technique 31.b0, which does not refer to any nutritional management technique, but rather to additional mitigation measures.
15	5 5 1 1		Description of techniques: The denomination of the techniques for pig housing as reworded in BAT 30 should be used also in the related descriptive Section 5.5.1.1.	In Section 5.5.1.1, the denomination of all the techniques for pig housing should be reworded as in BAT 30.	In order to improve the clarity of the "BAT Conclusions" chapter as a whole, the denomination of the techniques for pig housing described in Section 5.5.1.1 should be fully consistent with the rewording proposed for the same techniques listed in BAT 30.

Overall comment No.	Comments from	Chapter No. / section No.	Page No. (PDF version of the document)	Comment description	Proposal for modification	Rationale
<b>Comments on the final draft IRPP BREF (14 August 2015)</b>						
1	ESPP	2 7	124	Chapter title 2.7 states that it addresses "on-farm" systems but the chapter includes techniques such as combustion of poultry manure or electro-oxidation.	Remove the words "On farm"	We would recommend to clearly widen to centralised processes, as depending on logistics and context, it can be more efficient to treat manures in larger / centralised installations, sometimes after an initial treatment on-farm (e.g. biological treatment or anaerobic digestion).
2	EEB	5		All applicability restrictions based on "technical and/or economic constraints"	Delete any reference to "economic considerations" from the BAT conclusions for existing and new installations. Explain clearly in e.g. the Annex of the published revised IRPP BREF the potential "technical restrictions" raised and indicate the reference plants that served as a justification for those applicability restrictions	the agreed procedures to consider economic considerations through cost-benefit weighing -when retrofit arise- are to be handled in accordance to the agreed procedures of Art 15(4) of the IED. There is a generalisation of this statement without any justifications whatsoever, which is not acceptable. The derogation option is available if there is a "disproportionate higher cost compared to the benefits" due to specific local conditions. Even if that vague statement is not mentioned in the BAT conclusions the IED takes precedent over the BAT conclusions and the operator could always claim this derogation but based on a reversal of proof subject to third party involvement. Keeping the current wording is a sidelining of agreed legislative procedures. Having a generalised applicability restriction without any clear justification or basis is undermining the conclusions reached. This is against the better regulation agenda of the COM and favours laggards in the sector. Rather the technical constraints should be specified, the reference installations reported so that solutions to overcome these constraints can be implemented (e.g. by technique providers)
3	Germany	5 1 3	729	In BAT # 3 the use of the wording "BAT is to use a diet formulation and nutritional strategy which includes a combination of the techniques given below" contradicts the IED objective of aligning environmental performance requirements for industrial installations in Europe and refrains relevant support for permit writers, i.e. which effective requirement to chose from the list of techniques. Using only one of the list is often already a common standard and thus might lead to "business as usual"	In order to reduce the total nitrogen excreted and consequently ammonia emissions "one or" should be deleted. Instead BAT is to use technique 3 a + b together; 3 c+d might be used additionally. BAT #3 should read "In order to reduce the total nitrogen excreted and consequently ammonia emissions (...), BAT is to use a diet formulation and nutritional strategy that includes the reduction of crude protein content by using an N-balanced diet and the multiphase feeding with a feed formulation adapted to the specific requirements of the production period."	The wording "one or a combination" leaves a too high degree for interpretation of the BAT conclusions which may act as a stimulant to use this "loopholes" resulting in weak or no effects. Only the two measures 3 a+b together utilizes the available potential for emission reduction; 3 c+d might also be used but 3 a+b are more effective and feasible. Thus, the BAT conclusions with the chosen vague wording may result in strongly varying implementation practice in Europe maintaining imbalances in the Union as regards the level of emissions from industrial activities. The use of the wording "one or a combination" also contributes to the clear lack of ambition of many BAT. The realistic consequences in Member States may reach from "doing nothing" until implementing the most effective measures mandatorily in all farms. This will disturb the aim of the IED for reaching a level playing field.
