

**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 LARGE COMBUSTION PLANTS**

**MEETING OF 20 OCTOBER 2016**

**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 Large Combustion Plants (version of 27 June 2016).**

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 Large Combustion Plants as presented at the meeting of the forum of 20 October 2016:

1. The forum welcomes the draft Best Available Techniques (BAT) reference document for Large Combustion Plants as presented by the Commission <https://circabc.europa.eu/w/browse/3ee8ebb4-29b6-4d4e-9fe7-b5ec58c1cff7>.
2. The forum acknowledges the discussions held at its meeting of 20 October 2016 and agrees that the changes to the draft Best Available Techniques (BAT) reference document for Large Combustion Plants, 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, 20 October 2016

**Annex A:** Comments on the draft Best Available Techniques (BAT) reference document for Large Combustion Plants that are consensual within the forum.

**Annex B:** Comments on the draft Best Available Techniques (BAT) reference document for Large Combustion Plants that are representing the view of certain members of the forum.

Opinion of the IED Article 13 Forum on the proposed content of the LCP BREF-Annex A

Comment No	Chapter No / Section No					Page	Comment description	Proposal for modification	Rationale
1						xxx	The current text indicates that "this document does not address the following: - combustion of refinery fuels <b>in refineries</b> ; this is covered by the BAT conclusions for the refining of mineral oil and gas"	It should be replaced by "this document does not address the following: - combustion of refinery fuels <b>at the refinery site</b> ; this is covered by the BAT conclusions for the refining of mineral oil and gas"	The BAT conclusions for the refining of mineral oil and gas have been adopted on 9 October 2014 as implementing decision (2014/738/EU). Amongst the activities covered : Combustion units for energy production : combustion units burning refinery fuels, excluding units using only conventional or commercial fuels. For the purpose of these REF BREF BAT conclusions, the following definitions apply : 1) <u>Refinery fuel</u> : Solid, liquid or gaseous combustible material from the distillation and conversion steps of the refining of crude oil. Examples are refinery fuel gas (RFG), syngas and refinery oils, pet coke and 2) <u>Combustion unit</u> : Unit burning refinery fuels alone or with other fuels for the production of energy <b>at the refinery site</b> , such as boilers (except CO boilers), furnaces, and gas turbines. Replacing the words " <b>in refineries</b> " by " <b>at the refinery site</b> " in the scope of the LCP BREF would ensure full alignment of the scopes of both BREFs and allow permitting authorities and operators of unit firing refinery fuels <b>at the refinery site</b> (connected to the energy system of the refinery) to unambiguously refer to the REF BREF to regulate them. If the scopes of the LCP BREF and REF BREF would not be fully aligned, the combustion units not located "in refineries" but well located <b>at the refinery site</b> (connected to the energy system of the refinery) although firing refinery fuels originating from the refinery might not be regulated under the REF BREF BAT conclusions, nor the LCP BREF BAT conclusions, nor any other BREF BAT conclusions (no section dealing with refinery fuel combustion).
	10					740			

2	1	3	2	2	22	<p>The paragraph included in page 22 of the LCP BREF Final draft: <i>Data collected for the review of this document indicate the fuel-bound nitrogen to be &lt; 50 mg/Nm3 in random sampling at power plants using iron and steel process gases, whilst typical fuel-bound nitrogen levels reported in the IS BREF (Table 2.6) are between 200 mg/Nm3 and 800 mg/Nm3</i>" could be misunderstood by the reader without the specific contextual information (e.g. %COG input and all the technical details and justifications provided in chapter 7.3 of combustion of iron and steel process gases of the LCP BREF Final draft).</p>	<p>Suggestion is to delete the paragraph</p>	<p>The information included in that specific part of the BREF doesn't give add value to the BREF and could be misunderstood.</p> <p>Editorial</p>	
3	3	1	1	4	100	<p>The paragraph included in page 100 of the LCP BREF Final draft: "<i>Combustion plants located in iron and steel facilities aim at using the available process gases as much as possible</i>", should be complemented with the update of BAT 4 on Fuel choice and some technical comments included as well in chapter 7.3.3 of combustion of iron and steel process gases (page 646 and 649 of LCP BREF Final draft), in order to explain the particularities of the sector.</p>	<p>The paragraph should be read as follows: "Combustion plants located in iron and steel facilities aim at using the available process gases as much as possible, taken into account that the sector is specific as the composition and quantities of fuels/process gases that are combusted may be highly variable. Process gases are directed to the combustion plants depending on their availability, as they are distributed in order of priority to the consuming plants in the steelworks"</p>	<p>The proposed update reflects the particularities of the sector and is aligned to the update of BAT4 - Fuel choice.</p>	
4	5	1	3	6	1	448	<p>The emission levels provided give a wrong picture for Oak Grove.</p>	<p>Change: "<b><i>Emissions data from 2012-2014 indicates that Oak Grove has consistently achieved a level of 60mg/NM<sup>3</sup> through retrofitting with SCR and one pulverised unit sized 556 MWe at Sandow retrofitted with SCR in 2009</i></b>, showed stable yearly average levels of NOX emissions of about 80–90 mg/Nm3.</p>	<p>See submissions in BATIS. CEMs data suggests that the yearly average emissions of Oak Grove are at 60mg/Nm<sup>3</sup> . It is important that these levels are reported in the main text</p>
5	6	3	3	2	538	<p>Figure 6.11: The data shown for the NH3 range is not the 95 % percentile.</p>	<p>Mention <b>yearly</b> NH3, TVOC and CO besides NOx in the text of the graph legend.</p>	<p>Editorial</p>	

6	6	3	3	3	540	DSI and SDA should not be applicable to plants operating < 500 hr per year	Table 6.13: Add an applicability restriction for DSI and SDA techniques in column "Technical considerations relevant to applicability": " <i>not applicable to plants operating &lt; 500 hr per year</i> " Chapter 10.3.2.3 BAT 38 table: Add an applicability restriction for DSI technique BAT 38 b " <i>not applicable to plants operating &lt; 500 hr per year</i> "	See page 820 (chapter 10.8.4) of the LCP BREF Final Draft (June 2016) describing that DSI and SDA are equipped with either ESP or bag filters . Note in section BAT 39 page 786 is given a applicability restriction of ESP and bag filters such as " <i>Not applicable to combustion plants operated &lt; 500 h/yr</i> ". I.e. same applicability restriction should apply for DSI and SDA. The only diesel engine plant equipped with FGD in the BATIS reference database was the Maltese plant (362, 363, 364, 365), this plant is a baseload plant, see "Euromot Position 23 January 2015 Comments on Maltese Plant Data Submitted by EEB (EEB) on December 2014" at link <a href="http://www.euromot.org/download/54da4c2cb49b86c3cbe73ca9">http://www.euromot.org/download/54da4c2cb49b86c3cbe73ca9</a> also submitted to BATIS in January 2015. Page 6: "Base load: plant/s run for 24 hours; wo-shift operation: Plant/s run for 16 to 18 hours per day". Notice also text " Most of these faults are a result of cyclic operation. Continuous operation could have reduced such faults". I.e. DSI is NOT suitable for short term operating plants (in Malta a DSI FGD type was used). See page 820 (chapter 10.8.4) of the LCP BREF Final Draft (June 2016) describing that DSI and SDA are equipped with either ESP or bag filters . Note in BAT 39 on page 786 is given a applicability restriction of ESP and bag filters such as " <i>Not applicable to combustion plants operated &lt; 500 h/yr.</i> "I.e. same applicability restriction to apply for DSI.
	10	3	2	3	786			
7	6	3	3	3	541	The SO2 emission of HFO diesel engines should be <b>consistent with the sulfur content</b> reported for the fuel.	Change description of Figure 6.12: SO2 emissions from HFO- and/or gas-oil-fired engines below 280 mg/Nm3.	Plants 430 and 428-6 have both reported use of 100% fuel oil with sulphur content > 0.9 wt-% and no flue gas cleaning. SO2 Emission data thus appear to be inconsistent with the reported sulphur content and hence this data should not be presented as representative of "well performing" reference plants.

8	7	1	1	2	2	556	Methods for liquid fired engine to be taken away (chapter is for gaseous fuel)	Remove 2. bullet "introducing liquid water by direct injection. Evaporation of the water cools the fuel-air mixture"	Comment from submission of one industrial organisation of March 14th 2016 was accepted by EIPPCB but only partly implemented (The text not fully clear and thus not fully understood ?). There was <b>not awareness</b> of any gas engine applying direct injection of water for NOx reduction. In Final LCP BREF draft chapter 3.2.2.3.10 is stated " <i>..Direct water injection can only be applied in some liquid-fuel-fired engine types; this technique is used in some shipping installations only.</i> " in regard with direct water injection !
9	7	1	1	2		555	The first sentence of the paragraph is clumsy.	Suggestion:The emissions from the combustion of natural gas are principally NOx and CO, with mostly negligible SOx and dust emission.	Editorial
10	7	1	2	2		567	Table 7.4 - The electrical efficiency figures are "confusing"	Suggestion:Either use a point to separate the figures or title the column as a % and include as 38.5% for example.	Editorial
11	7	1	3	2	2	600	Table 7.14 SCR retrofit costs for a 375 MWe CCGT. The table of costs does not include a reference date. Since prices are subject the international market movements and currency variations the date should be included.	The date 2011 to be included.	Editorial
12	7	1	3	2	3	607	Economics of the SCONox system. Since this text is in black it relates to the current BREF under revision. These data are therefore relatively old and there is again no reference date for the costs.	The date 2000 to be included.	Editorial
13	7	1	3	2	5	614	table 7.16 footnote inserted "This NOx .. ideal conditions .. new and fresh catalyst .." Footnote to be extended and also cover the very low ammonia slip ranges shown in table	Table 7.16: Add NH3 to NOx in the footnote and associate footnote also to (NH3) cells.Text to read: "This NOx and associated NH3 levels are reached .."	Catalyst condition has a big impact on achievable NOx and NH3 slip levels, a worn catalyst will also emit a higher NH3-slip.
14	7	1	3	2	5	615	The conclusions of the DK study (DK Study - 2007) are to be better reflected in the text, in particular that "Using the catalyst experience obtained in this study, and extrapolating to a higher	<b>Text:</b> "Reduction efficiencies of about 85 % could be achieved in 10 000 hours of operation, with a decrease of 10 percentage points in the catalyst reduction efficiency after this period of	Euromot comment 15 submission March 14th 2016 was partially accepted by EIPPCB but misunderstood. 1) Denmark is giving some emission species <b>expressed at a 30 % reference efficiency</b> and final project emission limit depending on the

						<p>number of operation hours, it has been estimated that the majority of the Danish gas engines will be able to comply with an emission target of 20 mg/m<sup>3</sup> @ 5 % O<sub>2</sub> and 30 % efficiency. The extrapolation is primarily sensitive to the rate of decay on catalyst activity at higher operation hours.." (i.e big uncertainty exists). This should also be converted from the 30 % reference efficiency (this is a reference point used for the emission expression, NOT the efficiency of the engines in the study) to a typical efficiency of a modern gas engine, see text proposed.</p>	<p>operation. Formaldehyde emission levels of between 3.8 mg/Nm<sup>3</sup> and 7.5 mg/Nm<sup>3</sup> (15 % O<sub>2</sub>) could be estimated for operating cycles between 20 000 hours and 40 000 hours, with a catalyst with one or two layers, depending on the initial level of emissions at engines with a typical <b>electrical efficiency of about 30 %.</b>"<b>to be corrected as:</b> " Depending on the type of catalyst used, reduction efficiencies of about 85 % for one catalyst type and 40 % for another catalyst type could be achieved over 10 000 hours of operation; after this period of operation, the catalyst reduction efficiencies had decreased respectively by 10 and 20 percentage points. However, the plant in the field tests operated according to the liberalized power market with a large amount of start and stops showed catalyst degradation faster than above mentioned. Final extrapolation of the test results indicated that formaldehyde emission levels of between 3.8 mg/Nm<sup>3</sup> and 7.5 mg/Nm<sup>3</sup> (15 % O<sub>2</sub>) could be estimated for operating cycles between 20 000 hours and 40 000 hours with a catalyst with one or two layers, depending on the initial level of emissions given at engines electrical reference efficiency of 30 %. This translates in emission levels between 6 mg/Nm<sup>3</sup> and 11 mg/Nm<sup>3</sup> (15 % O<sub>2</sub>) for an engine electrical efficiency of 44 %. The study concluded that majority of the Danish gas engines would be able to emit less than 20 mg/m<sup>3</sup> @ 5 % O<sub>2</sub> and 30 % efficiency, corresponding to less than 11 mg/Nm<sup>3</sup> @ 15 % O<sub>2</sub> and 44 % electrical efficiency".</p>	<p>actual/real engine efficiency is scaled from this - see text below. E.g. page 11 of the DGC report (DK Study - 2007): "The proposed Danish emission limit for formaldehyde is seen to be strict compared to the <b>German TA Luft (2002)</b> emission limit for gas engines on <b>60 mg/m<sup>3</sup> @ 5 % O<sub>2</sub>. The TA Luft value translates to approximately 45 mg/m<sup>3</sup> @ 5 % O<sub>2</sub> and 30 % efficiency for a typical Danish engine with 40 % efficiency.</b> ... " 2) DK study page 60: " .. <b>One type of catalyst</b> showed 95 % decreasing to 85 % formaldehyde reduction after 10.000 hours of operation. <b>The other type of catalyst</b> showed a lower degree of oxidation, from 60 % in the beginning to 40 % at 10.000 hours of operation .." 3) DK study page 22: "..The Hjortebjerg catalyst activity has decreased to 85 % formaldehyde reduction <b>within 5500 hours</b> of operation ..", note this was also of catalyst type I (Johnson Matthey) which in the tests showed the highest reduction rate. Page 39: " ..At site Hjortebjerg a change in plant operation strategy has occurred during the field-test period. Hjortebjerg has <b>changed to the liberalised market for power causing a larger number of starts and stops and fewer operationhours.</b> .." 4) DK study page 5: <b>Summary " .Using the catalyst experience obtained in this study,</b> and extrapolating to a higher number of operation hours, it has been estimated that the majority of the Danish gas engines will <b>be able to comply with an emission target of 20 mg/m<sup>3</sup> @ 5 % O<sub>2</sub> and 30 % efficiency. The extrapolation is primarily sensitive to the rate of decay on catalyst activity at higher operation hours.</b> .." i.e. at a <b>44 % electrical efficiency:</b> corresponds to about 11 mg/Nm<sup>3</sup> (15 % O<sub>2</sub>)</p>
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15	7	1	3		573	In the last paragraph it is included <i>"Therefore, in order to avoid repetition, for those general techniques already described in Chapter 3, only the additional information that is specific to the combustion of iron and steel process gases is reported here in synthesis tables"</i>	To to be corrected replacing "specific to the combustion of iron and steel process gases" by "specific to the combustion of natural gas"	Chapter 7.1.3 refers to Techniques to consider in the determination of BAT for the combustion of natural gas in boilers /engines /gas turbines and not to iron and steel process gases.  Editorial
16	7	1			553	Ahead of the first paragraph there should be a general introduction to the chapter to indicate the major subdivisions, i.e. natural gas, bio-gas, iron and steel process gases and crude natural gas on offshore platforms.	Suggestion: This chapter considers the combustion of natural gas, biogas, iron and steel process gases and crude natural gas on offshore platforms.	Editorial
17	7	3	1	1	623	In relation to the number of European plants that submitted data for the LCP BREF review. It is included 56 plants combustion plants firing iron and steel process gases	Suggestion is to consider 61 plants as combustion plants firing iron and steel process gases.	Suggestion is to revise the number of the European plants from I&S (see as well page 623 LCP BREF Final Draft) where it is included 56 European plants and page 859 Chapter 12 where it is included 62 plants  Editorial
18	7	3	1	2	627	In the paragraph related to SO <sub>2</sub> , it is included <i>"Reported levels in the data collection show H<sub>2</sub>S levels in the COG between 15 mg/Nm<sup>3</sup> and 300 mg/Nm<sup>3</sup> for the year 2010 [LCP TWG 2012]. The total sulphur load in COG is normally in the range 350 mg/Nm<sup>3</sup> to 780 mg/Nm<sup>3</sup>. In some plants, higher levels of total S have been reported in the COG [EUROFER - 2013]"</i>	The paragraph should be read as follows: <i>Reported yearly average levels in the data collection show H<sub>2</sub>S levels in the COG between 15 mg/Nm<sup>3</sup> and 300 mg/Nm<sup>3</sup> for the year 2010 [LCP TWG 2012]. The total sulphur load in COG is normally in the range 350 mg/Nm<sup>3</sup> to 780 mg/Nm<sup>3</sup>, but could be higher due to the presence of organic sulphur compounds. In some plants, higher levels of total S have been reported in the COG [EUROFER - 2013]"</i>	Reported levels corresponds to the averages of the year in some plants, and situation could be different on different averaging period as for example daily basis (due to fluctuations in the composition under I&S BAT conclusions) Suggestion is to align as well the paragraph with the comment included in the LCP BREF final draft on page 622, taken into account that the total sulphur levels in COG could be higher that range 350 mg/Nm <sup>3</sup> to 780 mg/Nm <sup>3</sup> due to the presence of organic sulphur compounds, which can add a further 200-300 mgS/Nm <sup>3</sup> (I&S BREF 2012)  Editorial
19	7	3	2	2	631	In the last paragraph it is included <i>"..For the 43 European plants that submitted data for the LCP BREF review.."</i>	Suggestion is to consider 61 plants as combustion plants firing iron and steel process gases.	Suggestion is to revise the number of the European plants from I&S (see as well page 623 LCP BREF Final Draft) where it is included 56 European plants and page 859 Chapter 12 where it is included 62 plants  Editorial

20	7	3	2	3		639	Last paragraph refers to Figure 7.45 (daily data for a combination of three CCGT) when should be refer to Figure 7.46	Suggestion is to make reference to Figure 7.46 instead Figure 7.45	Editorial
21	7	3	2	3		641	Figure 7.47: Relationship between SO2 emissions and the relative thermal inputs to the boiler of BFG and COG using hourly average data over a three-month periodThe data in the figures relates to NOx instead SO2 (The figure in the previous draft was correct)	The current figure is replaced by the correct figure from the previous version.	Editorial
22	7	3	3	2	1	650	The reference to ">27% COG" in the first paragraph should be updated taken into account the Split-views with a positive assessment of technical rationale according to EIPPCB's report have been included in Chapter 12 of the LCP BREF Final draft	Suggestion is to replace >27% COG to >32%COG following the EIPPCB's split-views assessment report	Suggestion is to update the reference following EIPPCB's assessment report.  Editorial
23	7	3	3	3		654	The first sentence of the paragraph: "This graph does not mention the type of technique used to control the SO2 emissions." could be considered an oxymoron.	The sentence to be replaced with the following: "Crossing this set of data, this does not show the technique used to control SO2, and the data collected in 2012..."	Editorial
24	7	4	3	2		664	Comment is related to Table 7.27, 1st line devoted to Cogeneration of heat & power (CHP); column cross-media effects. Inappropriate entry for cross-media effects	Delete text 'sludge that needs to be dewatered to be disposed of' in the column cross-media effects	D1 comment #44 to remove the sludge text was "accepted and processed" but the text remains. We cannot understand why sludge would form and there is no mention of sludge in the referenced section 3.3.4.2. Our comment was re-submitted to the LCP BREF version dated February 2016, it is written that the comment was accepted, but the change has not been made.
25	10	1	1			748	BAT 1 (vi) word order	Amend to read: " review, <b>by senior management</b> , of the EMS and its continuing suitability, adequacy and effectiveness <del>by senior management</del> "	Editorial clarification, as written is suggests the assessment will only be of how suitable, adequate and effective the EMS is when used by senior management, not the whole system as used by all staff at the installation