4	Germany	5 1 3	729	In table 5.1 it remains unclear whether the "BAT-associated total nitrogen excreted" shall be interpreted as BAT-AEL according to Art. 15(3) (we think it is not) and why this presentation has been chosen instead of a BAT-AEL. Furthermore the monitoring method to determine N excreted (see BAT # 24b) is not reliable and also an unnecessary burden for operators. We could achieve the same result, i.e. reduced total N excreted, by presenting in table 5.1 the crude protein content including the reference for the calculation method for deriving the crude protein content in the feed. The same applies for table 5.2.	Replace "total N excreted" by the corresponding values of "crude protein content" and add the calculation method. Please replace "total P excreted" by "total phosphorus content in feed" (see current IRPP BREF 2003, p.278 Tab.5.2. Indicative total phosphorus levels in BAT-feeds for pigs and p.290, Tab.5.6 Indicative total phosphorus levels in BAT-feeds for poultry). The associated levels of course would then have to be adjusted.	More appropriate parameter which is easier to control with less burden for the farmer while maintaining the level of NH3 reduction. We have commented many times during the BREF review process.
5	Germany	5 1 10	737	BAT # 15 e is not BAT. Maybe it could qualify for BAT if the change of the location of these field heaps is limited to a maximum of six months. With the text as it stands now, nitrogen emissions to soil during a whole year may be high and the risk of nitrate leaching to ground water is increasing with time. Please consider here also our comment # 1.	Please change applicability to: "Not applicable during groundwater recharge periods. Only applicable to temporary field heaps whose nutrient content is congruent with reasonable application rates on the relevant field plot".	Based on the assessment of the EIIPCB, there is no doubt about the danger of nitrate leaching into ground water if field heaps are located on the field for a longer time. The given time frame of one year will increase environmental pollution by nitrate leaching depending on the climate and local conditions. We propose a more precise wording of the applicability. Please consider here also our comment # 1.
6	Germany	5 1 11	738	BAT # 16 presents a list of techniques in order to reduce ammonia emissions to air from a slurry tank without qualifying their effectiveness.	Add information on effectiveness either by sorting them from the more to the less effective measures or by putting rough potentials for NH3 reduction.	The current presentation of BAT # 16 do not provide relevant information for permit writers. The message is rather anything goes as far as you do something. It is not in line with the definition of BAT (most effective...)
7	Germany	5 1 11	738	Some of the techniques listed under BAT # 16 b 3 are not BAT and do not achieve the necessary efficiency for reduction of NH3 emissions	Delete in BAT # 16 b 3 "natural crust" and "straw" for emission reduction from manure storage not as BAT.	"natural crust" and "straw" for emission reduction from manure storage is not BAT.
8	Germany	5 1 13	743	Table 5.3 that corresponds to BAT # 22 (incorporation of manure into the soil) includes a footnote which allows for an exception of the BAT associated time delay between landspreading of manure and incorporation into soil up to 12 hours which is not BAT. Also the rationale seems to be very unprecise and is not related to technical constraints. The proposed wording may lead to unnecessary losses of NH3.	Please replace the footnote by the following wording: "The time delay between landspreading of manure and incorporation into the soil may only be exceeded if the non-compliance is caused by unpredictable weather events after the manure application which makes trafficability impossible; in this case incorporation must be done immediately after the restoration of the trafficability of the soil is given".	The associated time delay between landspreading of solid manure is supposed to be 4 hours. The rationale for not applying BAT seems to open the door for not applying BAT. When we are free to apply BAT "when conditions are not favourable", e.g. when human and machinery resources are not economically available" we move towards an understanding of BAT that we think is inappropriate
9	EEB	5 1 13	743	BAT 22: The EEB, with Germany and the Netherlands submitted a split view to delete footnote 2 on the time delay for incorporation	Delete footnote 2	See split view. This BREF relates to huge (industrial scale) installations. Again the derogation is based on "economic considerations" linked to machinery hardware not being available (which requires one person to handle in fact). In essence it is linked to proper management and planning only. Installations of this time scale which cannot cope with this basic management requirement should not be permitted from the start.
10	United Kingdom	5 1 15 a	743	BAT 24 Monitoring of emissions and process parameters: 'Digestible phosphates' is missing from technique a - to monitor the total nitrogen and total phosphorus excreted in manure.	Digestible phosphates should be put back into the text as an additional emission that can form part of the manure analysis.	Digestible phosphates' was agreed at the final TWG meeting to be an additional element to Nitrogen and Phosphorus to analyse as a manure excretion and was present in the May version of the draft BREF.
11	EEB	5 2 1	747	Table 5.4 The upper value for fattening pigs should not exceed 2.2 kg NH3/animal place/year. Footnotes 2, 4, 5 and 7 should be deleted.	Table 5.4 The upper value for fattening pigs is 2.2 kg NH3/animal place/year. Footnotes 2, 4, 5 and 7 are deleted.	Table 5.4 Footnotes 2, 4, 5 and 7 should be deleted in coherence with the modification of BAT 30a0 proposed under Comment n°1. A deep pit combined with nutritional measures is not sufficient to comply with the objectives of the BREF which is to improve environmental performance. A deep pit with BAT 3 (nutritional measures) is low performing in accordance to actual standard. Diverse techniques with much better performance are available, with various choices. Indeed, not only new installations but also existing ones must make an effort to reduce emissions. The IED and the BREF are not meant to protect all existing installations from all environmental improvement or retain the status quo. The situation is a bit different for footnotes 3, 6, 8, which concern higher welfare systems with litter; they are a small minority. High welfare is a good reason to authorize higher values.  There are many different systems with different quality of management and very diverse results. These systems should benefit from enough legal security to allow more experience and find out how to combine and manage BAT 30 a (i), ii), iii) and iv) in order to ensure low emissions. The BREF 2003 asked for further research on such alternative systems, and this has not yet been done. More must be done for the next revision. As a big difference to alternative systems, plenty of data exist for the dominant system with fully slatted floor, deep pit, and long-time storage underneath the animals, and allow to require better performance.
12	Denmark	5 2 1	749	Intervals of the BAT-AELs are in general too broad and it is unclear on what grounds the intervals were widened between the 2. draft and the TWG. As the BAT-conclusions are presented now, they will neither serve the purpose of securing a level playing field throughout Europe nor improve the environmental quality in the EU by lifting technical standards.	upper limit for new installations for fattening pigs should be lowered to 2.2 kg/ap/yr	1) BAT-AEL for fattening pigs is unambitious and not in line with the purpose of the BREF revision. The BAT-AEL interval is applicable only to new installations which are expected to exist for about 30 years. To construct them in an environmentally unambitious way will impede environmental progress for many years to come. 2) It is unclear on what grounds the upper limit of BAT-AEL for fattening pigs were doubled between 2. draft and the TWG meeting. We see it as a matter of transparency that the background for BAT conclusions should be clear. 3) The proposed range leaves the competent authority on its own when assessing the reduction potential of a single measure. The lack of ambition might force countries to develop and implement their own BAT standards to meet the EU air quality objectives. Clearly, such a development will disturb the aim of reaching a level playing field within the EU.
13	Austria	5 3 1 1	750	Cage systems for pullets and/or broiler breeders have been included under BAT 31 as BAT technique only at the Final Meeting although some MS and EEB opposed to it. A corresponding chapter in the techniques to consider chapter (4.6.3.1) has been added after the Final Meeting. The use of cage systems for laying hens is no longer allowed, therefore cage systems should not be named as best available technique for other poultry categories. At least it is necessary to add the "Recommendations concerning domestic fowls" according to the Council of Europe under the applicability of the BAT technique cages and not only in the description of the technique.	The restriction of the applicability for cage systems (not enriched) for broiler breeders and pullets has to be given under the applicability of the BAT technique and not only under the description of the technique (chapter 5.6.1.1). The applicability for broiler breeders should be read as follows "only applicable to broiler breeders; cages have to be fitted with perches, litter area and nest". For pullets this restriction should also be given under the applicability and not only under the description.	Cage systems are no longer allowed for laying hens, leaving this technique in the Bat conclusion for all other poultry categories without applicability restriction gives the wrong perspective.