26	10	1	1		748	BAT 1 (xiii) wording. The details in BAT 1 all relate to the EMS, so to require the EMS to contain an E&SMS seems strange wording, the intent is to have operators systematically assess uncontrolled/unplanned emission events.	Amend to read "a systematic method to identify and deal ..."	Editorial
27	10	1	3		756	BAT 4 table: Those techniques that are "Generally applicable" should be listed first in the table since they are the most commonly applied and hence of the most interest.	Promote "Technique e" to second in the list. Note that this comment applies to all tables throughout the BAT conclusions - not just the occurrence here.	Makes it clearer which techniques are likely to be used on an installation.
28	10	1	3		756	The wording of the applicability text for 'Fuel Choice' is confusing with two adjectives (various-suitable). The applicability restriction should be clearly associated with the combustion of process fuels in industrial sites where process fuels are generated	BAT4 b, applicability:"Applicable within the constraints associated with the availability of suitable types of fuel with a better environmental profile as a whole, which may be impacted by the energy policy of the Member State, or by the integrated site's fuel balance in the case of combustion of industrial process fuels generated at industrial sites."	Editorial clarification to avoid confusing double adjectives. The meaning of "integrated site's fuel balance" is vague and weakens the BAT on fuel choice because it inserts another applicability restriction which is very broad. The reference to "integrated site's fuel balance" was requested by two industrial organisations and <u>only</u> related to <b>industrial sites where process fuels are generated</b> (see BP page 284 and point 3.1 in page 283)
29	10	1	3		756	BAT 4 prescribes the techniques that are BAT (Fuel blending and mixing, Fuel choice etc), however, in accordance with Article 15(2), ELVs shall be based on BAT, without prescribing the use of any technique or specific technology. It is therefore inappropriate for the BATC to be prescriptive. This comment is also applicable to BAT 7, 10, 11, 14, 17, 18, 19, 21, 22, 23, 26, 28, 29, 30, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 46, 47, 48, 49, 51, 52, 53, 54, 56, 58, 59, 60, 61, 62, 65, 66, 67, 69, 70, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85	The wording is amended to read "In order to improve the general environmental performance ... , BAT is to ensure an optimised combustion and to use an appropriate combination of techniques below." The rest of the standard text in BAT conclusions has been kept.	The text on combination of techniques is standard text in BAT conclusions

30	10	1	6		762	BAT 11 table: No need to repeatedly say "Generally Applicable"	Merge the cells which have the same applicability statement and just make one statement. Note that this comment applies to all tables throughout the BAT conclusions - not just the occurrence here.	Editorial
31	10	1	6		761	b) Technique: Dry Bottom Ash Handling System Description: Dry, hot bottom ash falls from the furnace onto a mechanical conveyor system and is cooled down by air or water in a closed cycle. No water is used in direct contact with the ash for cooling or transportation.	b) Technique: Dry Bottom Ash Handling System Description: Dry, hot bottom ash falls from the furnace onto a mechanical conveyor system and is cooled down by ambient air. No water is used in the process.	In case of Pulverized Coal Fired Boilers, the Dry Bottom Ash Handling does not use any single drop of water to cool down the bottom ash.
32	10	1	6		763	Misalignments persist between the following two sections of the Final draft:- page 763, BAT 11, table 10.1, where BAT-AELs for emissions to water refer to 'daily averages' (no definition agreed); - page 747, definition agreed for the averaging period associated to BAT-AELs for emissions to water (i.e. 24-hour flow-proportional composite samples. Time-proportional composite samples can be used provided that sufficient flow stability can be demonstrated).	Modify under General Considerations, BAT-AELs for emissions to water: 'The BAT-AELs refer to daily averages, i.e. to 24-hour flow-proportional composite samples.'	According to the definition agreed on page 747, BAT-AELs for emissions to water should refer to '24-hour flow-proportional composite samples' or 'time-proportional composite samples' (provided that sufficient flow stability can be demonstrated), and not to 'daily average', for which no definition was agreed in the section 'General considerations'.  It should be also underlined that the monitoring requirements associated with BAT-AELs for emissions to water given in BAT 3 quater includes a frequency of once per month for water pollutants.
33	10	1	8		765	BAT 14 table: Noise abatement (technique d) can be confused with technique e (noise control equipment)	Change Technique d to read " <b>Noise attenuation</b> "	Editorial
34	10	1			748	First sentence is inconsistent with other recently published BAT conclusions and is misleading since the <i>BAT conclusions are more than "mentioned."</i>	Amend to read: " <i>The fuel-specific BAT conclusions included in Sections 10.2 to 10.7 apply in addition to the general BAT conclusions <del>mentioned</del>—in this section.</i> "	Consistency with other recently published BAT conclusions - e.g. see equivalent text used in NFM BAT conclusions
35	10	2	1	2	766	BAT 18 wording is inconsistent with other similar BAT statements (e.g. BAT 17).	Amend BAT 18 to read: " <i>In order to increase the energy efficiency of <u>the combustion of coal and/or lignite combustion</u>, BAT is to use an appropriate combination of the techniques in BAT 7 and below.</i> "	Editorial

36	10	2	1	2	766	Description of 'Dry bottom ash handling' is grammatically incorrect.	Amend description of 'Dry bottom ash handling' to read: " <i>Useful energy is recovered from both the ashes reburning and ashes cooling</i> "	Editorial
37	10	2	1	3	768	BAT 19: Emissions cannot be both prevented and reduced, if prevented no further reduction is possible, and if reduced, then prevention has not been achieved. The "and/" is not required in the sentence.	Amend to read "In order to prevent <del>and/or</del> reduce ..." Note this comment applies to all such statements throughout the BAT conclusions (BAT 21, 26, 28, 30, 32, 33, 36, 37, 38, 39, 41, 42, 43, 46, 47, 48, 49, 52, 53, 54, 56, 60, 61, 65, 74, 75, 76, 77, 83) - not just the occurrence here.	Editorial
38	10	2	1	3	769	Table 10.3; Footnote 11 is potentially confusing as it could be read that the BAT-AEL values are indicative of plants operated <500h/yr; when in fact the opposite is meant.	Amend footnote 11 of Table 10.3 to read: " <i>For plants operated &lt; 500 h/yr, these levels are indicative</i> ". Note this comment applies to all such footnotes throughout the BAT conclusions - not just the occurrence here.	Editorial
39	10	2	1	3	769	Relocation of footnote 7 in table 10.3	footnote 7 only applies to $\geq 300$ MWth coal fired PC boilers.	The extension of the applicability of footnote 7 to lignite fired PC boilers was not discussed within the TWG and should thus be made undone.
40	10	2	1	4	770	BAT 21 table: Technique c Duct sorbent injection, description should match the wording for technique i	Amend to read " <del>The technique</del> can be used..."	Editorial
41	10	2	1	4	771	BAT 21, Table 10.5, footnote (6) should be amended considering the case of existing plants already applying wet abatement system for SO2 reduction that couldn't achieves so high performances in all operating conditions, considering limitations for further retrofitting due to techno-economic reasons.	Table 10.5 note (6) The lower end of the range can be achieved with the use of low sulphur fuels in combination with most advanced wet abatement systems design	As data in chapter 5.1.5.3 figure 5.32 demonstrate, lower BAT-AEL values could be achieved just by recent plants fitted with most advanced design of wet FGD BAT 21 (f), i.e. adequate absorber loops L/G ratio, contact time in reactor and reactivity (purity and morphology) of limestone supplied: this is the actual outcome of final TWG discussion that note (6) doesn't express.
42	10	2	1	6	774	Tables 10.8 and 10.9 are very similar and repetitive	Consolidate Tables 10.8 and 10.9 into one table.	Editorial

43	10	2	2	2	774	Table 10.10 footnote 4 - use of words "in case" is grammatically incorrect	Amend footnote to read: " <i>These levels may not be achievable if the potential heat demand is too low.</i> " Note this comment applies to all such footnotes throughout the BAT conclusions - not just the occurrence here.	Editorial
44	10	2	2	2	774	It should be clarified whether there is a link between footnote on Energy efficiency for biomass # 5 and 1 bis. As we understand, they can be combined, but the one is not a prerequisite for the other. This means that the resulting energy efficiency for a plant < 150 MW burning high moisture fuel and equipped with cooling system or geographical location can be down to 28%. Is that correctly understood?	Change footnote 1 bis to : "The lower end of the range may correspond to cases where the achieved energy efficiency is negatively affected (up to four percentage points) by the type of cooling system used or the geographical location of the unit". Change consistently footnote 1 in Table 10.2 (coal/lignite).	Editorial
45	10	2	2	2	774	In the section for solid fuel biomass and peat AEEL, the footnotes of table 10.10 refer to fuel moisture content allowing for less efficiency when using high-moisture fuel. However there is no definition of high moisture fuel.	To read the footnote 5 in the Table 10.10: The lower end of the range may be down to 32 % in the case of units of < 150 MWth burning biomass fuels with <b>&gt;55% of moisture.</b>	With a higher level of moisture, the stack loss is higher. Normally wood chip already has a moisture content in range of 45-55% (Straw has only up to 25% moisture content). Therefore it should be clarified that high-moisture fuels are those containing above 55% of moisture.
46	10	2	2	6	778	BAT 30 is differently worded to BAT 23 and confusingly lists specific techniques before those techniques that provide co-benefit.	Harmonise the structure of BAT 23 and BAT 30.	Editorial
47	10	3	2	2	785	Texts have to be clear - thus text to be slightly changed	<b>Text</b> below table 10.20 "As an indication the yearly average CO emission levels and the average TVOC emission levels over the sampling period for new or existing .. " <b>to be changed to</b> "As an indication, the yearly average CO emission levels and the average over the sampling period for TVOC emission levels for new or existing .. "	Text below table 10.20 states " <i>As an indication the yearly average CO emission levels and the average TVOC emission levels over the sampling period for new or existing ..</i> " In table 10.20 (for NOx) "Daily average or average over the sampling period" is given besides yearly average values. In order to not confuse reader intention of chapter 6.3.3.2, figure 6.11 or chapter 6.2.3 table 6.4 showing yearly average measured values for amongst all TVOC a text change is needed.
48	10	3	3	2	788	Table 10.24 has no emission units.	Add 'mg/Nm <sup>3</sup> '	Legal clarity

49	10	3	3	3		789	Table 10.25 - no need for the row titled 'New plant or existing plant' as this is the totality of plants.	Delete "New plant or existing plant"	Editorial
50	10	4	1	1		791	Table 10.26 - some of the row are superfluous	Delete rows titled: Gas engine, Gas fired boiler and gas turbine.	Editorial
51	10	4	1	1		791	In table 10.26, row "gas turbine" (below "Open Cycle Gas Turbine), the explicit reference to the thermal input of '≥ 50 MWth' has been omitted. (see the pre-final Draft, February 2016)	In table 10.26, for "gas turbine" (below "Open Cycle Gas Turbine), the reference to '≥ 50 MWth' need to be restored.	It is necessary to point out again that the BAT-associated energy efficiency levels (BAT-AEELs), finally agreed, should refer to single combustion unit, each with rated thermal input ≥ 50 MWth. To this end, e.g. the energy efficiency data provided for mechanical drive gas turbine were then reported only for single turbine ≥ 50 MWth. In order to avoid distorted implementation of the above mentioned BAT-AEELs, it is deemed necessary to explicitly reintroduce the reference to '≥ 50 MWth' for "the open cycle gas turbine".
52	10	4	1	1		790	BAT 44 table - first column is empty	add "a" in the first column of the BAT44 table	Editorial clarification ( "a" already appears in the first column of the BAT44 table)
53	10	4	1	2		794	BAT 49 table 10.27 Footnotes 12 and 13	To apply footnote 12 also to existing CCGT plants and to apply footnote 13 also to existing OCGT plants.	Currently, footnotes 12 and 13 only apply to new plants. Older plants that have or could be retrofitted to high levels of efficiency should not be penalised.
54	10	4	1	2		794	Table 10.27. Typo.	In table 10.27, row "Existing gas turbines for mechanical drive applications", the ratio "h/hr" should be revised as " <u>h/yr</u> "	The appropriate ratio includes year, not hours.
55	10	4	1	2		795	BAT 50 - wording	Amend text to read: "BAT is to ensure <del>an</del> optimised combustion and/or to <del>apply-use</del> oxidation catalyts"	Editorial
56	10	4	1	2		794-795	Inconsistency persists between the first sentence of the paragraph introducing the indicative CO yearly average values for new and existing plants and the applicability clause reported in the second and fifth bullet points.	Review all the notes related to indicative CO levels after the table on NOX emissions throughout the document to make them applicable only for new plants or existing plants operated ≥1500 h/yr. For BAT 49 in particular, remove the ">500h" statement in bullets 2 and 5 (>1500h condition already included before the bullets)	As indicated in the first sentence of the paragraph introducing the indicative CO yearly average values, properly consistent with footnote 7 of table 10.27, CO yearly levels should apply to existing plants when operated ≥ 1500 h/yr. Thus, with such an introductory specification, the references to "≥ 500 h/yr" in the second and fifth bullet points would result in an unclear determinations.

57							<p>Split-view number 11 in relation to load modes: combustion plants that operate less than 500 and between 500 and 1500 operating hours per year. Footnotes BAT 52,53 (Table 10.32), BAT56 (Table 10.34) and BAT58 (Table 10.36) has not been assessed by EIPPCB, and refers that the dissenting view was expressed after Final TWG meeting.</p>	<p>Suggestion is to add in the footnotes of the table 10.32 (BAT54), table 10.34 (BAT56) and table 10.36 (BAT58) reference to the conclusions of the Final TWG meeting in relation to BAT AELs of combustion plants that operate less than 500 and between 500 and 1500 operating hours per year in the same way as other sector. Load modes (general issues). Distinguish the following 2 categories: Combustion plants that operate less than 500 operating hours per year (ex- "emergency load mode"). For this plant category: set proposed daily average or average over the sampling period emission level as indicative. Do not set yearly average emission levels. Combustion plants that operate between 500 and 1500 operating hours per year (ex- "peak load mode"). For this category: keep daily average or average over the sampling period BAT-AELs as proposed. Proposal to add the following footnotes, as follows:  a) <i>These BAT-AELs do not apply to combustion plants operated less than 1500 hours per year</i>  b) <i>These levels are indicative for combustion plants operated less than 500 hours per year</i></p>	<p>The split view refers to footnotes of tables 10.32,10.34 and 10.36 referring to BAT52,53,56 and 58 and on that proposal of BAT were raised split-views during the Final TWG meeting, so should be evaluated as well. This is based on the following rationale, among others:- The I&amp;S LCPs do not operate in the previously defined "emergency load mode" or "peak load mode". However the currently defined categories are a different approach, due to the consideration of operating hours per year.- Depending on coke, iron and steel production the quantity derivation of the process gases which has to be utilized is high. Therefore there are existing I&amp;S LCPs which have to use the momentary surplus of process gases and they have &lt; 500 or &lt; 1500 h of operating hours per year.- These stand-by I&amp;S LCPs are also in operation if another LCP in the same I&amp;S work is maintained or in case of higher demand on heat during the winter period.- The conclusions of the Final TWG meeting in relation of combustion plants that operate &lt; 500 and between 500 and 1500 operating hours has to be taken as a general approach of the TWG meeting for all the fuels (fair-level playing field for I&amp;S process gases as other fuels). This point is considered in accordance to point 1 of section 1.3 of the BREF guidance (2012/119/EU) in relation to IED Art 13 Forum opinion</p>
58	10	4	2	3	800	<p>BAT 56 - Technique b Description. Confusing text where it says: "<i>Use, as much as the iron- and steel-works allow it, of...</i>"</p>	<p>Amend to read: "<i>To the extent allowed by the iron- and steel-works, maximise the use of...</i>"  Also text "and auxiliary fuels such as" needs indent reduced to line up with main bullet points.</p>	<p>Editorial</p>	
59	10	4	3		802	<p>BAT 59 Description of 'Load control' - incorrect to use the word 'pollution' as this is an effect.</p>	<p>Amend to read: "<i>Operate multiple generator or compressor sets at load points which minimise <del>pollution</del> <u>emissions</u></i>"</p>	<p>Editorial</p>	



64	10	6			809	Word order in second paragraph	Amend text to read " <del>When waste is co-incinerated</del> , the BAT-AELs in this section apply, <del>when waste is co-incinerated</del> , to the entire flue-gas volume generated."	Editorial
65	10	6			809	BAT 70 prescribes the techniques technique 70a in all cases. However, in accordance with Article 15(2), ELVs shall be based on BAT, without prescribing the use of any technique or specific technology. It is therefore inappropriate for the BATC to be prescriptive.	Wording of the BAT statement to be amended as follows: "BAT is to use technique (a) below and a combination of the techniques in BAT 4 and/or of the other techniques below"	In accordance with Article 15(2), ELVs shall be based on BAT, without prescribing the use of any technique or specific technology. Prescriptive BATC do not allow for any future developments of new techniques. In addition, the details relating to BAT in the General Considerations on page 3 states "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."
66	10	8	1		817	Description of 'Fuel choice' could be clarified	Amend text to read: "The use of less polluting fuels"	Editorial
67	10	8	3		818	Some text is incorrectly underlined	Remove underline from: " <i>ultra- or advanced low-NOX burners</i> " and " <i>advanced lean-burn concept</i> ".	Editorial
68	10	8	3		818	Description of Air staging - "an" before optimised combustion is not required	Amend text to read: "and ensuring <del>an</del> optimised combustion."	Editorial
69	10	8	4		820	Description of DSI - naming of "trona" is inconsistent with the way in which other sorbents are named.	Change " <i>trona</i> " to read " <i>sodium carbonate</i> "	Editorial
70	10	8			817	Contents of the tables in this section appear to be in random order	Re-order in alphabetical order.	Editorial
71	10				753	Uniformity of TVOC definition among different BREFs	Make sure the same definition of (T)VOC is used in different BREFs	At the moment, different definitions of TVOC are used in the LCP and LVOC BREFs (BREF LCP: Total volatile organic carbon, expressed as C (in air); BREF LVOC: total volatile organic compounds which are measured by a flame ionisation detector (FID) and expressed as total carbon.) To prevent ambiguity or differences in interpretation, uniformity in the definition of TVOC (and in general for all definitions) should be guaranteed.