14	ESPP	6 3	785	This section is in places out of date or incomplete.	Add "A future BREF addressing manure processing and valorisation, on-farm and centralised, from all types of livestock production, should be engaged"	We would suggest to start preparation of a specific BAT on manure treatment, enlarging to cover also cattle manure, covering both on-farm and centralised systems, taking an approach of manure valorisation (recycling of nutrients, recovery of energy, reuse of water). This should also cover possible co-treatment with other organic wastes (e.g. biomass, food waste) where this can improve resource recovery. It should address techniques (including upstream in feeding) to minimise contaminants and improve nutrient balance in manures, to facilitate valorisation. For example: P-separation by gypsum-based precipitation is not today pertinent, ammonia stripping is applicable to the liquid fraction of manure only after solid-liquid separation not after biological treatment, magnesium addition is not always necessary for struvite precipitation, other calcium / magnesium / potassium phosphates can be precipitated and not only struvite. Technique 6.3 "Struvite precipitation" is reported with magnesium addition.

Overall comment No.	Comments from	Chapter No. / section No.	Page No. (PDF version of the document)	Comment description	Proposal for modification	Rationale		
15	EEB	7		Modify EIPPCB conclusions on the split view <i>Fully slatted floor is not applicable to new plants</i> and to report the split view for all categories of pigs including mating, gestating and farrowing sows, not only fattening pigs and weaners.	Table 7.2 : The split view submitted by the EEB, supported by Austria and Finland related to <b>all categories</b> of pigs, supported by Denmark for mating and gestating sows, weaners and fattening pigs, and is supported by the Netherlands for mating and gestating sows and for fattening pigs. This needs to be adequately reported. Further, a dissenting view has to be recorded that housing systems with fully slatted floors should not be applicable to new plants / is not BAT for new plants. <b>We reiterate the proposals for modifications contained in the split view</b>	The split view has been introduced for all categories of pigs, and there is support from some member states for all categories. There is no rational reason to exclude sows from this split view. Concerning the formal aspect, there cannot be any problem to summarize all categories in one statement; BAT 30 itself has regrouped all categories avoiding repetition in separate chapters. Concerning emissions, the mitigation principles are strictly the same, and fully slatted floor has no advantage for any category. Concerning the inherent problems of fully slatted floor, non compliance with the legal obligations of physical and thermal comfort and sufficient appropriate manipulable material is strictly the same for all categories.  It is even particularly relevant for sows. Gestating sows are hungry which makes them nervous, regrouped sows may be aggressive, therefore they have a major need for appropriate and abundant manipulable material. Sows have problems with thermoregulation and normal laying behaviour on fully slatted floor, which induces lesions and health problems such as urinary infections. There is no ideal slatted floor : they all do (more or less) increase the risk of lesions. For farrowing sows there is a problem with their need for nesting material. There is no slat width which would be convenient for sows and piglets. The reasons to adopt the split view for sows have been detailed in the contribution of EEB from 24 april 2015.		
16	Austria	7	794	The text of the split view for fully slatted floors does not represent the split view as supported by Austria as the animal categories mating, gestating and farrowing sows are missing. The full text of the split view was "Fully slatted floor is not applicable for new plants for <b>all pig categories</b> ". The European Environmental Bureau, supported by Austria and Finland expressed a dissenting view that housing systems with fully slatted floors should not be applicable to new plants (incl. all pig categories). The split view was supported by Denmark for mating and gestating sows, weaners and fattening pigs and by the Netherlands for mating and gestating sows and fattening pigs.	The full text of the split view on fully slatted floors should be given in chapter 7 --> sows should be included.	EIPPCB in its split view assessment has come to the conclusion that the split view on fully slatted floors (FSF) in new plants for mating and gestating sows is not supported by appropriate technical arguments. Austria does not agree with this conclusion. We believe that chapter 4 and 5 show very clearly that there are better alternatives available for this category, such as the partly slatted floors (PSF) with slanted walls in the manure channel, with V-shaped manure belts or with a reduced manure pit. Topping the FSF up with a mandatory additional technique (e.g. air scrubber) doesn't make FSF better.		
<b>Comments on the alternative wording for BAT 30-34 (15 September 2015)</b>								
17	Austria	5		The alternative wording is only a small improvement as not only the reduction measure but also the housing system is still mentioned. Especially fully slatted floors are still given as BAT technique although there is no emission reduction measure behind. Please see the Austrian split view in Chapter 7 "fully slatted floors are not applicable to new plants to all animal categories" Furthermore applicability restrictions with regard to animal welfare have now been left out.	Only the reduction BAT technique should be given, there is no need to name the housing technique.	BAT conclusions are the reference for permit conditions		
18	EEB	5		BAT 30 to 34 contain too many applicability restrictions for <i>technical and/or economic consideration</i> , in particular for air cleaning.	BAT 30-34 : Delete applicability restrictions for technical and/or economic considerations for air cleaning. Replace it by "Generally applicable unless prevention of emissions at the source achieves high environmental performance."	The objective of the BREF documents is to achieve environmental progress, not to preserve current practice which leads to environmental dumping and very low animal protection standard. The numerous applicability restrictions risk to make it more difficult for authorizing authorities to impose constraints for an efficient reduction of emissions. Air cleaning can indeed be a very efficient system. However, air cleaning has no effect on air quality inside the building where there is a major impact on the health and welfare of the animals and the workers. It is interesting to prevent emissions at the very source. The risk that end-of-pipe cleaning might replace and discourage prevention of emissions at the source, including cross media effects and the risk of trade-off between ventilation rate and indoor air quality, has not been sufficiently analysed and discussed.		
19	EEB	5	2	1	BAT 30 is directly involved in non compliance with minimal standards for the protection of pigs, which is the predominant situation in pig housing in Europe. Therefore it is essential to draw the attention of the authorizing authorities to the critical points that must be observed.	Add under applicability : "The housing system must comply with directive 2008/120/CE, in particular pigs must have access to a physically and thermally comfortable lying area, floors must not cause injury or suffering, and there must be permanent access to sufficient and appropriate manipulable material. For farrowing sows, nesting material should be provided."	Non compliance with minimal standards for the protection of pigs is predominant in pig housing in Europe. The design of the floor is highly relevant for compliance. The problem is well known, and the Commission has taken the option to promote training rather than enhance infringement procedures. In such a critical situation the general declaration in the Scope of Chapter 5 <i>These BAT conclusions apply without prejudice to other relevant legislation</i> is not sufficient. Authorizing authorities must become aware that fully slatted floor as usual does not mean derogation from legal constraints, and that the floor system has to be adapted to the legal obligations, not the other way around. This has to be made clear in order to avoid more or less voluntary misunderstanding of the BAT list.	
20	EEB	5	2	1	BAT 30a0 should integrate one of the techniques listed under a i), ii), iii) or iv). These should not be replaced by nutritional measures which are no more than BAT 3 (Nutritional management). BAT 3 does not mean exemption from BAT 30.	<b>Technique.</b> A deep pit (in case of fully or partly slatted floor) only if used in combination with an additional mitigation measure belonging to a i), ii), iii) or iv), b, c or d.	The new wording of BAT 30a is indeed better and much more coherent, although it remains inconsistent regarding non compliance with animal protection standards by fully slatted floor systems. At least it is now possible to approach logically the general principle of BAT 30a, using i), ii), iii) or iv). Nutritional measures are not part of these principles which deal with housing. Nutritional measures are BAT 3. It makes no sense to have a BAT 30a0 which is nothing more than BAT 3. Also, nutritional measures are today basic state of the art, they are independent from housing and valuable for all stages (housing, storage and landspreading). Therefore BAT 30a0 in existing plants should only be used in combination with an additional mitigation measure belonging to BAT 30 a i), ii), iii) or iv), b, c or d. This is necessary to achieve the objective of the BREF, which is progress in environmental performance. A deep pit with only nutritional measures is the current situation without any improvement. The list of a i), ii), iii) or iv), b, c or d still gives a large choice for existing plants.	