76	10				741	Definitions: There are 3 definitions relating to FGD but they are not adjacent in the list making it difficult to understand each term.	Amend terms to read; " <i>Flue-gas desulphurisation (FGD) system - existing</i> " and " <i>Flue-gas desulphurisation (FGD) system - new</i> ". These related terms will then appear next to each other in alphabetical order.	Editorial
77	10				741	Definitions: Similarly, there are 2 definitions each relating to 'plant' and 'unit', but they are not adjacent in the list making it more difficult to understand each term.	Amend terms to read; " <i>Plant - existing</i> " and " <i>Plant - new</i> ", and " <i>Unit - existing</i> " and " <i>Unit - new</i> ". These related terms will then appear next to each other in alphabetical order.	Editorial
78	10				741	Definitions: There are several sentences with restrictive clauses, and "which" should be "that".	Replace " <i>which</i> " with " <i>that</i> " where it appears in definitions of "Combustion plant" second bullet point, "Existing plant", "Existing unit", "Existing flue-gas desulphurisation (FGS) system", "New flue-gas desulphurisation (FGS) system"	Editorial
79	10				746	General considerations: The following text is inaccurate since all installations are required by Article 11(b) of the IED to apply BAT - even those installations that do not meet the AELs: " <i>The BAT-AELs set out in these BAT conclusions may not apply to liquid-fuel-fired and gas-fired turbines and engines for emergency use operated less than 500 h/yr, when such emergency use is not compatible with the use of BAT.</i> "	Amend text to read: " <i>The BAT-AELs set out in these BAT conclusions may not apply to liquid-fuel-fired and gas-fired turbines and engines for emergency use operated less than 500 h/yr, when such emergency use is not compatible <u>with meeting the BAT-AEL.</u></i> "	Legal clarity
80	10				746	General considerations: Sentence before the table of reference conditions	Delete "given"	Editorial
81	10				739 and all the BAT-AEL tables	The word "total" in the phrase "total rated thermal input" in the BAT-AEL tables is confusing and should be removed.	The word "total" should be deleted from the first column of all the BAT-AEL tables.	The total rated thermal input in case of aggregated plants is already embedded within the combustion plant definition.
82	10				739	Scope: The second bullet relating to 1.4 Gasification	Replace the final word " <i>process</i> " with " <i>plant</i> ".	Editorial

83	10				740	Scope: The final bullet should relate to the preceding 3 bullets (i.e. "this is covered by the BAT conclusions for waste incineration"), that is, it is not a separate bullet point but the conclusion of the sentence on disposal or recovery of waste.	Remove bullet and change to " <i>as this is covered by the BAT conclusions for waste incineration.</i> "	Editorial
84	12				864	Table 12.2, N° 18: Dissenting view to BAT 22 table 10.7, <b>dust</b> : EIPPCB takes up only one of sixteen postulations for dust BAT-AEL. The decision of the TWG is very ambitious. Since numerous coal- and lignite-fired power plants are going to have difficulties with this BAT-AEL, it is necessary to determine a more realistic range.	An additional line for the dissenting view on dust should be added after line N° 18:It should be added in line N° 18(new), column 1:"18.2"It should be added in line N° 18 (new), column 2: "BAT 22 Table 10.7"It should be added in line N° 18 (new), column 3: "Footnote 6 : (6) The higher end of the BAT-AEL range is <del>16.44</del> mg/Nm <sup>3</sup> for plants put into operation no later than 7 January 2014"It should be added in line N° 18 (new), column 4:"EURACOAL"It should be added in line N° 18(new), column 5: "16 mg/Nm <sup>3</sup> "	EIPPCB assessment indicates that a re-assessment of available daily averages shows that all plants having yearly averages of < 10 mg/Nm <sup>3</sup> achieve daily averages below 16 mg/Nm <sup>3</sup> . According to 'Table and graphs working document', more than half of this set of plants recorded 95th percentile over 10 mg/Nm <sup>3</sup> .
85	12				864	Table 12.2, N° 23: Dissenting view to BAT 23 table 10.8 and table 10.9, mercury:EIPPCB has assessed:"Add a footnote mentioning that the mercury BAT-AELs do not apply to plants of > 300 MWth operated<1500 h/yr"The proposal is not limited to power plants > 300 MWth. Dissenting view of one industrial organisation is missing because the former footnote 1 was deleted	Amend the paragraph in line N° 23: "Add a footnote mentioning that the mercury BAT-AELs do not apply to plants <del>of &gt; 300 MWth</del> operated <1500 h/yr"	The techniques for further reducing mercury emissions are not sufficiently examined. In many cases, there are only results from tests. The decision to delete footnote 1 in table 10.8 for coal-fired plants is derived incorrectly from the data for the reference power plants and the information on the availability of techniques to reduce mercury.
86	12				859	Slr relation to the number of European plants that submitted data for the LCP BREF review.It is included 62 combustion plants firing iron and steel process gases	Suggestion is to consider 61 plants as combustion plants firing iron and steel process gases.	Suggestion is to revise the number of the European plants from I&S (see as well page 623 LCP BREF Final Draft) where it is included 56 European plants and page 859 Chapter 12 where it is included 62 plantsEditorial

87	12				934	Under the definition of Process furnaces or heaters, suggestion is to clarify that specific process furnaces and heaters from the Ferrous Metal Processing (FMP) industry should be identified as well in the text.	Suggestion is to read de definition as follows <i>Process furnaces or heaters are:- combustion plants whose flue-gases are used for the thermal treatment of objects or feed material through a direct contact heating mechanism (e.g. cement and lime kiln, glass furnace, asphalt kiln, drying process, reactor used in the (petro-)chemical industry, ferrous metal processing furnaces), or- combustion plants whose radiant ...</i>	Combustion plants used for direct heating, drying, or any other treatment of objects or materials are not covered by Chapter III of the IED or the MCP Directive. Process furnaces and heaters are explicitly excluded from the scope of the LCP BREF. It is therefore proposed to cover the following processes, i.e. process furnaces and heaters under FMP BREF: e.g. reheating and heat treatment furnaces in hot rolling mills, heat treatment in cold rolling mills: annealing, galvannealing etc.
88	12				872	Extend future work listing	Under the recommendation on information to collect related to emissions to air, include the following additional bullet: "More information in order to review, in the case of gas turbines, the use of specific NOx emissions (g/MWh) as a possible alternative or complement to concentrations (mg/Nm3)"	Review the use of specific NOx emissions (g/MWhr) in place of mg/Nm3 as explained in table 7.4 (PDF page 603)
89	12				860	EIPPCB reports: "The number of dissenting views is explained by the high number of BAT conclusions, BAT-AELs and BAT-AEELs in this document, as well as by the high number of TWG members actively involved in the BREF review process and, in particular, in the final TWG meeting (140 participants)." The impression is given that all 140 had the opportunity to participate actively in the discussion. This was not the case in the TWG meeting.	In this paragraph '140 participants' should be replaced with '40 organisations and Members States with 140 attendees in total'	140 participants took part in the TWG, but each member state and each NGO was only allowed to speak with one voice, so the high number of participants does not reflect the number of members who were allowed to actively participate.
90	12				869	Table 12.2 text change need	<b>No 62: Text:</b> Modify valid split view. "Add a footnote mentioning that yearly dust BAT-AELs for existing plants using only fuel choice apply at engine MCR loads of >85%, in steady state conditions" .to "Add a footnote mentioning that yearly <b>and daily</b>	Valid <b>dissenting view</b> no 62 in table 12.2 of chapter 12 LCP BREF Final Draft (June 2016) needs updating. The submitted document containing Position on BAT 39 BAT AELs for dust item >85 % of engine load", dated 07 March 2016 " following text in the overall conclusion part was overlooked: "... on engine unit load span for set dust emission



Opinion of the IED Article 13 Forum on the proposed content of the LCP BREF- Annex B

Comment No.	Comments from	Chapter No. / Section No.				Page	Comment description	Proposal for modification	Rationale
1	EEB	1	3	7		137	<p>Add in this section interesting information on what implementing stricter BAT levels concretely means also in terms of health protection</p>	<p>Add: The May 2015 Study “Health and Economic implications of alternative Emission Limits for coal fired power plants in Europe” of the EEB and Greenpeace have quantified the damage to health and the environment associated with the emissions from 290 LCPs combusting coal and lignite, and compared these with two scenarios : the proposed upper end BAT-AELs of the LCP draft version of April 2015 and the lower BAT ranges proposed. The study quantified the health implications of either of those scenarios. The main findings are that 71,000 preventable deaths across Europe, due to increased risk of stroke, heart disease, asthma and other illnesses associated with air pollution could be prevented. The loss of life and quality of life, additional drain on health services and the loss of over 23 million working days would cost Europeans over €52 billion between 2020 and 2029. The full study is available here <a href="http://www.eeb.org/index.cfm/library/eu-health-impacts-technical-report/">http://www.eeb.org/index.cfm/library/eu-health-impacts-technical-report/</a></p>	<p>The study has been supplied in advance of the Final TWG meeting (uploaded to BATIS on 25/05/2015 and summied also as Background information in our written comments) and therefore forms part of material supplied under the information exchange for the LCP BREF. This background information on potential benefits for human health and the environment due to more ambitious implementation of mitigation measures should be added in this section.</p>

2	EUROMOT	3	1	1	4	121	Table 3.3 described as “ <i>The ranges integrate the emissions from coal-fired plants (which represent the majority of plants fitted with wet abatement systems), biomass-fired plants, and gaseous- or liquid-fuel-fired plants for those not fitted with such abatement systems. The plants themselves are boilers, gas turbines or engines.</i> ”. This is <b>not correct</b> no waste water composition data for the diesel engine plant were found in BATIS. Text needs correction.	<b>Text</b> (above table 3.3): “ .. <i>The ranges integrate the emissions from coal-fired plants (which represent the majority of plants fitted with wet abatement systems), biomass-fired plants, and gaseous- or liquid-fuel-fired plants for those not fitted with such abatement systems. The plants themselves are boilers, gas turbines or engines. ..</i> ” <b>change to</b> “ .. <i>The ranges integrate the emissions from coal-fired plants (which represent the majority of plants fitted with wet abatement systems), biomass-fired plants, and gaseous- or liquid-fuel-fired plants for those not fitted with such abatement systems. The plants themselves are <b>boilers and gas turbines</b>.</i> ” ..	EUROMOT comment 55 (submission March 2016) was rejected by EIPPC. EUROMOT re-examined the data in BATIS for diesel engines and found only some data submitted by Malta - no waste water data measurement results were found but the permissible waste water limits for the water discharge are listed in a table in BATIS document “ ENEMALTA - Delimara IPPC Permit 06-12-11_.pdf (1355 KB) “ see page 27. Amongst all a max. limit of 4 mg/l for the Vanadine is given which is much higher than table 3.3. (in June 2016 Final BREF Draft page 121) figure of < 0.037 mg/l, for Copper 0.5 mg/l which is higher than < 0.13 mg/l (table 3.3 figure) (case without wet abatement), etc. EUROMOT are not aware of any other engine plant that provided liquid discharge composition data for the BATIS data gathering process. On page 121 above table 3.3 is stated “ .. <i>The ranges integrate the emissions from coal-fired plants (which represent the majority of plants fitted with wet abatement systems), biomass-fired plants, and gaseous- or liquid-fuel-fired plants for those not fitted with such abatement systems. The plants themselves are boilers, gas turbines or engines. The ...</i> “ I.e. when no waste water data data supporting figures given in table 3.3 found in BATIS for the diesel engine plant text above table needs a correction.	
3	EURACOAL	5	1	3	4	2	420	Mercury emissions from power plants with FBC and PC boilers are shown in figure 5.31. They should be separated into different figures.	To present Hg emissions from the data collection and provide two figures which show power plants with FBC and PC boilers separately.	Figure 5.31 provides data for deriving Hg BAT AELs for lignite-fired power plants. Because Hg control is quite different in FBC and PC boilers, there should be two figures derived with separate Hg BAT AELs for plants with FBC and PC boiler (see also expert opinion of Prof. Kather, Hamburg University of Technology, Aug. 2016) .
4	EURACOAL	5	1	3	4	2	420	In Figure 5.31, four lignite-fired power plants from the data collection (List of tables and graphs) were eliminated, although among these plants are the only ones equipped with continuous measurement.	Add power plants 133VC, 117-1 VC, 391V and 117-2VC to Figure 5.31	The power plants 133VC, 117-1 VC and 117-2VC are the only power plants with continuous measurement in the data collection. (Information on continuous measurement for power plant 18-2V in "List of tables and graphs" is wrong. The questionnaire for power plant 18-2V is incorrectly filled, it should be periodic measurement not continuous, n.b. sampling should be one per year (EC has been informed.)Power plant 391V is part of data collection and should be added to figure 5.31 as well.

5	EEB	5	1			448	Provide important background information on NOx levels achieved with SCR by Sostanj 6 (lignite PC)	Add: the following "In Europe, a new 600MWe lignite-fired plant <b>put in operating in March 2015</b> in Slovenia at Solstanj (unit 6) is fitted with SCR <b>and achieved NOx emission levels of 46mg/Nm<sup>3</sup> (daily averaged)</b> .	See EEB submissions in BATIS (31/05/2016). It is important that these levels are reported in the main text of the BREF, so important information is lost. This is especially true because it is the only EU lignite plant with SCR which entered into commercial operation since MArch 2015. The information is raw CEMs data which is validated. The fact that this information dates April 2015 and has been supplied in May is irrelevant since it relates to the "new plants" only, so plants that would be built after the LCP BAT-C publication date (Q1/2017 at the earliest).
6	EUROMOT	6	2	3		510	table 6.4: Ammonia range measured to be extended	Table 6.4: Extend upper range of NH3 to 20 mg/Nm3 (15 % O2). Footnote (1) not to apply to NH3.	Euromot comment 26 submission March 14th 2016 was partially accepted by EIPPCB but ammonia comment disregarded. 1) BATIS measurement data base states in regard of NH3 for Plant 504: "20mg/Nm3 running on dual fuel (95% gas, 5% gas oil), <b>20mg/Nm3 running on gas oil</b> " at reference point 15 % O2. 2) Graph 3 of Euromot Position 23 January 2015 Comments on Maltese Plant Data Submitted by EEB (European Environmental Bureau) on 3 December 2014 at link <a href="http://www.euromot.org/download/54da4c2cb49b86c3cbe73ca9">http://www.euromot.org/download/54da4c2cb49b86c3cbe73ca9</a> can also be found in BATIS shows that all of the Maltese SCR NH3 slips were well above 9 mg/Nm3 for more than 5 % of the operating time and a range of 15 .. 20 mg/Nm3 is better representative. Note also that the Maltese plant was according to " BATIS document :Annex III - Operational Data to cover whole year (2013) from 'anne-marie.grech', on 03/04/2014: Annex 3 Operational Data.pdf (39 KB) " <b>partly operating on diesel oil</b> (4099.539 MT gasoil consumed year 2013) and not the whole time on HFO. Thus footnote (1) should <b>not</b> be applicable to NH3 .
7	EURELECTRIC	6	3	3	2	537	The lack of data for <b>NH3 slip</b> for diesel engines equipped with SCR should be acknowledged in the text of the chapter 6.	After "The NH3 emissions concentration yearly average for the plotted plants ranges below 9 mg/Nm3" Add the following sentence : "Based on a single plant that reported NH3 slip values during the data collection".	The averaged NH3 slip for diesel engines quoted in the text is based on only 3 data, originating from one single plant. The control of NH3 slip for diesel engines equipped with SCR still represents a technical challenge that should not be concealed in the text of the LCP BREF. Plant 504 reported NH3 split of 20 mg/Nm3@15%O2.

8	EUROMOT	6	3	3	2	537	<b>Text describing</b> Figure 6.11: TVOC emission is not described (missing) in text. NH3 emission range statement "below 9 mg/Nm3" should be raised, as there is evidence on this.	Add / correct text: TVOC yearly average was below 74 mg/Nm3 (15 % O2) calculated as C. Yearly average NH3 emission concentrations are below 20 mg/Nm3 (15 % O2). All plants except one reported yearly average CO emissions concentrations below 192 mg/Nm3 (%).	Euromot comment 37 submission March 14th 2016 was rejected by EIPPCB. 1) All figure 6.11 emissions to be described on page 537. 2) BATIS measurement data base states in regard of NH3 for Plant 504: "20mg/Nm3 running on dual fuel (95% gas, 5% gas oil), <b>20mg/Nm3 running on gas oil</b> " at reference point 15 % O2. 3) Graph 3 of Euromot Position 23 January 2015 Comments on Maltese Plant Data Submitted by EEB (European Environmental Bureau) on 3 December 2014 at <a href="http://www.euromot.org/download/54da4c2cb49b86c3cbe73ca9">http://www.euromot.org/download/54da4c2cb49b86c3cbe73ca9</a> can also be found in BATIS shows that all of the Maltese SCR NH3-slips <b>were well above 9 mg/Nm3 value for more than 5 % of the operating time and a range of 15 .. 20 mg/Nm3 is better representative.</b> 4) Plant 427-7 74 mg/Nm3 (15 % O2) calc. as C TVOC. Plant 429-2 reported 199 mg/Nm3 (15 % O2) CO and Plant 691 192 mg/Nm3 (15 % O2) CO in the BATIS measurement database.
9	Portugal	6	3	3	3	541	Improve the analysis of the data that were taken into consideration for the definition of the upper limit of BAT AEL of 280 mg/Nm3 (footnote 3 of Table 10.21).	Based on the data analysis and their real representatively, define the need do establish a new BAT AEL more adequate to the reality.	From the analysis of the data concerning plants 428-6 and 430 (years 2012-2015) it can be expected much higher values for the yearly average.
10	EURELECTRIC	6	3	3	4	543	The dust measurements reported for diesel engines show a <b>variability</b> that should not be concealed in the graph.	Complete at least with reference plants 176, 427-3, 427-7, 427-8, 429-1.	The data collection shows a great variability of dust emission for engines that have the same technical characteristics and allegedly the same fuel. Cherry picking should be avoided in the BREF and this variability should be presented in the graphs (in particular in regard of the limited number of reference plants available). Furthermore the same set of reference plants should be presented in the graphs for dust and for SO2 emissions, since both are predominantly depending on the fuel quality for engines not equipped with flue gas cleaning (just as the data for NOx, CO and NH3 were presented in the same graph).