21	Germany	5	2	1	BAT # 30 c: Applicability: "Applicable to existing plants only where a centralised ventilation system is used" is not correct.	Replace "centralised" by "forced" in "applicability"	Air cleaning systems require a forced ventilation system but it does not need to be centralised also not for existing plants.	
22	Belgium	5	2	1	"For mating and gestating sows, fully slatted floor is only applicable when less than 15% of the surface of the lying area is reserved for drainage openings", as mentioned in techniques a.0, a.1,2,3 and a.4	Don't remove this applicability restriction from the text.	We would like to keep the text as was originally proposed, since the described techniques are very commonly applied in Belgium. Furthermore, because of the importance of animal welfare, a direct mention of this applicability restriction is much preferable over just an indirect mention to animal welfare legislation in the chapter introduction.	
23	Germany	5	2	1	The wording in BAT # 30: "A deep pit (in case of fully and partly slatted floor)... is redundant.	1. Delete "in case of", 2. write "perforated floor" and 3. delete "fully and partly slatted floor".	The "liquid manure technique" requires always a slatted / perforated floor.	
24	Germany	5	2	1	BAT # 30 includes all ammonia reduction techniques for pig housing without recognizing that there are significant differences of ammonia emissions and animal welfare conditions between the particular housing techniques. In Germany, we distinguish as a minimum between the following basic forms of pig housing: (1) liquid manure techniques forced ventilated, (2) liquid manure techniques naturally ventilated, (3) solid manure techniques forced ventilated, and (4) solid manure techniques naturally ventilated. The objectives of BREFs are to describe all relevant mitigation techniques and to evaluate these techniques in order to finally select those techniques which are BAT in a general sense for the sector as a whole.  Since the current BAT # 30 mixes all housing techniques of the pig rearing sector and include a list of all techniques without assessment of their effectiveness, the BAT AEL range now reflects a mixture of emission factors from different housing techniques and an undefined bunch of available techniques. Unfortunately, the proposal lacks a traceable derivation of BAT; we also miss the removal of techniques from the list which are not BAT. This basic work to evaluate BAT has now to be done by the member states to implement this BAT appropriately.	We recommend to refer the particular ammonia reduction technique to the particular pig housing techniques they belong to (types of pig housing 1-4). Then derive the BAT AEL respectively for this pig housing types, based on the emission factors and combined with the reduction potential of techniques which are - partially - included already in chapter 4! For all BAT AEL within the BAT 30 (pig housing) the ammonia reduction by nutritional management techniques (about 20%) has to be included, e.g. if a housing technique has an emissions factor (EF) of 3.6 kg NH3/AP and year, the EF of 3.0 kg NH3/AP and year would be the starting point for ammonia emission reduction in pig housing using the mitigation techniques in BAT 30. Every reduction technique should include such emission factors (to indicate effectiveness or emission reduction potential).  Please delete than the brackets (in case of ...). Once having carried out this proposed way forward we would expect separate BAT AELs for the four different housing types and the four animal categories based on the effectiveness and proportionality of a combination of techniques for new and existing farms. This would give e.g. a BAT-AEL for fattening pigs (liquid manure techniques forced ventilated) of 2.2 kg N/AP/year for existing farms. For each technique the technical applicability for existing farms should be described more precisely. If there is still a chance to change BAT AELs at this stage of work Germany could make proposals for the other housing types as well.	Especially in BAT # 30 it is evident that all available housing techniques for the pig sector are included in just one BAT. We believe this is difficult to understand and to implement. To fulfill the requirements of other European key Directives (NEC) it is very important to set realistic BAT AEL for the ammonia reduction technique in each type of pig housing in order to discriminate none of them. For the permitting authorities it is hardly possible to recognize the reduction potential of the reduction techniques of the long BAT # 30 list and which ammonia reduction can be reached in a given case. We expect that Member states will interpret the BAT # 30 very differently and will come to very different environmental performance levels for pig farms. We do not see that this BAT will drive environmental improvements in Europe.  The housing type (1 - liquid manure techniques forced ventilated) which corresponds to the deep-pit housing type is the most common in the European pig sector (>90%). For existing plants, the upper end of the corresponding BAT AEL range for this housing type is not reflecting an appropriate combination of BAT because this emission level is achieved already by the housing technique BAT 30 a0 (without applying any BAT). In consequence, an operator of an installation with this form of pig housing is not required to apply any of the BAT of the list.	