11	EUROMOT	6	3	3	4	543	<p>Erroneous data shall not be reported. EU documents shall be based on correct facts.</p> <p>1) Figure 6.13: Take out 428-10, 429-2 , 429-4 and 430 (these are flawed data for the corresponding HFO quality (0.8 .. 0.91 wt-% S) used). Give whole measured dust range for plant 691 (upto 46 mg/Nm3 (15 % O2)), include 429-1 (0.9 % S), 427-8 (1.01 % S), 427-7, 427-3, 176 (0.881 % S) PM data into figure. Add word "yearly" in front of "dust emissions" in text description below figure 6.13. 2) In text above table write "<i>When combusting heavy fuel oil, the dust mainly consists of the ash and sulphur (resulting in sulphate) content of the fuel oil. In below figure S-wt% of HFO brands used were in the range 0.88 ..1.01 Thus by use of a low sulphur (maximum 0.50 wt- % S) and low ash oil in a well maintained diesel engine operating on a high load a typical dust emission should be 35 .. 45 mg/Nm3 (15 % O2) measurement standard EN 13284-1, part 1 (instack procedure).</i>"</p>	<p>Euromot comment 48 submission March 14th 2016 was partially accepted by EIPPCB . 1) See Euromot Position "Feedback on LCP BREF Data Collection 2011 - 2012 at European Plant Levels HFO/gas oil in engine: Dust emissions to air" document submitted to BATIS May 2015. , see also " Working document - Figures HFO-gas oil engines dust " updated 25.05-15 in BATIS, see also March 2016 Euromot comment 48 showing source for the higher French measured dust figure ! 2) In the Final LCP BREF Draft (June 2016) section 6.1.4.2 is stated " <i>When combusting heavy fuel oil, the dust mainly consists of the ash and sulphur (resulting in sulphate) content of the fuel oil and, to a smaller extent, of soot and hydrocarbons With gas oil, the dust mainly consists of soot and hydrocarbons</i> " . Heavy fuel oils in the BATIS database are in the range of 0.8 .. 1.01 wt-% S not any max. 0.5 wt-% S HFO case is found. In EUROMOT March 2016 feedback EUROMOT proposed some of the used plants to be stay in the figure and the clearly erroneous ones to be taken out. For further information see our March submission. Note also valid split view 13.7.4 on minimum load and dust emission correspondence. Argument that Portugal has not corresponded to request is not a valid excuse for implementing wrong data in the report. In our March feedback we highlighted that many measurement data had been left out and only lowest (in many time erroneous) figures were used in the figure.</p>
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12	EUROMOT	6	3	3	4	543	Upper dust figure of the Maltese plant is NOT fulfilling the 95 % fractile thus to be raised for 2 plants (364 and 365 ).	Figure 6.13: raise upper span variation level up to 20 mg/Nm3 at least for 2 of the Maltese "plants" namely: 364 and 365 in figure 6.13.	Euromot comment 49 submission March 14th 2016 was rejected by EIPPCB. See "Euromot Position 23 January 2015 Comments on Maltese Plant Data Submitted by EEB on December 2014" (also available in BATIS) at <a href="http://www.euromot.org/download/54da4c2cb49b86c3cbe73ca9">http://www.euromot.org/download/54da4c2cb49b86c3cbe73ca9</a> graph 1 showing that for fulfilment of the 95 % fractile upper figure to be about 20 mg/Nm3 at least for some of the plants. According to BATIS document submitted by Malta "Annex III - Operational Data to cover whole year (2013) from 'anne-marie.grech', on 03/04/2014 09:13 Annex 3 Operational Data.pdf " <b>Plant 6C seems to be 364 and plant 6B to be 365.</b> Plant codes 6A, 6B, 6C and 6D (as also was used in the EEB submitted info "LCP-BREF SOx, NOx, Dust and Ammonia-20141121.xlsx 2013 raw and filtered conti measurement data " December 2014) used in the Euromot above mentioned document .
13	EUROMOT	7	1	2	2	571	table 7.7 CH4 emission of plant 186-1 V, important information is missing. Footnote (2) below table is <b>not correctly</b> describing("one sample" is not the same as "monitoring once a year" !) the text in the BATIS measurement database for this plant ! A very skewed picture of the HC emission from the SG engine is obtained.	Table 7.7: 1) Add to footnote (2) text: " <i>value is based on one sample thus data quality of class C</i> ". 2) CH4 figure for 186-1 to be corrected to 216 mg/Nm3 from 212. In order to give the reader a correct impression based on a <b>broader material expand</b> text below table " <i>Further information on unburned carbon emission is given in section 7.1.3.2.5</i> " with sentence " <i>A many year Dutch field HC measurement campaign gave HC measurement data in range 330 .. 500 mg/Nm3 (15 % O2) expressed as C at MCR</i> ".	Euromot comment 8 submission March 14th 2016 was accepted by EIPPCB but not correctly / fully implemented. A) In the BATIS measurement database for plant 186-1 1) is stated " <b>number of samples for the values..</b> " is 1 i.e. not an average value consisting of at least 3 samples as is praxis in manual measurements, thus of class C. 2) Reported (in BATIS) value 575 mg/Nm3 at 5 % O2 is at 15 % O2 about 216 mg/Nm3. B) Dutch study (referred to in section 7.1.3.2.5 in the final BREF Draft) also available at <a href="http://www.google.fi/url?sa=t&amp;rct=j&amp;q=&amp;esrc=s&amp;source=web&amp;cd=1&amp;ved=0ahUKEwirjPDLhvPNAhXJWCwKHSYIB08QFggeMAA&amp;url=http%3A%2F%2Fwww.rwsleefomgeving.nl%2Fpublish%2Fpage%2F90792%2Fhydrocarbon_emissions_from_gas_engine_def.pdf&amp;usq=AFQjCNE96qfjz3qthIFJ4wgJBDAwPSVz6g&amp;sig2=xEheEtFZlJmJuH5LXh9OC5w">http://www.google.fi/url?sa=t&amp;rct=j&amp;q=&amp;esrc=s&amp;source=web&amp;cd=1&amp;ved=0ahUKEwirjPDLhvPNAhXJWCwKHSYIB08QFggeMAA&amp;url=http%3A%2F%2Fwww.rwsleefomgeving.nl%2Fpublish%2Fpage%2F90792%2Fhydrocarbon_emissions_from_gas_engine_def.pdf&amp;usq=AFQjCNE96qfjz3qthIFJ4wgJBDAwPSVz6g&amp;sig2=xEheEtFZlJmJuH5LXh9OC5w</a> figure 1 shows also that the CH4 result from plant 186-1 is odd. Dutch study "summary text " <i>This decree imposes a first-time emission limit value (ELV) of 1500 mg C/m3 o at 3% O2 for hydrocarbons emittedby gas engines. I&amp;M used the findings of two hydrocarbon emission measurement programs,executed in 2007 and 2009, as a guideline for this initial ELV.</i> " . Level 1500 mg C/Nm3 at 3% O2 is at 15 % O2 equal to 500 mg C/Nm3.

14	EUROMOT	7	1	3	2	5	614	Sentence “ <i>Well-performing SG- and DF-type engines achieve NOx yearly emission levels below 100 mg/Nm3</i> ” is not correct and needs to be modified.	<b>Text</b> “ <i>Well-performing SG- and DF-type engines achieve NOx yearly emission levels below 100 mg/Nm3</i> ” <b>to be changed to:</b> “ <i>Well-performing gas fired SG- and DF-type engines achieve NOx yearly emission levels below 100 mg/Nm3 if equipped with SCR. See also table 7.6 for further information on NOx emissions when primary methods used.</i> ”	EUROMOT comment 14 (submission March 2016) was partially accepted by EIPPCB but sentence : “ <i>Well-performing SG- and DF-type engines achieve NOx yearly emission levels below 100 mg/Nm3</i> ” needs still correction. Intention seems to be to explain NOx emissions achieved in plants 353 and 354 equipped with SCR. If so some text to be added.
15	EUROFER	7	3	3	1	2	646	The title of the technique 7.3.2.1.2 process gas management system should be renamed as 7.3.2.1.2 Specific technique to increase the energy efficiency: Process gas management system as it was named in D1.	EUROFER suggests to rename the technique as follows: 7.3.2.1.2 Specific technique to increase the energy efficiency: Process gas management system	EUROFER would like to remark that the concept of - no fuel choice - should not be misled with this technique. The goal of the management system is optimize the available fuel distribution within the integrated plant. This point is considered by EUROFER in accordance to point 4 of section 1.3 of the BREF guidance (2012/119/EU) in relation to IED Art 13 Forum opinion
16	EUROFER	7	3	3	2	1	648	Fig 7.51 NOx emissions - represents the so called well performing plants for boilers using iron and steel process gases. EUROFER considers that the full data presented in table 5 of the background paper section 1.7c - Tables 10.30 to 10.36 should be presented in the LCP BREF Final Draft.	EUROFER suggests an alternative proposal and then to add a new section under chapter 13.1 Annex I - List of European plants that took part in the data collection exercise in 2012, e.g. 13.1.1 and then add all the set of graphs with all the plants, including a reference in each of the chapter of the LCP BREF to this new section.	In the commenting period of the LCP BREF pre-final draft, EUROFER suggested to delete the term well-performing from the graphs presented on chapter 7.3.3 and then to represent the graphs with all the plant data collection, but EIPPCB rejected the proposal based on that the chapter of BAT candidates should not be included plants emitting outside the BAT-AELs. EUROFER suggests an alternative because considers very important to have in the BREF the graphs will all the plants who participated in the process of data collection. This point is considered by EUROFER in accordance to point 4 of section 1.3 of the BREF guidance (2012/119/EU) in relation to IED Art 13 Forum opinion

17	EUROFER	7	3	3	2	1	649	Fig 7.52 NOx emissions - represents the so called well performing plants for CCGTs using iron and steel process gases. EUROFER considers that the full data presented in table 5 of the background paper section 1.7c - Tables 10.30 to 10.36 should be presented in the LCP BREF Final Draft.	EUROFER suggests an alternative proposal and then to add a new section under chapter 13.1 Annex I - List of European plants that took part in the data collection exercise in 2012, e.g. 13.1.1 and then add all the set of graphs with all the plants, including a reference in each of the chapter of the LCP BREF to this new section.	In the commenting period of the LCP BREF pre-final draft, EUROFER suggested to delete the term well-performing form the graphs presented on chapter 7.3.3 and then to represent the graphs with all the plant data collection, but EIPPCB rejected the proposal based on that the chapter of BAT candidates should not be included plants emitting outside the BAT-AELs.EUROFER suggests an alternative because considers very important to have in the BREF the graphs will all the plants who participated in the process of data collection. This point is considered by EUROFER in accordance to point 4 of section 1.3 of the BREF guidance (2012/119/EU) in relation to IED Art 13 Forum opinion
18	EUROFER	7	3	3	2	1	648	Figure 7.51: NOX emissions from well-performing gas boilers combusting iron and steel process gasesEUROFER considers that It is necessary to define "well performing plants" for the LCP BREF revision process	EUROFER suggests that a definition of "well performing plants" be provided with specific reference to the emission specie concerned.For example: 36 "well performing plants" for NOx, 38 "well performing plants" for SO2 with 28 in common.	This point is considered by EUROFER in accordance to point 3 of section 1.3 of the BREF guidance (2012/119/EU) in relation to IED Art 13 Forum opinion
19	EUROFER	7	3	3	3		653	Fig 7.54 SO2 emissions - represents the so called well performing plants for boilers using iron and steel process gases. EUROFER considers that the full data presented in table 5 of the background paper section 1.7c - Tables 10.30 to 10.36 should be presented in the LCP BREF Final Draft.	EUROFER suggests an alternative proposal and then to add a new section under chapter 13.1 Annex I - List of European plants that took part in the data collection exercise in 2012, e.g. 13.1.1 and then add all the set of graphs with all the plants, including a reference in each of the chapter of the LCP BREF to this new section.	In the commenting period of the LCP BREF pre-final draft, EUROFER suggested to delete the term well-performing form the graphs presented on chapter 7.3.3 and then to represent the graphs with all the plant data collection, but EIPPCB rejected the proposal based on that the chapter of BAT candidates should not be included plants emitting outside the BAT-AELs.EUROFER suggests an alternative because considers very important to have in the BREF the graphs will all the plants who participated in the process of data collection. This point is considered by EUROFER in accordance to point 4 of section 1.3 of the BREF guidance (2012/119/EU) in relation to IED Art 13 Forum opinion.

20	EUROFER	7	3	3	3	655	Fig 7.56 SO2 emissions - represents the so called well performing plants for CCGTs using iron and steel process gases. EUROFER considers that the full data presented in table 5 of the background paper section 1.7c - Tables 10.30 to 10.36 should be presented in the LCP BREF Final Draft.	EUROFER suggests an alternative proposal and then to add a new section under chapter 13.1 Annex I - List of European plants that took part in the data collection exercise in 2012, e.g. 13.1.1 and then add all the set of graphs with all the plants, including a reference in each of the chapter of the LCP BREF to this new section.	In the commenting period of the LCP BREF pre-final draft, EUROFER suggested to delete the term well-performing form the graphs presented on chapter 7.3.3 and then to represent the graphs with all the plant data collection, but EIPPCB rejected the proposal based on that the chapter of BAT candidates should not be included plants emitting outside the BAT-AELs.EUROFER suggests an alternative because considers very important to have in the BREF the graphs will all the plants who participated in the process of data collection.This point is considered by EUROFER in accordance to point 4 of section 1.3 of the BREF guidance (2012/119/EU) in relation to IED Art 13 Forum opinion
21	EUROFER	7	3	3	3	653	"Figure 7.54 shows the SO2 emissions from well-performing gas-fired boilers combusting iron and steel process gases, sometimes with liquid fuels and/or natural gas as auxiliary fuels."EUROFER considers that In the absence of a definition of "well performing plants" this sentence does not make good sense.	EUROFER suggests that either all of the data are used or a clear definition of "well performing plants" is presented.	The emission of SO2 in the absences of e of p measures is a reflection of the input S loading in the gases and thus the emission of SO2 is related to the gases utilised. The figure clearly shows this to be the case lower emissions for those boilers utilising higher quantities of BFG, BOFG and NG.  This point is considered by EUROFER in accordance to point 3 of section 1.3 of the BREF guidance (2012/119/EU) in relation to IED Art 13 Forum opinion
22	EUROFER	7	3	3	4	656	Fig 7.57 dust emissions - represents the so called well performing plants for boilers using iron and steel process gases. EUROFER considers that the full data presented in table 5 of the background paper section 1.7c - Tables 10.30 to 10.36 should be presented in the LCP BREF Final Draft.	EUROFER suggests an alternative proposal and then to add a new section under chapter 13.1 Annex I - List of European plants that took part in the data collection exercise in 2012, e.g. 13.1.1 and then add all the set of graphs with all the plants, including a reference in each of the chapter of the LCP BREF to this new section.	In the commenting period of the LCP BREF pre-final draft, EUROFER suggested to delete the term well-performing form the graphs presented on chapter 7.3.3 and then to represent the graphs with all the plant data collection, but EIPPCB rejected the proposal based on that the chapter of BAT candidates should not be included plants emitting outside the BAT-AELs.EUROFER suggests an alternative because considers very important to have in the BREF the graphs will all the plants who participated in the process of data collectionThis point is considered by EUROFER in accordance to point 4 of section 1.3 of the BREF guidance (2012/119/EU) in relation to IED Art 13 Forum opinion

23	EUROFER	7	3	3	4	657	<p>Fig 7.58 dust emissions - represents the so called well performing plants for CCGTs using iron and steel process gases.</p> <p>EUROFER considers that the full data presented in table 5 of the background paper section 1.7c - Tables 10.30 to 10.36 should be presented in the LCP BREF Final Draft.</p>	<p>EUROFER suggests an alternative proposal and then to add a new section under chapter 13.1 Annex I - List of European plants that took part in the data collection exercise in 2012, e.g. 13.1.1 and then add all the set of graphs with all the plants, including a reference in each of the chapter of the LCP BREF to this new section.</p>	<p>In the commenting period of the LCP BREF pre-final draft, EUROFER suggested to delete the term well-performing form the graphs presented on chapter 7.3.3 and then to represent the graphs with all the plant data collection, but EIPPCB rejected the proposal based on that the chapter of BAT candidates should not be included plants emitting outside the BAT-AELs. EUROFER suggests an alternative because considers very important to have in the BREF the graphs will all the plants who participated in the process of data collection. This point is considered by EUROFER in accordance to point 4 of section 1.3 of the BREF guidance (2012/119/EU) in relation to IED Art 13 Forum opinion.</p>
24	Denmark	10	1	2		754	<p>It should be clarified whether there is a link between footnote on Hg 9 and 9 bis. As we understand, they can be combined, but the one is not a prerequisite for the other.</p>	<p>After the acronyms insert explanation on how to read footnotes. For example: Foodnotes: Footnotes on a topic can be combined, but one is not a prerequisite for the other, unless otherwise stated.</p>	<p>Can be misinterpreted</p>
25	CEWEP	10	1	2		751	<p>Since the EIPPCB said that checking the feasibility to use BATAELs to set ELVs in compliance with the standards required by the IED was outside the scope of the TWG and of the Seville team, it is necessary to warn the MSs on what they have to do before setting ELVs not exceeding BATAEL values.</p>	<p>After <b>"BAT 3 ter. BAT is to monitor emissions to air with at least the frequency given below and in accordance with EN standards. If EN standards are not available, BAT is to use ISO, national or other international standards that ensure the provision of data of an equivalent scientific quality."</b>Please add: <i>"However, since checking the feasibility to use BATAELs to set ELVs in compliance with the standards required by the IED was considered outside the scope of the LCB BREF review, the Member States competent authorities must address the topic before setting ELVs not exceeding BATAEL values. In this respect, useful information</i></p>	<p>The EIPPCB has stated (see Split views assessment 22/2/2016, pp. 111-113/255) in answer to a split view requiring that the feasibility to use the BATAEL values to set ELVs should be checked by monitoring experts that : <i>"Quality assurance requirements as defined in EN standards cannot prescribe the setting of certain BAT-AEL ranges in BAT conclusions. ""BAT conclusions are secondary legislation taking precedence over EN standards.""</i>"<i>BAT-AELs can be defined without referring to an EN standard."</i> <i>"The split view refers to the use of BAT-AELs for setting ELVs and to the consideration of measurement uncertainties, which are implementation and compliance issues going beyond the remit of the LCP TWG."</i>The EIPPCB position was repeated and made even clearer: The setting of ELVs (based on BAT-AELs) and compliance issues are implementation matters for Member States and DG ENV to deal with, and therefore are outside the scope of the Seville process.</p>