25	EEB	5	2	1	BAT 30 a 6 Solid manure systems should be generally applicable to new plants, because they can and they must apply the principle of a iv) : keep bedding clean and dry.	Delete applicability restriction for new plants. It could be replaced by : Only applicable if clean and dry bedding is ensured, which would be a repetition of iv).	The emissions of solid manure are reduced when animal density is lowered and when more clean straw is delivered (Paul ROBIN, Mélynda HASSOUNA, Claude TEXIER : Emissions d'ammoniac et de protoxyde d'azote des porcs engraisés sur litère de paille). These characteristics (number of animals and surface, and availability of litter) are known when authorization is delivered and can be evaluated. Solid manure is considered to be very interesting from an agronomic point of view, to preserve and enhance the fertility of soils.	
26	Germany	5	3	1	1	BAT # 31 a: In case of cage systems: (enriched or unenriched) is not an agreed change of the document.	Please delete " in case of" and "enriched or unenriched", additionally please write in the applicability the restriction which is given in the description for "Cages": "unenriched cages only applicable to broiler breeders; cages have to be fitted with perches, litter area and nest".	Poultry housing in unenriched cages is not BAT for laying hens. Therefore this housing type may not be called BAT. The applicability restriction is important.

Overall comment No.	Comments from	Chapter No. / section No.				Page No. (PDF version of the document)	Comment description	Proposal for modification	Rationale
27	Austria	5	3	1	1		BAT 31. Technique a has now been combined: "in case of cage systems (enriched or unenriched)..." and the applicability has been stated as generally applicable. This is in conflict with the European ban on cage systems on laying hens.	unenriched cages should be deleted from BAT31. If this is not possible it is important to say that unenriched cages are banned for laying hens and should only be used for broiler breeders or pullets as discussed at the Final Meeting. Then the applicability restriction have to be given: The restriction of the applicability for cage systems (not enriched) for broiler breeders and pullets has to be given under "applicability" of the BAT technique and not only under the description of the technique (chapter 5.6.1.1). The applicability for broiler breeders should be read as follows "only applicable to broiler breeders; cages have to be fitted with perches, litter area and nest". For pullets this restriction should also be given under the applicability and not only under the description.	Cage systems are no longer allowed for laying hens, leaving this technique in the Bat conclusion for all other poultry categories without applicability restriction gives the wrong perspective.
28	United Kingdom	5	3	1	1		Applicability of poultry-housing techniques: The proposed rewording in the techniques column combines the 2 approaches of manure removal by belt, no longer separating out for enriched and non-enriched cage systems. The applicability section indicates that these are generally applicable however, the previous wording made clear that for enriched cage systems, these manure-removal approaches were not applicable to pullets and broiler breeders nor to laying-hens for non-enriched cage systems.	Either retain original wording or amend to maintain non-applicability. For example generally applicable, except to pullets and broiler systems for enriched cage systems and to laying hens for non-enriched cage systems.	Proposed rewording has changed the applicability of the techniques and as such is not correct/as agreed.