27	ETN	10	1	2	751	<p>The BAT-AEL values proposed in the draft of the revised LCP BREF are often much lower than the ELVs of the IED and very little experience has been acquired on LCPs with the emission of some of these substances.</p>	<p>After <b>"BAT 3 ter. BAT is to monitor emissions to air with at least the frequency given below and in accordance with EN standards. If EN standards are not available, BAT is to use ISO, national or other international standards that ensure the provision of data of an equivalent scientific quality."</b>Please add:<i>"However, since checking the feasibility to use BATAELs to set ELVs in compliance with the standards required by the IED was considered outside the scope of the LCB BREF review, the Member States competent authorities must address the topic before setting ELVs not exceeding BATAEL values. E.g. NOx measurements for GT or CC applications with a lower level than coal fired plants need ot have a clear definition on which standard shall be used, In this respect, useful information can be found in INERIS institute study report nr. DRC-16-159382-06994A dated 22/7/2016. NOx conclusion: Chemiluminescence is the most accurate, but uncertainties to be recognized"</i></p>	<p>The EIPPCB has stated (see Split views assessment 22/2/2016, pp. 111-113/255) in answer to a split view saying that some BATAEL values are too low to be used to set ELVs and requiring that the feasibility to use the BATAEL values to set ELVs should be checked by monitoring experts that : "Quality assurance requirements as defined in EN standards cannot prescribe the setting of certain BAT-AEL ranges in BAT conclusions. ""BAT conclusions are secondary legislation taking precedence over EN standards." "BAT-AELs can be defined without referring to an EN standard." "The split view refers to the use of BAT-AELs for setting ELVs and to the consideration of measurement uncertainties, which are implementation and compliance issues going beyond the remit of the LCP TWG."There is a clear difference between Nox measurements in GT and coal plants, this has not be taken into account.A more detailed investigation on monitoring for different technologies is mandatory . Quaifaction testing of monitoring equipment of NOx in almost all cases &gt; 50 mg/Nm<sup>3</sup></p>
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28	EURELECTRIC	10	1	2		751	BAT 3ter: feasibility of using BAT-AELs values to set ELVs	Add after introduction sentences: "However, since checking the feasibility to use BATAELs to set ELVs in compliance with the standards required by the IED was considered outside of the scope of the LCP BREF review, competent authorities must address this topic before setting ELVs not exceeding BATAELs values"	In its assessment of split view 11.13, the EIPPCB stated that:"The split view refers to the use of BAT-AELs for setting ELVs and to the consideration of measurement uncertainties, which are implementation and compliance issues going beyond the remit of the LCP TWG.BAT-AELs can be defined without referring to an EN standard.Quality assurance requirements as defined in EN standards cannot prescribe the setting of certain BAT-AEL ranges in BAT conclusions. BAT conclusions are secondary legislation taking precedence over EN standards."Based on this answer which considers that checking the feasibility of using BATAELs to set ELVs in compliance with the standards required by the IED is outside of the scope of the EIPPCB and TWG work, it is necessary to include clarification to inform clearly competent authorities of what they will have to do before setting ELVs not exceeding BATAELs values.
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29	EUTurbines	10	1	2			751	<p>The BAT-AEL values proposed in the draft of the revised LCP BREF are often much lower than the ELVs of the IED and very little experience has been acquired on LCPs with the emission of some of these substances.</p>	<p>After <b>"BAT 3 ter.</b> <i>BAT is to monitor emissions to air with at least the frequency given below and in accordance with EN standards. If EN standards are not available, BAT is to use ISO, national or other international standards that ensure the provision of data of an equivalent scientific quality.</i>"Please add:<i>"However, since checking the feasibility to use BATAELs to set ELVs in compliance with the standards required by the IED was considered outside the scope of the LCB BREF review, the Member States competent authorities must address the topic before setting ELVs not exceeding BATAEL values. E.g. NOx measurements for GT or CC applications with a lower level than coal fired plants need to have a clear definition on which standard shall be used, In this respect, useful information can be found in INERIS institute study report nr. DRC-16-159382-06994A dated 22/7/2016. NOx conclusion: Chemiluminescence is the most accurate, but uncertainties to be recognized"</i></p>	<p>The EIPPCB has stated (see Split views assessment 22/2/2016, pp. 111-113/255) in answer to a split view saying that some BATAEL values are too low to be used to set ELVs and requiring that the feasibility to use the BATAEL values to set ELVs should be checked by monitoring experts that : "Quality assurance requirements as defined in EN standards cannot prescribe the setting of certain BAT-AEL ranges in BAT conclusions. ""BAT conclusions are secondary legislation taking precedence over EN standards." "BAT-AELs can be defined without referring to an EN standard." "The split view refers to the use of BAT-AELs for setting ELVs and to the consideration of measurement uncertainties, which are implementation and compliance issues going beyond the remit of the LCP TWG."There is a clear difference between NOx measurements in GT and coal plants, this has not been taken into account.A more detailed investigation on monitoring for different technologies is mandatory . Qualification testing of monitoring equipment of NOx in almost all cases &gt; 50 mg/Nm<sup>3</sup></p>
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30	EURACOAL	10	1	2		751	EIPPCB has assessed the <b>monitoring frequencies</b> of emissions <b>to air</b> . BAT 3 ter. intensifies the periodic monitoring frequencies of numerous pollutants vastly.	In BAT 3 ter. the periodic monitoring frequencies should not be selected shorter than every three years.	It is doubtless important to verify the emissions to air from power plants. But for a few air pollutants in power plants without specific flue gas treatment special conditions should be respected. The operator cannot really influence the amount of these emissions. In such cases, it is sufficient to verify the emissions every three years. Short periodic monitoring frequencies lead to increased costs without improving the combustion process or emission performance.
31	EURELECTRIC	10	1	2		751	BAT 3 ter: Minimum monitoring frequencies for periodic measurement of air pollutants	An additional general footnote should be added to the table of BAT 3 ter: <i>"In the case of period measurements, if the emission levels are proven to be sufficiently stable due to the characteristics of the fuel and if no specific abatement technology is applied for the corresponding pollutant, periodic measurements may be carried out only each time that a change of the fuel characteristics may have an impact on the emissions, but in any case at least once every three years."</i>	The proposed minimum monitoring frequencies will lead to significant additional administrative costs for both plant operators and competent authorities. For many pollutants in the list, no specific reduction technologies are applied. In those cases, too frequent monitoring will not be associated with an environmental benefit.

32	Slovenia	10	1	2			<p>751 Continues monitoring it should not be , 752 BAT for plants that operate less than , 753 500 hours per year (or even for those , 754 who operate less than 1500 hours per year). For those peak load plants, emergency plants BAT should be periodic measurement, for example once per year or once every five years if the plant operates less than 300 hours per year. We are sure, that continues monitoring for the peak load, emergency plants are not environmental friendly from at least two reasons: • Plants should be started and then operate just for the reason to comply EN 14181 - Quality Assurance of Automated Measuring Systems measuring. That means that emission of pollutants and pollution would be higher just because of the continuous measurement. • A lot of peak load plants have group of boilers discharge their waste gases through a common stack. When those plants operate for peak – load purposes it is not necessary that all the boilers operate and in those cases it is technically impossible to get trustable results of the measurements. For confidential measurement you have to have a lot of measurement systems to cover all the operating combination regimes.</p>	<p>The notes at the end of the Table BAT 3 ter on pages 751 – 754 should contain the text: For plants operating less than 1500 h/yr the minimum monitoring frequency may be at least once every six months and for plants operating less than 500 h/yr the minimum monitoring frequency may be once every five years if the plant operates less than 300 hours per year.</p>	
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33	EUROFER	10	1	2		752	EUROFER Split-view number 2 (sent to EIPPCB on 20 July 2015) has not been assessed by EIPPCB based on that it is a BAT conclusion that has not been challenged by the TWG and was not included in the topics to be discussed at the Final Meeting as an outstanding issue (Section 2.10 of the Background Paper).	EUROFER suggests to delete the requirement of SO3 monitoring on BAT3 ter.	EUROFER would like to stress that on 20 May 2015 and before Final TWG meeting, the report "EUROFER alternative proposals of BATs LCP BREF revision process" was submitted to TWG members and EIPCCB and posted in BATIS. This technical report summarised the EUROFER views and the assessment of the background paper and the proposal of BAT conclusions published by the EIPPCB on 1st of April 2015, as well as the EUROFER alternative proposals of BATs based on technical justifications and supporting data, in advance to the Final Technical Working Group Meeting. All the proposals included in this report were prepared by EUROFER with the intention/objective to be discussed during the technical discussions in the Final meeting and should be considered as a point raised at due time. This point is considered by EUROFER in accordance to point 1 of section 1.3 of the BREF guidance (2012/119/EU) in relation to IED Art 13 Forum opinion
34	Slovenia	10	1	2		753	In the Table BAT 3 ter on pages 751 – 754 continuous monitoring of Hg should not be BAT. It is highly unreasonable to require continuous measurements of Hg if it is obvious that no appropriate devices for continuous monitoring Hg exist.	In the Table BAT 3 ter on pages 751 – 754 should be stated, that periodic monitoring of Hg is BAT.	
35	Czech Republic	10	1	2		754	BAT 3ter, footnote 3 - NH3 monitoring requirements to be reduced when SNCR with wet abatement technique applied.	<i>In the case of SCR or SNCR combined with wet abatement techniques (e.g. wet/semi-wet FGD or flue-gas condenser), the monitoring frequency may be at least once every year, if the emissions are proven to be sufficiently stable.</i>	Inadequate costs related to continuous monitoring of NH3 emissions even in case the levels are stable and well within the BAT-AELs. For more details see REVIEW OF THE BEST AVAILABLE TECHNIQUES (BAT) REFERENCE DOCUMENT FOR LARGE COMBUSTION PLANTS (LCP BREF), Seville, 22/06/2016 Chapter 8.1 /accepted split view/.

36	EURELECTRIC	10	1	2		754	BAT 3ter, footnote 3 - NH3 monitoring requirements to be reduced when SNCR with wet abatement technique applied.	<i>In the case of SCR or SNCR combined with wet abatement techniques (e.g. wet/semi-wet FGD or flue-gas condenser), the monitoring frequency may be at least once every year, if the emissions are proven to be sufficiently stable.</i>	The reasons are of economic nature based on inadequate costs related to continuous monitoring of NH3 emissions even in case the levels are stable and well within the BAT-AELs. For more details see REVIEW OF THE BEST AVAILABLE TECHNIQUES (BAT) REFERENCE DOCUMENT FOR LARGE COMBUSTION PLANTS (LCP BREF), Seville, 22/06/2016 Chapter 8.1. (accepted split view)
37	UK	10	1	2		750	Brackets to Footnote 1 are not in superscript text.	Put brackets in superscript. Note that this comment applies to all footnotes throughout the document - not just the occurrence here.	Editorial clarification
38	CEWEP	10	1	3		756	BAT conclusions for the emissions of <b>NH3 to air (BAT 4 bis)</b> <b>The BATAEL range given in BAT 4bis appear too low</b> to be used as ELVs with the techniques which are available.	Please ask experts, e.g. CEN TC 264 what changes have to be achieved in respect of monitoring techniques and standards to comply with the requirements of the current legislation and applicable standards if ELVs are very low. Take into account the experts recommendation.	As explained in due time, i.e. during the Final meeting 1-9/6/2015 by a number of oral split views, then by written split view nr 1 (supported by CEWEP) on 22/7/2015 during the written consultation period, the uncertainty on the monitored values is too high in respect of the legislation requirements when ELVs are set at very low level. NB: uncertainty requirements are expressed as a percentage of the daily ELV. And for substances for which there is not yet a requirement in standards (e.g. because it was not required to monitor them up to now), the minimum uncertainty levels (%) are also depending on the ELV levels. This has been confirmed by INERIS institute study report nr. DRC-16-159382-06994A.
39	ESWET	10	1	3		756	BAT conclusions for the emissions of <b>NH3 to air (BAT 4 bis)</b> <b>The BATAEL range given in BAT 4bis appear too low</b> to be used as ELVs with the techniques which are available.	Please ask experts, e.g. CEN TC 264 what lowest ELV can be achieved in respect of monitoring techniques in compliance with the requirements of the current legislation and applicable standards. Modify BATAEL ranges according to their recommendations.	As explained by ESWET in due time, i.e. during the Final meeting 1-9/6/2015 by a number of oral split views, then by ESWET written split view nr 1 on 22/7/2015 during the written consultation period, the uncertainty on the monitored values is too high in respect of the legislation requirements when ELVs are set at very low level. NB: uncertainty requirements are expressed as a percentage of the daily ELV. And for substances for which there is not yet a requirement in standards (e.g. because it was not required to monitor them up to now), the minimum uncertainty levels (%) are also depending on the ELV levels. This has been confirmed by INERIS institute study report nr. DRC-16-159382-06994A.

40	ETN	10	1	3		756	BAT conclusions for the emissions of <b>NH3</b> to air ( <b>BAT 4 bis</b> ) <b>The BATAEL range given in BAT 4bis appear too low</b> to be used as ELVs with the techniques which are available.	lowest ELV which can be achieved in respect of monitoring techniques in compliance with the requirements of the current legislation and applicable standards is 5 mg/Nm <sup>3</sup> . But only with High Tech equipment. Modify BATAEL ranges according to applicability of certain measurements	NH3 measurements in general are very difficult to perform. Uncertainties are very high. High tech equipment available, but in most cases not applicable. Other monitoring equipment to be checked whether such levels can be measured
41	EUTurbines	10	1	3		756	BAT conclusions for the emissions of <b>NH3</b> to air ( <b>BAT 4 bis</b> ) <b>The BATAEL range given in BAT 4bis appear too low</b> to be used as ELVs with the techniques which are available.	Lowest ELV which can be achieved in respect of monitoring techniques in compliance with the requirements of the current legislation and applicable standards is 5 mg/Nm <sup>3</sup> . But only with High Tech equipment. Modify BATAEL ranges according to applicability of certain measurements.	NH3 measurements in general are very difficult to perform. Uncertainties are very high. High tech equipment available, but in most cases not applicable. Other monitoring equipment to be checked whether such levels can be measured
42	EUROFER	10	1	3		757	EUROFER Split-view number 4, in relation to iron and steel process gases characterization has been assessed in the EIPPCB's split-view assessment report, but without support of the technical rationale provided by EUROFER.	Based on the specific situation and comments presented, EUROFER suggests to delete from BAT5 the reference to iron and steel process gases.	EIPPCB is on the opinion that this BAT conclusion applies to LCPs and is therefore within the scope of the BAT conclusions, but EUROFER considers that the quality of the gases is well described and prescribed under I&S BAT conclusions, with the same objective (to be used as fuel in the steelworks or tailpipe use in the boilers/CCGTs).Furthermore EUROFER remarks that specific consideration has to be taken based on the fact that there are no existing EN standards, ISO, national or international standards for the characterisation of COG, BFG and BOF gas composition (no reference in I&S BREF). Only non-standardised continuous and periodic measurements are used. This point is considered by EUROFER in accordance to point 1 of section 1.3 of the BREF guidance (2012/119/EU) in relation to IED Art 13 Forum opinion

43	EUROFER	10	1	3		758	EUROFER Split-view number 5 in relation to BAT6 and BAT6bis has not been assessed by EIPPCB based on that refers to a BAT conclusion agreed by the TWG at the Final Meeting, as it is not related to the conclusion of the written consultation circulated in October 2016, but to an intermediate proposal circulated in July 2016.	EUROFER suggests to delete BAT 6 and BAT6bis from the LCP BREF Final draft.	The split view was sent to EIPPCB on 20 July, 2015 and the position was included as well in the report delivered before the FM on 20 May, 2015 "EUROFER alternative proposals of BATs"EUROFER remarks that some of the rationales expressed have not been taken into account or evaluated, in special that to be in compliance with EN standards have to be applied in the case of OTNOC and according to EN 14181 a second set of continuous measurement equipment because of the calibration range of the monitoring instruments used for NOC must be fixed, well defined and not open-ended and on the other hand from an economic perspective this would represent a doubling of the emission monitoring costs. In addition there is no EU reference plants that have been cited in the current LCP BREF Final draft nor are any known where monitoring during OTNOC using specially installed systems is practiced.Finally no operational information has been collected during the process (no information in BAT candidates chapters to justify the BATC and subsequently used to propose this BAT for I&S LCPs.This point is considered by EUROFER in accordance to point 1 of section 1.3 of the BREF guidance (2012/119/EU) in relation to IED Art 13 Forum opinion
44	Poland	10	1	3		756	Corection in provisions on NH3 BATAELs (BAT4)	BAT-associated emission levelsIn last sentence (In the case of plants combusting biomass AND operating at variable loads as well as in the case of engines combusting HFO and/or gas oil, the higher end of the range is 15 mg/Nm3.) replace the conjunction "and" to a comma or replace "biomass" with "solid fuels".	The key issue in ammonia slip is not fuel type, but operating at variable loads. Current wording limits the BAT provisions only for biomass with variable loads.
45	UK	10	1	3		756	BAT 4 table: Wording of the applicability text for c. Advanced control system, <b>old</b> combustion plants are not defined.	Amend text to read: "The applicability to old existing combustion plants .." Note that this comment applies to all tables throughout the BAT conclusions (BAT 7h, 32g, 46f, 48d, 52g, 53e, 60d, 65i, and 10.8.3 Air staging and Low NOx burners) - not just the occurrence here.	Editorial clarification

46	EPPSA	10	1	4		795 - 796	New row to be listed in the table	The following topics, per each reference column, should be considered in the new row:1) Technique: Dry Bottom Ash Handling System 2) Description: Boiler efficiency is increased by the Dry Bottom Ash Handling System, that recovers thermal and chemical energy from bottom ash, which would be otherwise lost in the water bath of a conventional wet extraction system.Heat recovery is accomplished by means of ambient air, that cools down the bottom ash and flows at high temperature back into the steam generator.Ref. to paragraphs 10.8.2 and 10.8.6 too.3) Applicability: solid-fuel fired boilers.	
47	EURACOAL	10	1	6		762	EIPPCB has assessed : "BAT 11. In order to reduce emissions to water from flue-gas treatment, BAT is to use an appropriate combination of the techniques given below, and to use secondary techniques as close as possible to the source in order to avoid dilution:...- d. Anoxic/aerobic biological treatment; Mercury (Hg), nitrate (NO3-), nitrite (NO2-)...- g. Filtration (e.g. sand filtration, microfiltration, ultrafiltration); Suspended solids, metals...- i. Ion exchange; Metals" In subsections d, g and i, techniques are defined as BAT, yet these techniques are not yet proven.	It should be amended this paragraph: "BAT 11. In order to reduce emissions to water from flue-gas treatment, BAT is to use an appropriate combination of the techniques given below, and to use secondary techniques as close as possible to the source in order to avoid dilution:...- d. Anoxic/aerobic biological treatment; Mercury (Hg), nitrate (NO3-), nitrite (NO2-)...- g. Filtration (e.g. sand filtration, microfiltration, ultrafiltration); Suspended solids, metals...- i. Ion exchange; Metals"	The deleted techniques are under development and test. They are not BAT. So they should be described in chapter 11 (emerging techniques). The reduction of mercury in waste water with the help of bacteria is not an established technique. It is under scientific study. Other techniques (microfiltration, ultrafiltration and ion exchange) can show good results in laboratory tests, but require further development to reach BAT.

48	EURELECTRIC	10	1	6	762	In the subsections c, g and i of BAT 11, some techniques are assigned to be BAT for mercury, but should be classified as "emerging techniques" instead: "BAT 11. In order to reduce emissions to water from flue-gas treatment, BAT is to use an appropriate combination of the techniques given below, and to use secondary techniques as close as possible to the source in order to avoid dilution:...- d) Anoxic/aerobic biological treatment; Mercury (Hg), nitrate (NO3-), nitrite (NO2-)	BAT conclusion should be amended as follows: <i>"BAT 11. In order to reduce emissions to water from flue-gas treatment, BAT is to use an appropriate combination of the techniques given below, and to use secondary techniques as close as possible to the source in order to avoid dilution:...- d) Anoxic/aerobic biological treatment; Mercury (Hg), nitrate (NO3-), nitrite (NO2-)</i>	Emerging techniques should not be mentioned in BAT 11. None of the reference plants reported such techniques for mercury removal in commercial operation. Cost, benefits and effectiveness of anoxic/anaerobic biological treatment for mercury removal should be described in chapter 11 (emerging techniques). These techniques are under development and cannot considered to be BAT, yet.
49	EURACOAL	10	1	6	763	EIPPCB has assessed : "Table 10.1: BAT-AELs for direct discharges to a receiving water body from flue-gas treatment:- Hg: 0.2–3 µg/l". This range is not supported by data on water emissions from reference power plants. As shown in figure 3.9, the lowest mercury concentration was reported for power plant No. 456. The operator and the member state report 0,8 µg/Nm <sup>3</sup> . The lower end of the proposed range cannot be justified.	This paragraph should be amended: "Table 10.1: BAT-AELs for direct discharges to a receiving water body from flue-gas treatment: - <b>Hg: 0.2–3 µg/l 0.5-5 µg/l</b> "	It is questioned whether the range is derived correctly. The range was justified by CAN with data from the reference power plants 662V, 479V and 496 V. However, it has to be taken into account that:- 662V reported "zero" instead of the real value: less detection limit (1µg/l)- 496V reported 50 µg/l- 479V reported 5µg/lIt should be noted that the former range of EIPCB is closer to the correct BAT-AEL.

50	EURELECTRIC	10	1	6		763	BAT 11, Table 10.1 states a BAT-AEL range for mercury related to direct discharges to a receiving water body from flue-gas treatment of "0.2 – 3 µg/l". This range was not derived based on reference plant data.	Change Hg BAT-AEL in Table 10.1 to correctly reflect reference plant data: " <i>Table 10.1: BAT-AELs for direct discharges to a receiving water body from flue-gas treatment: <b>Hg: 0,5 - 5 µg/l</b></i> "	In figure 3.9, Hg emissions of BAT reference plants are reported. The lowest reported values (excluding measurements below detection limit) were plants n° 456V and 386 reporting 0,8 µg/l and 0,85 µg/l, respectively. The lower BAT-AEL range contained in the final draft is below the detection limit and cannot be justified based on the reference plant data. In figure 3.9, the highest reported value refers to BAT reference plant 138V (sharing a common water treatment plant with n° 139V). It was reported to be 4,4 µg/l. Many reference plant did not report mercury emissions. Some plants reported values below the detection limit (usually 1 µg/l). The original proposal of the EIPPC contained in the background paper and draft for the final TWG meeting (0,5 - 5 µg/m <sup>3</sup> ) should be restored.
51	Poland	10	1	6		763	BAT-AEL range for Hg related to direct discharges from flue-gas treatment (0,2 – 3 µg/l) should be changed to (0,5-5 µg/l).	Table 10.1: BAT-AELs for direct discharges to a receiving water body from flue-gas treatment: Hg: 0,5 - 5 µg/l	Proposed levels does not reflect reference data. many plants doesnt report Hg at all, many raports are on the border of detection level and cannot be treated as reference. The highest level reported by reference plant was 4,4 µg/l. We propose to restore levels proposed by EIPPCB before final TWG meeting.
52	UK	10	1	6		761	BAT 10 bis - The 'Description' is a list of examples not a description of the technique.	Add a better description e.g. from CWW "In order to prevent the contamination of uncontaminated water and to reduce emissions to water, BAT is to segregate uncontaminated waste water streams from other waste water streams that require treatment."	Editorial clarification

53	EPPSA	10	1	7		764	New row to be listed in the table	The following topics, per each reference column, should be considered in the new row:1) Technique: Dry Bottom Ash Handling System 2) Description: In case of a Dry Bottom Ash Handling System the overall amount of bottom ash is reduced if compared to a wet extraction system, due to:- the elimination of water;- the reduction of residual unburned material in bottom ash. Therefore, the bottom ash quality is improved since it is dry and with a low-carbon content, helping for its reuse in several fields: e.g. cement or concrete production, road construction, bricks manufacturing. Dry bottom ash can be also recycled back to the steam generator and transformed into fly ash. Ref. to paragraphs 10.8.2 and 10.8.6 too.3) Applicability: solid-fuel fired boilers.	
54	EPPSA	10	2	1	2	766	BAT 18. In order to increase the energy efficiency of coal and/or lignite combustion, BAT is to use an appropriate combination of the techniques in BAT 7 and below.	BAT 18. In order to increase the energy efficiency of coal and/or lignite combustion, BAT is to use an appropriate combination of the techniques in BAT 7, BAT 10, BAT 13 and below.	Please, refer to comments #2 & 3 of the present sheet.
55	UK	10	2	1	2	767	Table 10.2: Footnote 2 is potentially confusing: what are 'unfavourable climatic conditions'? This could be read as either high or low temperature, high or low humidity, even high or low wind speed.	Clarify, the 'unfavourable climatic conditions (in particular, high ambient temperatures)'	Legal clarity

56	Poland	10	2	1	3	768	SCR applicability for lignite boilers.	In table BAT 19 Techniques - add information to line d. (SCR): The applicability may be limited in the case of sepcific lignite parameters and boiler design.	Applicability of SCR in lignite power plants is rather emerging technique then BAT. In every case (f.e. Oak Groove, USA) its application is followed study of fuel parameters and the behavior and durability of SCR eg. in the case of too large ash content in lignite (with SCR installed in high-dust zone of installation).
57	EURELECTRIC	10	2	1	3	768	BAT 19, row d-Applicability restrictions for SCR should be extended.	The applicability restrictions of SCR for both new and existing plants should include the following constraint:• There may be applicability constraints to lignite fired plants, depending on the fuel quality characteristics.	During the Final TWG meeting for the revision of LCP BREF, it was decided that SCR (selective catalytic reduction) is BAT for lignite fired plants. This decision was not based on information provided by the national administrations for reference plants for which properly filled-in questionnaires have been submitted, but on case studies with restricted information. It should be noted that no lignite-fired reference plant is equipped with SCR. Concerning the applicability of SCR, the issue of lignite quality characteristics which can have detrimental effect on the catalyst deactivation was completely ignored. Therefore, the information used to derive BATs and BAT AELs:• is not representative of the situation• is not detailed enough to fulfill the requirements set by the Guidance document,thus violating the rules set in the Guidance document concerning the data that should be used to derive BAT conclusions
58	Czech Republic	10	2	1	3	768	BAT 19 (NOx) Selective catalitic reduction (SCR) - Applicability . /MAJOR/	<i>Applicability of SCR to lignite-fired plants may be constrained by the fuel characteristics.</i>	SCR applicability strongly depends on lignite quality and there is not enough evidence that SCR can be generally applied to european lignites. The BAT Conclusions are not consistent with the rest of the BREF - limitations are mentioned in LCP BREF FINAL DRAFT (June 2016) - p. 369. For more details see REVIEW OF THE BEST AVAILABLE TECHNIQUES (BAT) REFERENCE DOCUMENT FOR LARGE COMBUSTION PLANTS (LCP BREF), Seville, 22/06/2016 Chapter 11.2 /accepted split view/.

59	Greece	10	2	1	3	768	Applicability restrictions for SCR and SNCR should be extended. Valid Split Views 11.1 and 11.2 should be incorporated in chapter 10.	The applicability restrictions of SNCR for both new and existing plants should include the following constraint: • Not applicable to lignite fired plants >300MWth The applicability restrictions of SCR for both new and existing plants should include the following constraint: • There may be applicability constraints to lignite fired plants, depending on the fuel quality characteristics.	During the Final TWG meeting for the revision of LCP BREF, it was decided that SCR (selective catalytic reduction) and SNCR (selective non catalytic reduction) are BAT for lignite fired plants. This decision was not based on information provided by the national administrations for reference plants for which properly filled-in questionnaires have been submitted, but on case studies with restricted information. It should be noted that no lignite-fired reference plant is equipped with SCR and no reference lignite-fired plant >300MWth is equipped with SNCR. Especially concerning the applicability of SCR, the issue of lignite quality characteristics which can have detrimental effect on the catalyst deactivation was completely ignored. Therefore, the information used to derive BATs and BAT AELs: • is not representative of the situation • is not detailed enough to fulfill the requirements set by the Guidance document, thus violating the rules set in the Guidance document concerning the data that should be used to derive BAT conclusions
60	Czech Republic	10	2	1	3	769	BAT 19 (NOx) Table 10.3 New footnote for coal fired PC boilers above 300 MW put into operation no later than 7 January 2014 where due to technical characteristics SCR is not applicable. /MAJOR/	<i>New footnote: The higher end of the range is 180 mg/Nm3 for coal fired PC boilers above 300 MW put into operation no later than 7 January 2014 where due to technical characteristics SCR is not applicable.</i>	Proposed value is restrictive (it allows to use SCR only), which is not in line with the list of BATs in the BAT Conclusions as well as with art. 15 (2) of IED. The range of a BAT-AEL should allow all applicable techniques to be used in practice.

61	EURACOAL	10	2	1	3	769	<p>Comment on: "Table 10.3: BAT-associated emission levels (BAT-AELs) for <b>NOx emissions to air</b> from the combustion of coal and/or lignite"Based on the investigations of EIPPCB for NOx emissions and the discussion during the TWG meeting it was decided to add a footnote: "(9) The higher end of the range is 175 mg/Nm<sup>3</sup> for FBC boilers put into operation no later than 7 January 2014 and for lignite-fired PC boilers."Our experience in operation of such power plants proves an upper range of 175 mg/Nm<sup>3</sup> is not BAT. It is necessary to increase the range up to 200 mg/Nm<sup>3</sup></p>	<p>Footnote 9 in table 10.3 should be amended to:"(9) The higher end of the range is <u>175 200</u> mg/Nm<sup>3</sup> for FBC boilers put into operation no later than 7 January 2014 and for lignite-fired PC boilers."</p>	<p>The proposed yearly NOx BAT-AELs for lignite-fired power plants and both coal- and lignite-fired FBC plants &gt;300 MWth are too ambitious because these combustion plants use only primary NOx reduction measures and cannot be retrofitted with SCR /SNCR. Therefore, the existing power plants cannot comply reliably with the proposed higher end of the BAT-AEL range of 180 mg/Nm<sup>3</sup> (see reference plants n° 23, 128, 129, 130, 137, 224, 387, and 391) under technically and economically feasible conditions. Cross-media affects (optimisation of lignite use and efficiency) and trade-offs (CO emissions) on the further optimization of NOx emissions should be taken into account. The proposed marginal reduction of NOx emissions does not justify the retrofitting of secondary NOx abatement - neither for economic (cost-benefit) nor for environmental reasons when considering cross-media effects (efficiency loss, ammonia slip etc.).</p>
62	EURACOAL	10	2	1	3	769	<p>Comment on: "Table 10.3: BAT-associated emission levels (BAT-AELs) for <b>NOx emissions to air</b> from the combustion of coal and/or lignite"Based on the investigations of EIPPCB for NOx emissions and the discussion during the TWG meeting it was decided to determine 65 - 150 mg/Nm<sup>3</sup> as BAT-AEL for existing coal -fired PC boiler (&gt;300 MWth) per yearly average. Our experience in operation of such power plants proves an upper range of 150 mg/Nm<sup>3</sup> is not BAT. It is necessary to increase the range up to 180 mg/Nm<sup>3</sup></p>	<p>An additional footnote should be added to Table 10.3:"(...) The higher end of the range is 180 mg/Nm<sup>3</sup> for existing coal -fired PC boiler (&gt;300 MWth) per yearly average."</p>	<p>Raise upper BAT-AEL level from 150 mg/m<sup>3</sup> to 180 mg/m<sup>3</sup> for existing plants already applying secondary abatement techniques for NOx reduction. In the background document of the EIPCCB, it is stated: "As plants using only primary techniques achieve levels of emission below 500 mg/Nm<sup>3</sup>, it is expected that plants retrofitted with SCR and properly operated would achieve levels below 150 mg/Nm<sup>3</sup>. The higher end of the range proposed in D1 could thus be reviewed accordingly."Only 20% of the reference power plants emit, on average, yearly NOx of less than 150 mg/Nm<sup>3</sup> (see file "COAL-Lignite NOX-CO-NH3 V2", table and graph The results of the data evaluation do not justify yearly average BAT-AEL of less than 180 mg/Nm<sup>3</sup>. In fact, the emission limit of the IED is confirmed as BAT-AEL. The BAT AEL for existing coal plant &gt;300 MW for NOx has been reduced from 180 to 150 mg/Nm<sup>3</sup> which is not achievable for primary techniques with SNCR. This technology option would be perhaps precluded. For some power plants, it could be feasible for SNCR, in combination with other measures, to deliver 180 mg/Nm<sup>3</sup>, but 150 mg/Nm<sup>3</sup> is not feasible under any circumstances with SNCR (see UK response to the background paper).</p>

63	EURELECTRIC	10	2	1	3	769	BAT 19, Table 10.3, footnote 9	BAT 19: Modify footnote 9 in table 10.3: increase the upper level of the yearly BAT-AELs range for existing lignite-fired pulverized combustion plants of $\geq 300$ MWth from "175 mg/m <sup>3</sup> " to " <b>190 mg/m<sup>3</sup></b> ".	The proposed yearly NO <sub>x</sub> BAT-AELs for lignite-fired power plants and both coal- and lignite-fired FBC plants >300 MWth are too ambitious because these combustion plants use only primary NO <sub>x</sub> reduction measures and cannot be retrofitted with SCR /SNCR. Therefore, the existing power plants cannot comply reliably with the proposed higher end of the BAT-AEL range of 180 mg/Nm <sup>3</sup> (see reference plants n° 23, 128, 129, 130, 137, 224, 387, and 391) under technically and economically feasible conditions. Cross-media affects (optimisation of lignite use and efficiency) and trade-offs (CO emissions) on the further optimization of NO <sub>x</sub> emissions should be taken into account. The proposed marginal reduction of NO <sub>x</sub> emissions does not justify the retrofitting of secondary NO <sub>x</sub> abatement - neither for economic (cost-benefit) nor for environmental reasons when considering cross-media effects (efficiency loss, ammonia slip etc.). See also rationales provided by dissenting views of Eurelectric, Euracoal, DE, PL, EL, CZ, SK und EE
64	Euroheat & Power	10	2	1	3	769	Change the higher end of the yearly NO <sub>x</sub> BAT-AEL ranges for $\geq 300$ MWth FBC boilers combusting coal and/or lignite and lignite-fired PC boilers	Increase the higher end of the yearly NO <sub>x</sub> BAT-AEL ranges for $\geq 300$ MWth FBC boilers combusting coal and/or lignite to 180 mg/Nm <sup>3</sup> . Increase the higher end of the yearly NO <sub>x</sub> BAT-AEL ranges for $\geq 300$ MWth lignite-fired PC boilers to 200 mg/Nm <sup>3</sup> .	Rationale is elaborated in the valid split view 11.3.1
65	Germany	10	2	1	3	769	BAT 19, Table 10.3, footnote 9	BAT 19: Modify footnote 9 in table 10.3: increase the upper level of the yearly BAT-AELs range for existing lignite-fired pulverized combustion plants of $\geq 300$ MWth from "175 mg/m <sup>3</sup> " to " <b>190 mg/m<sup>3</sup></b> ".	The decision on Techniques includes the use Techniques a and/or b only (that means without any NO <sub>x</sub> -flue gas cleaning system). However an upper level of 175 mg/Nm <sup>3</sup> does not reflect the emission performance of most of the reference plants of concern as most of them report yearly average emissions between 160 mg/Nm <sup>3</sup> and 200 mg/Nm <sup>3</sup> . The potential to further reduce the NO <sub>x</sub> emissions based on Technique a) and/or b) is limited. The retrofit of NO <sub>x</sub> flue-gas cleaning systems tends to be very cost intensive which will be disproportionate in relation to the small emission gap to be closed.

66	Greece	10	2	1	3	769	Valid split view 11.3.1 (BAT 19 - NOx BAT AEL for coal and lignite) should be incorporated from chapter 12 to chapter 10. The daily BAT AEL should be increased accordingly.	Increase the higher end of the yearly NOx BAT-AEL range for existing lignite fired PC boilers of $\geq 300$ MWth : 190 mg/Nm <sup>3</sup> .	See rationale of the split view 11.3.1. and comment 5 above. BAT 19 - NOx BAT AELs for lignite fired PC boilers should reflect the fact that there are applicability restrictions concerning secondary abatement techniques. BAT AELs should be adapted accordingly.
67	Czech Republic	10	2	1	3	769	BAT 19 (NOx) Table 10.3 Change footnote (9). /MAJOR/	<i>The higher end of the range is 190 mg/Nm<sup>3</sup> for FBC boilers put into operation no later than 7 January 2014 and for lignite-fired PC boilers.</i>	Proposed BAT AEL in the footnote (175 mg/Nm <sup>3</sup> ) does not reflect the emission performance of most of the reference plants of concern. The costs needed to achieve proposed value will be disproportionate in relation to the small emission gap among the current value in BREF and 190 mg/Nm <sup>3</sup> as proposed by the Czech Republic. For more details see REVIEW OF LCP BREF, Seville, 22/06/2016 Chapter 11.3.1 /accepted split view/.
68	Poland	10	2	1	3	769	Change of the BAT-AEL range for Nox for existing $\geq 300$ MW FBC boilers combusting coal and/or lignite and lignite-fired PC boiler	Change footnote (9) as follows: The higher end of the range is 190 mg/Nm <sup>3</sup> for FBC boilers put into operation no later than 7 January 2014 and for lignite-fired PC boilers.	There is lack of lignite power plant in European power sector applying the SCR and there is no possibility to build up SCR on the existing lignite-fired power units in the period of time required in BAT/BREF documents. The existing power plants cannot comply reliably with the proposed higher end of the BAT-AEL range (see reference plants n° 23, 128, 129, 130, 137, 224, 387, 389, 390 and 391) under technically and economically feasible conditions. The proposed marginal reduction of NOx emissions does not justify the retrofitting of secondary NOx abatement - neither for economic nor for environmental reasons when considering cross-media effects (efficiency loss, ammonia slip etc.). Every single step on the way of NOx reduction has a negative impact on existing in bed desulphurisation process efficiency (FBC boilers). Assessment of pollutant concentrations in flue gasses (before ESP) which could effect on SCR efficiency shows that in case of polish lignite dust, SiO <sub>2</sub> , and SO <sub>2</sub> concentrations are more than two times higher than in Texas lignite. Al <sub>2</sub> O <sub>3</sub> concentrations are 3-4 times higher, CaO and K <sub>2</sub> O concentrations are more than 5 times higher, Na <sub>2</sub> O concentrations are almost 4 times higher. SCR and catalysts' suppliers emphasize importance of these parameters on construction and operation of SCR. None of the manufacturers of boilers and flue gas cleaning installations does not have references to SCR installed in lignite-fired power plants in Central Europe