29	EEB	5	3	1	1		Cages in general should not be considered to be BAT, and unenriched cages even less because they don't comply with the Recommendation of the COE on domestic fowl.	In BAT 31 a : Delete the bracket ( <i>enriched or unenriched</i> ). Add under Applicability : "Unenriched cages are not BAT and enriched cages are not allowed in new installations."	Unenriched cages are prohibited for laying hens. There is no rational reason to allow them for broiler breeders. Broilers cannot be kept in cages and must be given litter, and layers must have at least ENRICHED CAGES ; broiler breeders are egg-laying hens from broilers breeds, so they should be given litter and if they are kept in cages, these should be ENRICHED CAGES. Giving them neither litter nor enrichment is totally irrational. The only reason might be economic, and this is a very bad argument for BAT. There is no reason either to allow unenriched cages for pullets ; unenriched cages for pullets are illegal according to the Recommendation concerning domestic fowl from the Standing Committee of the COE Article 4.2.  Young birds should be given appropriate experience of management practices (e.g. particular feeding and watering systems) and environmental conditions (e.g. natural light, perches, litter) to enable them to adapt to the husbandry systems which they will encounter later in life. <a href="http://www.coe.int/t/e/legal_affairs/legal_co-operation/biological_safety_and_use_of_animals/farming/Rec%20ofow%20E.asp">http://www.coe.int/t/e/legal_affairs/legal_co-operation/biological_safety_and_use_of_animals/farming/Rec%20ofow%20E.asp</a> All cages are actually the object of intense campaigning from welfare organisations, they are prohibited in several countries, and the market turns in favour of non-cage systems. Puttig a "BAT stamp" on these systems is contra-productive and drawing a (unnecessary) negative image on the BREF process.
30	EEB	5	3	1	3		BAT 33. For technique a 2. the bracket ( <i>in case of fully slatted floor</i> ) should be deleted and replaced by : ( <i>in case of partly slatted floor</i> ), because fully slatted floor clearly leads to an illegal situation. Under applicability, the sanitary pretext for this illegal practice should be deleted, because its motivation is merely economic, in order to keep intolerable high density of animals.	Replace (in case of fully slatted floor) by (in case of partly slatted floor). Replace the applicability clause by: Only applicable if a sufficient area is provided to enable all birds to rest simultaneously, covered with an appropriate bedding material in a dry, friable state.	It is particularly important to remind legal obligations, because non compliance for ducks is current practice. Non compliance is also current practice for pigs, the difference to pigs is the following : for ducks the legal obligation to provide litter is explicit, whereas for pigs it is implicit (other solutions can envisaged, but in practice they don't perform sufficiently well). For pigs, the non compliance is wide spread among member states, for ducks it seems concentrated in the member state which is the biggest producer. It is non-admissible to justify non compliance by so-called sanitary reasons. This is a misrepresentation. In fact, the reasons are economic. On fully slatted floor it is possible to keep ducks at a higher density than on litter. The usual densities are extreme, and duck are debeaked and declawed. The technical results in France (2011) are the following for ducks : Age : 83,7 days for males and 69,5 days for females. Density : 15,1 animals/m <sup>2</sup> . Batch : 3,4/year. Weight : 3,980 kg. Productivity : 194,8 kg/m <sup>2</sup> /year.  Source : <a href="http://www.itav.asso.fr/economie/references/volailles.php">http://www.itav.asso.fr/economie/references/volailles.php</a> . The fact is that on litter, with the same density, mortality is much higher. Robin et al. think that it is better to limit the density to 10 ducks/m <sup>2</sup> on litter. In their comparison of emissions on fully slatted floor FSF and on litter, mortality was higher on litter. This does not mean that FSF provides comfort and welfare. The Recommendation concerning domestic ducks is clear : <a href="http://www.coe.int/t/e/legal_affairs/legal_co-operation/biological_safety_and_use_of_animals/farming/Rec%20ducks.asp">http://www.coe.int/t/e/legal_affairs/legal_co-operation/biological_safety_and_use_of_animals/farming/Rec%20ducks.asp</a> To compare with broilers, the minimal standards for the protection of broilers have three levels of weight limit per m <sup>2</sup> : 33 kg, 38 kg and 42 kg. 15 ducks/m <sup>2</sup> can mean up to 60 kg ! Litter cannot remain clean and healthy with such a density, though ducks need litter. Therefore the applicability clause which gives the pretext of sanitary reasons, has in fact only economic reasons. It does not comply with legal obligations and reveals highly unethical treatment of ducks.