69	EURELECTRIC	10	2	1	3	769	<p>Comment on BAT 19, Table 10.3: BAT-associated emission levels (BAT-AELs) for <b>NOx emissions to air</b> from the combustion of coal and/or lignite"Based on the investigations of EIPPCB for NOx emissions and the discussion during the TWG meeting it was decided to determine 65 - 150 mg/Nm<sup>3</sup> as BAT-AEL for existing coal -fired PC boiler (&gt;300 MWth) per yearly average. Our experience in operation of such power plants proves an upper range of 150 mg/Nm<sup>3</sup> is not BAT. It is necessary to increase the range up to 180 mg/Nm<sup>3</sup></p>	<p>An additional footnote should be added to BAT 19, Table 10.3: "<i>In the case of existing coal -fired PC boiler (&gt;300 MWth) put into operation no later than 7 January 2014, the higher end of the range is 180 mg/Nm<sup>3</sup> for the yearly average.</i>"</p>	<p>Raise upper BAT-AEL level from 150 mg/m<sup>3</sup> to 180 mg/m<sup>3</sup> for existing plants already applying secondary abatement techniques for NOx reduction. In the background document of the EIPCCB, it is stated: "As plants using only primary techniques achieve levels of emission below 500 mg/Nm<sup>3</sup>, it is expected that plants retrofitted with SCR and properly operated would achieve levels below 150 mg/Nm<sup>3</sup>. The higher end of the range proposed in D1 could thus be reviewed accordingly."Only 20% of the reference power plants emit, on average, yearly NOx of less than 150 mg/Nm<sup>3</sup> (see file "COAL-Lignite NOx-CO-NH<sub>3</sub> V2", table and graph The results of the data evaluation do not justify yearly average BAT-AEL of less than 180 mg/Nm<sup>3</sup>. In fact, the emission limit of the IED is confirmed as BAT-AEL. The BAT AEL for existing coal plant &gt;300 MW for NOx has been reduced from 180 to 150 mg/Nm<sup>3</sup> which is not achievable for primary techniques with SNCR. This technology option would be perhaps precluded. For some power plants, it could be feasible for SNCR, in combination with other measures, to deliver 180 mg/Nm<sup>3</sup>, but 150 mg/Nm<sup>3</sup> is not feasible under any circumstances with SNCR (see UK response to the background paper).</p>
70	Poland	10	2	1	3	769	<p>Change of the BAT-AEL range for NOx from existing coal fired PC boilers ≥ 300 MW</p>	<p>For existing coal-fired PC boilers ≥ 300 MW (yearly average) add footnote (new) as follows: The higher end of the range is 180 mg/Nm<sup>3</sup> for boilers put into operation no later than 7 January 2014 which due to technical characteristics SCR is not applicable.</p>	<p>Compliance with BAT AELs of 180 mg/Nm<sup>3</sup> for NOx is possible for pulverised bed boilers with a rated thermal input ≥ 300 MW using combination of advanced primary techniques (ROFA combustion) and secondary technique (SNCR). With advanced and well operated primary techniques urea injection is limited and can be effectively controlled to avoid ammonia slips. Measured levels of NH<sub>3</sub> (before ESP) is below 5 mg/Nm<sup>3</sup>. The BAT AEL of 150 mg/Nm<sup>3</sup> imposes in practice application of SCR what can be restricted due to the technical and economic reasons. Well-functioning combinations of SNCR and primary NOx abatement techniques exist and are implemented. One example is reference plant no. 386</p>
71	UK	10	2	1	3	769	<p>Table 10.3. NOx annual BAT AEL for NOx for coal &gt;300MWth</p>	<p>As per the split view, the UK continues to assert that where SNCR is used the appropriate upper end of the AEL is 180mg/m<sup>3</sup>. The view of the TWG was that this was a matter for consideration under Article 15(4).</p>	<p>As detailed in UK split view</p>

72	Czech Republic	10	2	1	3	769	BAT 19 (NOx) Table 10.3 increase of yearly BAT AEL for new FBC boilers of $\geq 300$ MWth combusting coal and/or lignite and lignite-fired PC boilers of $\geq 300$ MWth /MAJOR/	<i>Increase of yearly BAT AEL for new FBC boilers of <math>\geq 300</math> MWth combusting coal and/or lignite and lignite-fired PC boilers of <math>\geq 300</math> MWth (85 mg/Nm<sup>3</sup>) to 150 mg/Nm<sup>3</sup>.</i>	Proposed value is restrictive (it allows to use SCR only), which is not in line with the list of BATs in the BAT Conclusions as well as with art. 15 (2) of IED. SCR applicability strongly depends on lignite quality and there is not enough evidence that SCR can be generally applied to european lignites. The BAT Conclusions are not consistent with the rest of the BREF - limitations are mentioned in LCP BREF FINAL DRAFT (June 2016) - p. 369.
73	Greece	10	2	1	3	769	Increase the higher end of new lignite fired boilers above 300 MWth	Increase the higher end of the yearly NOx BAT-AEL range for new lignite fired PC boilers of $\geq 300$ MWth : 150 mg/Nm <sup>3</sup> (yearly) and 200 mg/Nm <sup>3</sup> (daily).	See rationale for comment 5 above.BAT 19 - NOx BAT AELs for lignite fired PC boilers should reflect the fact that there are applicability restrictions concerning secondary abatement techniques. BAT AELs should be adapted accordingly.
74	Poland	10	2	1	3	769	Change of the BAT-AEL range for Nox for new $\geq 300$ MW FBC boilers combusting coal and/or lignite and lignite-fired PC boiler which due to fuel parameters SCR is not applicable	For new $\geq 300$ MW FBC boilers combusting coal and/or lignite and lignite-fired PC boiler add footnote (new) as follows: The higher end of the range is 150 mg/Nm <sup>3</sup> (yearly average) and 165 (daily average) for boilers which due to fuel parameters SCR is not applicable.	Currently, there is no technology suppliers in Europe, which would ensure that the SCR will work properly due to fuel parameters in all cases. Single examples of SCR technique applied for NOx removal in United States are not representative as techniques which could be commonly use to attain compliance with NOx BAT AELs for lignite fired combustion plants. Compared to fuel from Texas, lignite in Poland is characterized by high volatility of parameters, a lower calorific value and a much higher water content, as well as significant content of ash, sulphur, and calcium. Texas lignite has calorific value around 16 000 kJ/kg what is 50 to 100 % higher than polish lignite. Texas lignite is more similar to poor quality polish hard coal which characterizes calorific value 19 000 – 20 000 kJ/kg.
75	Bulgaria	10	2	1	3	769	ELVs for NOx from combustion firing lignite/coal	For new plants:- < 100 - 300 mg/Nm <sup>3</sup> ;- 100-300 - 150-300 mg/Nm <sup>3</sup> ;- > 300 - 150-200 mg/Nm <sup>3</sup> .	The IED requires ELVs for NOx for new LCP according to Article 30(3) in conjunction with IED Annex V, Part 2 are higher than those proposed in BAT. In Table 10.3 (BAT BREF) for new plant, daily average are: - <100 - 155-200 mg/Nm <sup>3</sup> (compare with IED the ELV is 300mg/Nm <sup>3</sup> );- 100-300 - 80-130 mg/ Nm <sup>3</sup> (compare with IED the ELV is 200mg/Nm <sup>3</sup> );- >300 - 80-125 mg/Nm <sup>3</sup> (compare with IED the ELV is 150mg/Nm <sup>3</sup> / 200mg/Nm <sup>3</sup> ).A BAT requirement goes far beyond this ambition and would require additional new investments and technical changes in a short time, which is hardly acceptable, having in mind the size of the plants.

76	EURACOAL	10	2	1	3	769	During the final TWG meeting, it was decided to handle <b>CO</b> with the identified BAT-AEL as an indicative level. Following this general decision at the beginning of the final TWG meeting, the assessment of the various techniques for reducing CO emissions were not subsequently discussed and yet indicative emission levels are proposed.	The indicative emission levels for CO should be removed from BAT 19, section below Table 10.3	In the case of BAT-AELs for <b>carbon monoxide (CO)</b> , indicative emissions levels are proposed without reference to particular techniques or to the performance of actual plants. This approach is not in accordance with the IED.
77	EURELECTRIC	10	2	1	3	769	BAT 19, indicative values for CO: During the final TWG meeting, it was decided to handle <b>CO</b> with the identified BAT-AEL as an indicative level. Following this general decision at the beginning of the final TWG meeting, the assessment of the various techniques for reducing CO emissions were not subsequently discussed and yet indicative emission levels are proposed.	The indicative emission levels for CO should be removed from BAT 19 (section below Table 10.3)	In the case of carbon monoxide (CO), indicative emissions levels are proposed without reference to particular techniques or to the performance of actual reference plants. This approach is not in accordance with the IED and the BREF rules and procedures.
78	CEWEP	10	2	1	4	771	BAT conclusions for the combustion of <b>coal and/or lignite - SO2 (BAT 21)</b> <b>The lower ends of BATAEL ranges for plants &gt; 300 MW in Table 10.5 appear too low</b> to be used as ELVs applied in compliance with the current legislation with the techniques which are available.	Please ask experts, e.g. CEN TC 264 what changes have to be achieved in respect of monitoring techniques and standards to comply with the requirements of the current legislation and applicable standards if ELVs are very low. Take into account the experts recommendation.	As explained by ESWET in due time, i.e. during the Final meeting 1-9/6/2015 by a number of oral split views, then by ESWET written split view nr 1 (supported by CEWEP) on 22/7/2015 during the written consultation period, the uncertainty on the monitored values is too high in respect of the legislation requirements when ELVs are set at very low level. NB: uncertainty requirements are expressed as a percentage of the daily ELV. And for substances for which there is not yet a requirement in standards (e.g. because it was not required to monitor them up to now), the minimum uncertainty levels (%) are also depending on the ELV levels. This has been confirmed by INERIS institute study report nr. DRC-16-159382-06994A.

79	ESWET	10	2	1	4	771	BAT conclusions for the combustion of <b>coal and/or lignite - SO2 (BAT 21)</b> The lower ends of BATAEL ranges for plants > 300 MW in Table 10.5 appear too low to be used as ELVs applied in compliance with the current legislation with the techniques which are available.	Please ask experts, e.g. CEN TC 264 what lowest ELV can be achieved in respect of monitoring techniques in compliance with the requirements of the current legislation and applicable standards. Modify BATAEL ranges according to their recommendations.	As explained by ESWET in due time, i.e. during the Final meeting 1-9/6/2015 by a number of oral split views, then by ESWET written split view nr 1 on 22/7/2015 during the written consultation period, the uncertainty on the monitored values is too high in respect of the legislation requirements when ELVs are set at very low level. NB: uncertainty requirements are expressed as a percentage of the daily ELV. And for substances for which there is not yet a requirement in standards (e.g. because it was not required to monitor them up to now), the minimum uncertainty levels (%) are also depending on the ELV levels. This has been confirmed by INERIS institute study report nr. DR-16-159382-06994A.
80	EEB	10	2	1	4	771	Add a requirement that the question of whether this is indeed not possible to meet the standard BAT-AEL for SO2 based on "technico-economic" reasons is subject to a public consultation in accordance to Article 15(4) of the IED.	Preferred option: <b>DELETE</b> the desulphurisation rate text. Proposed compromise new text: <i>"For a combustion plant with a total rated thermal input of more than 300 MWth, which is specifically designed to fire indigenous lignite fuels and which can demonstrate that it cannot achieve the BAT-AELs mentioned in Table 10.5 for techno-economic reasons <b>subject to prior validation of a derogation pursuant to Article 15(4) of the Industrial Emissions Directive, the upper end of the yearly average BAT-AEL range is as follows:</b></i>	In line with the split views expressed by EEB on the inadequacy of the SO2 BAT-AEL tables (not differentiating in accordance to S content in the fuels as we proposed) we insist that this desulphurisation rate derogation is clearly pre-conditional to the Art 15(4) derogation to be applied under the IED. This should be the standard practice since we are referring clearly to a derogation. The public has its say on what is economically acceptable, especially since we are referring to the worst types of lignites in terms of sulphur content. The text builds on Article 72(4) point a of the IED. • The relaxations are purely arbitrary and not backed up by any technical (and not even economic) facts• It constitutes a sidelining of the agreed derogation procedure foreseen by the IED pursuant to Article 15(4) where the (dis)proportionality of costs compared to the benefits claims for meeting a certain level of emissions is properly weighted by the competent authority given the specific conditions for the installation concerned and subject to public participation• Further, Article 31 and 72(4) of the IED do not allow a desulphurisation rate derogation based on economic grounds but on technical arguments only • These upfront relaxations for more polluting fuels is in our view a distortion of competition in the liberalised energy market. Special treatment should not apply to power generation operating in the liberalised wholesale electricity and balancing markets, even less for highly polluting fuels. Any derogation should be limited to out-of-market emergency conditions

81	Belgium	10	2	1	4	771	Derogation for high-sulfur lignite combustion	Delete the derogation foreseen in BAT 21 for indigineous lignite with high sulfur content.	If a combustion plant with a total rated thermal input of more than 300 MW, which is specifically designed to fire indigenous lignite fuels, cannot achieve the BAT-AELs mentioned in Table 10.5, a derogation should only be allowed if the derogation procedure lined out in Article 15(4) of the IED is followed. The derogation foreseen in the Final Draft of the LCP BREF is not backed up by technical or economic arguments.
82	France	10	2	1	4	771	Derogation with the SO <sub>2</sub> BAT-AELs of the table 10.5 for indigenous lignite fuels is not acceptable, considering the transboundary impact of the lignite. This provision should be deleted	Delete derogation for indigenous lignite fuels (from the end of table 10.5 to the beginning of the table 10.6)	The combustion plants concerned by this derogation can not be considered as reference plants. They are not efficient concerning the atmospheric pollution and the emissions of greenhouse gas. This derogation is not consistent with the Paris agreement on climate change and the air quality package, which is being adopted and aims at dividing by two the premature deaths due to air pollution. A recent study of the NGOs assess that the lignite and coal fired plants are responsible of 23 000 prematurred deaths in Europe. The SO <sub>2</sub> is reponsible of transboundary pollution and is reponsible of the creation of secondary fine particles. This derogation would allow the commissioning of new lignite fired plants, which emit 20 times more SO <sub>2</sub> than the best performing coal fired plant. This derogation could also create discrimination and unfair competition inside the internal market, including the electricity market, with a direct prejudice to environment and human health, raising questions about its compliance with the TFEU.
83	Czech Republic	10	2	1	4	771	BAT 21 (SO <sub>2</sub> ) Table 10.5 Change formula for new FGD systems. /MAJOR/	<i>RCG x 0.02 with a maximum of 200 mg/Nm<sup>3</sup>.</i>	The level of 99 % in the final draft is mainly based on expert judgment/literature. From data collection just 3 out of 19 lignite-fired reference plants achieve reduction efficiency of above 98 % and none over 99%. Although information outside EU/data gathering can be used as a source of information it is not acceptable to set key figures without complex data set. Also possible technical problems of new FGD systems on existing installations must be taken into account. For more details see REVIEW OF THE BEST AVAILABLE TECHNIQUES (BAT) REFERENCE DOCUMENT FOR LARGE COMBUSTION PLANTS (LCP BREF), Seville, 22/06/2016 Chapter 11.7.3 /accepted split view/.

84	Poland	10	2	1	4	771	SO <sub>2</sub> BATAELs and/or indigenous fuels formula	Change the multiplier in indigenous fuel formula for new FGD from 0,01 to 0,02 and for existing FGD from 0,03 to 0,04 or add new footnote for existing plants: In case of plant which is specifically designed to fire indigenous lignite fuels and which can demonstrate that it cannot achieve the BAT-AELs for techno-economic reasons the higher BAT-AEL range is 170 mg/Nm <sup>3</sup>	The current desulphurisation level of 99 % for new FGD (0,01) is mainly based on expert judgment. This level represents the max achievable performance in some specific conditions and not the available performance in normal operating regime. For existing FGD - according to IED Article 31 and Annex V Part 5, IED requires a minimum DSR of 96 % from 2016 onwards for this types of plants - we dont see any point for limiting IED special provisions.
85	Greece	10	2	1	4	771	Valid split view 11.7.3 should be incorporated from chapter 12 to chapter 10. Greece supports CZ on this split view	Change in formula (i) the multiplier factor for new FGD systems CZ as follows: RCG x 0.02, with a maximum of 200 mg/Nm <sup>3</sup> Change in formula (ii) the multiplier factor and the higher end of the range for existing FGD systems as follows: RCG x 0.04, with a maximum of 400 mg/Nm <sup>3</sup>	See rationale for split view 11.7.3

86	EURACOAL	10	2	1	4	771	Derogation for combustion plants > 300 MWth, designed to fire indigenous fuels	Amend formula i) and ii):formula i): Change multiplier factor to 0.02 with a maximum of 200 mg/Nm <sup>3</sup> for new FGD systemsformula ii): Change multiplier factor to 0.04 with a maximum of 400 mg/Nm <sup>3</sup> for existing FGD systems	For indigenous fuels, the desulphurisation rate is part of the BAT-AEL. As for all other BAT-AELs, the restriction for indigenous fuels should relate to a BAT-AEL range based on reference plant data. In addition, the SO <sub>2</sub> emissions of indigenous fuels depend on the coal/lignite which is available. The operator does not have any possibility to blend with other qualities. The IED requires an MDR of 96% from 2016 onwards according to Article 31 in conjunction with IED Annex V Part 5. This is a lex specialis in the Directive itself and cannot be bypassed or debased by way of a technical document. Hence, Table 10.5 of the BAT-conclusions is not applicable for combustion plants under Article 31. Thus, for these combustion plants desulphurisation rates in the BAT-conclusions cannot be stricter than those established in IED Article 31 in conjunction with IED Annex V Part 5 IED.Many potential IED Art. 31 plants are currently undergoing retrofit to achieve the stringent MDRs of 96% required by Directive 2010/75/EU by 1st January 2016. Due to the lack of experience with the 96% -MDR requirement, the multiplier factor for existing FGD systems should be 0.04.A BAT requirement with a MDR of 97% goes far beyond this ambition and would require additional new investments.A limit of 320 mg/Nm <sup>3</sup> implies a desulphurisation of far beyond 97% and is not achievable at existing plants with existing FGDs firing indigenous lignite with higher sulphur contents. The evaluation for the revised draft 1 (1st of April) resulted in the correct upper value of 400 mg/Nm <sup>3</sup> . This value is justified with data from the reference power plants.But even with a further upgrading of the existing FGDs, a maximum emission limit value of 320 mg/m <sup>3</sup> is out of reach if the indigenous fuels have higher sulphur contents. To comply with these requirements, an entirely new FGD would be necessary, which is not economically viable.
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87	EURELECTRIC	10	2	1	4	771	<p>BAT 21, Table 10.5 - SO<sub>2</sub>: Derogation for combustion plants &gt; 300 MW<sub>th</sub>, designed to fire indigenous fuels</p>	<p>Amend formula i) and ii):formula i): Change multiplier factor to 0.02 with a maximum of 200 mg/Nm<sup>3</sup> for new FGD systemsformula ii): Change multiplier factor to 0.04 with a maximum of 400 mg/Nm<sup>3</sup> for existing FGD systems</p>	<p>For indigenous fuels, the desulphurisation rate is part of the BAT-AEL. As for all other BAT-AELs, the restriction for indigenous fuels should relate to a BAT-AEL range based on reference plant data. In addition, the SO<sub>2</sub> emissions of indigenous fuels depend on the coal/lignite which is available. The operator does not have any possibility to blend with other qualities. The IED requires an MDR of 96% from 2016 onwards according to Article 31 in conjunction with IED Annex V Part 5. This is a <i>lex specialis</i> in the Directive itself and cannot be bypassed or debased by way of a technical document. Hence, Table 10.5 of the BAT-conclusions is not applicable for combustion plants under Article 31. Thus, for these combustion plants desulphurisation rates in the BAT-conclusions cannot be stricter than those established in IED Article 31 in conjunction with IED Annex V Part 5 IED.Many potential IED Art. 31 plants are currently undergoing retrofit to achieve the stringent MDRs of 96% required by Directive 2010/75/EU by 1st January 2016. Due to the lack of experience with the 96% -MDR requirement, the multiplier factor for existing FGD systems should be 0.04.A BAT requirement with a MDR of 97% goes far beyond this ambition and would require additional new investments.A limit of 320 mg/Nm<sup>3</sup> implies a desulphurisation of far beyond 97% and is not achievable at existing plants with existing FGDs firing indigenous lignite with higher sulphur contents. The evaluation for the revised draft 1 (1st of April) resulted in the correct upper value of 400 mg/Nm<sup>3</sup>. This value is justified with data from the reference power plants.But even with a further upgrading of the existing FGDs, a maximum emission limit value of 320 mg/m<sup>3</sup> is out of reach if the indigenous fuels have higher sulphur contents. To comply with these requirements, an entirely new FGD would be necessary, which is not economically viable.The level of 99 % in the final draft is mainly based on expert judgment/literature. From data collection just 3 out of 19 lignite-fired reference plants achieve reduction efficiency of above 98 % and none over 99%. Although information outside EU can be used as a source of information, it is not acceptable to set key figures without complex data set.Also possible technical problems of new FGD systems on existing installations must be taken into account.For more details see REVIEW OF LCP BREF, Seville, 22/06/2016 Chapter 11.7.3.(accepted split view)</p>
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88	Euroheat & Power	10	2	1	4	771	Indigenous lignite fuels - Change in formula (i) the multiplier factor for new FGD systems according to the accepted split view by Euroheat & Power (11.7.3)	Change in formula (i) the multiplier factor for new FGD systems to $RCG \times 0.02$ with maximum of 200 mg/Nm <sup>3</sup> .	Rationale is elaborated in the valid split view 11.7.3
89	Czech Republic	10	2	1	4	771	BAT 21 (SO <sub>2</sub> ) Table 10.5 Increase the upper end of the yearly BAT-AEL for existing PC boilers of $\geq 300$ MWth /MAJOR/	<i>Increase the higher end of the SO<sub>2</sub> yearly BAT-AEL range for existing coal- and lignite-fired PC boilers (130 mg/Nm<sup>3</sup>) to 170 mg/Nm<sup>3</sup>.</i>	The yearly BAT-AEL range should consider the case of all existing plants already applying secondary abatement techniques for SO <sub>2</sub> reduction, that could not achieve high performance in all operating conditions and taking into account relevant limitations. For more details see REVIEW OF THE BEST AVAILABLE TECHNIQUES (BAT) REFERENCE DOCUMENT FOR LARGE COMBUSTION PLANTS (LCP BREF), Seville, 22/06/2016 Chapter 11.7.2 /accepted split view/.
90	Euroheat & Power	10	2	1	4	771	Increase the higher end of the SO <sub>2</sub> yearly BAT-AEL range for existing coal- and lignite-fired PC boilers $\geq 300$ MWth	Increase the higher end of the SO <sub>2</sub> yearly BAT-AEL range for existing coal- and lignite-fired PC boilers $\geq 300$ MWth to 170 mg/Nm <sup>3</sup> .	Rationale is elaborated in the valid split view 11.7.2
91	Greece	10	2	1	4	771	The valid split view 11.7.2 should be incorporated to chapter 10. Change footnote (6) of table 10.5.	Add in footnote (6) the following: "For existing plants put into operation no later than 7 January 2014, the higher end of the BAT-AEL range is 170 mg/Nm <sup>3</sup> "	The difference between the existing yearly and daily BAT AELs for plants put into operation no later than 7 January 2014 is not plausible and reasonable. See rationale of split view 11.7.2
92	Czech Republic	10	2	1	4	772	BAT 21 (HCl) Table 10.6 Limit applicability of the table - add new footnote.	<i>These BAT-AELs do not apply to combustion of coal with high chlorine content.</i>	BAT AELs are not applicable to specific fuel with high chlorine content and are based on very limited data. For more details see REVIEW OF THE BEST AVAILABLE TECHNIQUES (BAT) REFERENCE DOCUMENT FOR LARGE COMBUSTION PLANTS (LCP BREF), Seville, 22/06/2016 Chapter 11.8.

93	Bulgaria	10	2	1	4	771	Derogation for combustion plants > 300 MWth, designed to fire indigenous fuels	Desulphurisation rate:- For existing plants – 96%;- For new plants – 98%.Emissions limit value: - For existing plants – 400 mg/Nm3;- For new plants – 300 mg/Nm3.	The SO2 emissions from indigenous fuels depend on the sulphur content in lignite which is available in Bulgaria. Bulgarian low calorific lignite, with average value of 6 000 kJ/kg, has sulphur content of above 2 wt % - working basis (above 4 wt % - dry basis). The quality of lignite is the reason for the following restrictions in relation to raising the level of desulphurisation:- Because of the low calorific value of the lignite, steam boilers are designed for firing ONLY this type of fuel. Therefore, operators do not have possibility to blend it with other fuels with higher quality in order to minimize SO2 emissions;- Flue gas desulphurisation installations in Bulgarian LCPs under IED Article 31 have been initially designed to maintain 92% or 94% rate of desulphurisation. In order to reach requirements of the IED by 1st January 2016, FGDs were already retrofitted to achieve the stringent MDRs of 96%. The existing reserve of FGDs has been already spent and it is not possible from constructional point of view to make further upgrade of these plants. This means that it will be necessary to build once again NEW FGDs for existing plants which is extremely expensive and is nonsense from economic point of view. We would like also to pay attention to the fact that the BREF document DOES NOT GIVE information on the implementation of the proposed rate of desulphurisation (99%) in NEW plants burning lignite coal with sulfur content similar to that of Bulgarian lignite. This raises some questions:- Is it possible to achieve and maintain a 99% rate of desulphurisation using coal with a sulfur content of above 2 wt % - working basis (above 4 wt % - dry basis);- Is it justified to operate such a plant from an economic point of view;- What are the environmental benefits, compared to the costs, having in mind potential implications for Bulgarian economy by stopping the operation of plants burning indigenous lignite.Before seeing answers to the above listed questions Bulgaria is not in a position to approve proposed document. We also do not find acceptable the proposal for lowering SO2 emissions in air from lignite fired plants to 320 mg/Nm3, in a case emission limit value instead rate of desulphurisation is applicable. The previous proposal (of 400 mg/Nm3) was also a bit high for Bulgarian LCPs, but with some efforts that value was achievable. The new proposed value (of 320 mg/Nm3) is a figure that our plants will hardly achieve, giving the specification of local lignite.
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94	CEWEP	10	2	1	4	772	BAT conclusions for the combustion of <b>coal and/or lignite - HCl and HF (BAT 21)</b> All HCl and HF BATAEL values in Table 10.6 are too low to be used as ELVs with the techniques which are available.	Please ask experts, e.g. CEN TC 264 what changes have to be achieved in respect of monitoring techniques and standards to comply with the requirements of the current legislation and applicable standards if ELVs are very low. Take into account the experts recommendation.	As explained by ESWET in due time, i.e. during the Final meeting 1-9/6/2015 by a number of oral split views, then by ESWET written split view nr 1 (supported by CEWEP) on 22/7/2015 during the written consultation period, the uncertainty on the monitored values is too high in respect of the legislation requirements when ELVs are set at very low level. NB: uncertainty requirements are expressed as a percentage of the daily ELV. And for substances for which there is not yet a requirement in standards (e.g. because it was not required to monitor them up to now), the minimum uncertainty levels (%) are also depending on the ELV levels. This has been confirmed by INERIS institute study report nr. DRC-16-159382-06994A.
95	ESWET	10	2	1	4	772	BAT conclusions for the combustion of <b>coal and/or lignite - HCl and HF (BAT 21)</b> All HCl and HF BATAEL values in Table 10.6 are too low to be used as ELVs with the techniques which are available.	Please ask experts, e.g. CEN TC 264 what lowest ELV can be achieved in respect of monitoring techniques in compliance with the requirements of the current legislation and applicable standards. Modify BATAEL ranges according to their recommendations.	As explained by ESWET in due time, i.e. during the Final meeting 1-9/6/2015 by a number of oral split views, then by ESWET written split view nr 1 on 22/7/2015 during the written consultation period, the uncertainty on the monitored values is too high in respect of the legislation requirements when ELVs are set at very low level. NB: uncertainty requirements are expressed as a percentage of the daily ELV. And for substances for which there is not yet a requirement in standards (e.g. because it was not required to monitor them up to now), the minimum uncertainty levels (%) are also depending on the ELV levels. This has been confirmed by INERIS institute study report nr. DRC-16-159382-06994A.
96	EURELECTRIC	10	2	1	4	772	BAT 21, Table 10.6. Values at lower end of the HCl and HF range couldn't be properly measured using available equipment (AMS and SRM), systems and methods compliant with CEN Standards, currently installed in order to cover continuous monitoring and periodic measurements.	Table10.6 insert note: lower end of the range should be assessed considering EN standard for measurement	The LoQ and uncertainty associated with the measurement have to be taken in account in setting BAT_AEL range: identify the performances of the monitoring techniques available on the market in accordance with current EN Standard so to review lower end of the range as minimum achievable ELVs /BATAELs

97	EEB	10	2	1	4	772	We object to the change made by the EIPPCB which is altering the substance (scope) of the relaxation	Amend to : "In the case of FBC <b>district heating plants</b> <300MWth combusting fuels with a chlorine content of >1000mg/kg(dry) operated <1500h/yr , the higher end of he range <b>may be up to</b> 20mg/Nm <sup>3</sup> . <b>The lower end is achievable with wet FGD.</b> "	The change is beyond the remit of the EIPPCB to change for consistency without altering the substance of the BAT-Conclusions. The new change is no longer making the HCL relaxation subject to cumulative 3 conditions (i.e. CFB boiler that fires fuel with a chlorine content of >1000mg/kg (dry and operates less than 1500hours/year). Contrary to what is claimed by the EIPPCB the scope of the relaxation is thus altered in its practical effect. The BAT conclusions should always be focused on environmental performance outcomes. Specific boiler types / existing configurations should not get much more laxist requirements for the combustion of the same type of fuels. If not mistaken the request for a relaxation was limited to a couple of Polish CFB district heating plants of a size of <300MWth. This size restriction is to be added to be consistent with the outcome of the Final TWG meeting.
98	EURACOAL	10	2	1	4	772	Comment on: "Table 10.6: BAT-associated emission levels (BAT-AELs) for <b>HCl</b> and HF emissions to air from the combustion of coal and/or lignite"Based on the investigations of EIPPCB for HCl emissions and the discussion during the TWG meeting it was decided to add a footnote: "(2) The higher end of the BAT-AEL range is 20 mg/Nm <sup>3</sup> in the following cases: plants combusting fuels where the average chlorine content is 1000 mg/kg (dry) or higher; plants operated < 1500 h/yr; FBC boilers. These levels are indicative for plants operated < 500 h/yr."Our experience with the operation of such power plants proves an upper range of 20 mg/Nm <sup>3</sup> is not BAT. In cases where coal and/or lignite with high chlorine content is used, it is necessary to increase the range up to 120 mg/Nm <sup>3</sup> .	Footnote 2 in Table 10.6 should be amended:"(2) In the case of FBC boilers applying dry sorption technique for SO2 reduction, the higher end of the range is 60 mg/Nm <sup>3</sup> for plants using lignite and for plants using hard coal with a chlorine content of 500 mg/kg or less (dry matter).In the case of FBC boilers applying dry sorption technique for SO2 reduction the higher end of the range is 120 mg/Nm <sup>3</sup> for plants using hard coal with a chlorine content of more than 500 mg/kg dry matter; plants operated < 1500 h/yr; FBC boilers. (These levels are indicative for plants operated < 500 h/yr.)"	For existing fluidised bed boilers, with a dry desulphurisation system, the proposed HCl BAT-AELs are not achievable. Retrofitting a wet flue gas cleaning step at existing FBC boilers simply to reduce HCl emission is not proportionate. An explicit differentiation should be made between pulverised coal and fluidised bed boilers with dry sorption techniques.Examples of end-of-pipe techniques applied for HCl removal shown in the Background Paper (Luminant start up 2009, Dominion Energy start up 2011 see file EPPSA-01-HCl-HF.pdf) are not representative as techniques which could be commonly use to attain compliance with HCl BAT AELs requirements for existing plants. They are appropriate only for new plants with moderate or low Cl content in the fuel (HCl in flue gases 50-134 ppmv).Typically there is no space for additional end-of-pipe measures for reducing HCl emissions with wet abatement techniques in existing CFB plants using dry sorption techniques in combination with ESP or a bag filter.

99	EURELECTRIC	10	2	1	4	772	BAT 21, Table 10.6, HCL: Comment on: "Table 10.6: BAT-associated emission levels (BAT-AELs) for HCl and HF emissions to air from the combustion of coal and/or lignite"Based on the investigations of EIPPCB for HCl emissions and the discussion during the TWG meeting it was decided to add a footnote: "(2) The higher end of the BAT-AEL range is 20 mg/Nm <sup>3</sup> in the following cases: plants combusting fuels where the average chlorine content is 1000 mg/kg (dry) or higher; plants operated < 1500 h/yr; FBC boilers. These levels are indicative for plants operated < 500 h/yr."Our experience with the operation of such power plants proves an upper range of 20 mg/Nm <sup>3</sup> is not BAT. In cases where coal and/or lignite with high chlorine content is used, it is necessary to increase the range up to 120 mg/Nm <sup>3</sup> .	Footnote 2 in BAT 21, Table 10.6 should be replaced using the following wording:"(2) In the case of FBC boilers applying dry sorption technique for SO <sub>2</sub> reduction, the higher end of the range is 60 mg/Nm <sup>3</sup> for plants using lignite and for plants using hard coal with a chlorine content of 500 mg/kg or less (dry matter).In the case of FBC boilers applying dry sorption technique for SO <sub>2</sub> reduction the higher end of the range is 120 mg/Nm <sup>3</sup> for plants using hard coal with a chlorine content of more than 500 mg/kg dry matter and for plants operated < 1500 h/yr. These levels are indicative for plants operated < 500 h/yr."	For existing fluidised bed boilers, with a dry desulphurisation system, the proposed HCl BAT-AELs are not achievable. Retrofitting a wet flue gas cleaning step at existing FBC boilers simply to reduce HCl emission is not proportionate. An explicit differentiation should be made between pulverised coal and fluidised bed boilers with dry sorption techniques.Examples of end-of-pipe techniques applied for HCl removal shown in the Background Paper (Luminant start up 2009, Dominion Energy start up 2011 see file EPPSA-01-HCl-HF.pdf) are not representative as techniques which could be commonly use to attain compliance with HCl BAT AELs requirements for existing plants. They are appropriate only for new plants with moderate or low Cl content in the fuel (HCl in flue gases 50-134 ppmv).Typically there is no space for additional end-of-pipe measures for reducing HCl emissions with wet abatement techniques in existing CFB plants using dry sorption techniques in combination with ESP or a bag filter.
100	Poland	10	2	1	4	774	Change of character of HCl and HF from binding to indicative	Change the character of HCl and HF emissions from BAT AELs to a indicative levels in the BAT conclusions (solid fuels/biomass).Alternatively, change the footnote (2) as follows: The higher end of the BAT-AEL range is 20 mg/Nm <sup>3</sup> in the following cases: plants combusting fuels where the average chlorine content is 1000 mg/kg (dry) or higher; plants operated < 1500 h/yr. These levels are indicative for plants operated < 500 h/yr and for FBC	HCL and HF emissions reduction is secondary benefit from SO <sub>2</sub> reduction and in installations that met at least SO <sub>2</sub> IED requirements will achieve HCl/HF ELVs automatically. Exception are old FCB boilers combusting fuels with high chlorine content without secondary FGD – however this type of boilers will be naturally closed down. New coal FBC boilers (if any will be build), due to SO <sub>2</sub> and NO <sub>x</sub> BATAELs will have to be equipped with secondary FGD – so there will be no problem to achieve HCl/HF limits. We would like to point that:1. None of EU air policy acts (CAFE, NEC, MCP) mention HCl/HF limitations for combustion plant sector - so HCl emission is not key environmental issue. 2. There is also no EU regulations on chlorine content in coal - and LCP BAT conclusions may in practice make such a restriction, for which they are not empowered.3. There are limited information about impact assessment of HCl/HF emissions.4. There is almost

									boilers combusting fuels where the average chlorine content is 500 mg/kg (dry) or higher and due to plant characteristics secondary FGD is not applicable.	no cost-benefit analysis, that will allow to use art. 15.4 derogation in proper manner - so using 15.4 will not be solution for issue raised by us, because it is not individual plant problem, but whole type od boilers combined with specific fuel. We see lack of possibility to make reliable environmental benefits calculation, on which 15.4 derogation should be based. <b>Taking this into account we propose to change the character of HCL/HF emissions set in BREF into indicative values</b> , as it was in case of CO emissions. This will allow to flexible approach at competent authority level in subsidiary way and will reduce unnecessary administrative burdens, allowing operator to focus on key environmental issues and requirements. It will allow to gather more representative data - and on future BREF revision TWG, based on new database, will decide if its important to set BATAELs for HCl/HF or to remove it from the BREF.If in forum opinion this is not proper way to deal with HCl/HF emissions we propose to change the footnote (2) and set levels for FBC boilers combusting fuels where the average chlorine content is 500 mg/kg (dry) or higher and in which due to plant characteristics secondary FGD is not applicable – as indicative.We would like to point that there was small reference data base on HCl/HF emissions, and no reference data from FBC boilers combusting coal with high chlorine content.Detailed information and rationale was given in HCL split view, additional data in BATIS and comments during TWG meetings.
101	EURELECTRIC	10	2	1	4	772	BAT 21, Table 10.6: BAT-associated emission levels (BAT-AELs) for HCl and HF emissions to air from the combustion of coal and/or lignite Modification of footnote (3)	(3) The higher end of the BAT-AEL range is 7 mg/Nm <sup>3</sup> in the following cases: plants fitted with wet FGD with a downstream gas-gas heater; FBC boilers. These levels are indicative for plants operated < 500 h/yr and in the case of plants put into operation no later than 1 July 1987, which are operated < 1500 h/yr .	For such plants put into operation no later than 1 July 1987, with limited life time operation it would be more rational approach	

102	CEWEP	10	2	1	5	772	BAT conclusions for the combustion of <b>coal and/or lignite - Dust (BAT 22)</b> <b>The lower ends of all BATAEL ranges in Table 10.7 appear too low</b> to be used as ELVs applied in compliance with the current legislation with the techniques which are available.	Please ask experts, e.g. CEN TC 264 what changes have to be achieved in respect of monitoring techniques and standards to comply with the requirements of the current legislation and applicable standards if ELVs are very low. Take into account the experts recommendation.	As explained by ESWET in due time, i.e. during the Final meeting 1-9/6/2015 by a number of oral split views, then by ESWET written split view nr 1 (supported by CEWEP) on 22/7/2015 during the written consultation period, the uncertainty on the monitored values is too high in respect of the legislation requirements when ELVs are set at very low level. NB: uncertainty requirements are expressed as a percentage of the daily ELV. And for substances for which there is not yet a requirement in standards (e.g. because it was not required to monitor them up to now), the minimum uncertainty levels (%) are also depending on the ELV levels. This has been confirmed by INERIS institute study report nr. DRC-16-159382-06994A.
103	ESWET	10	2	1	5	772	BAT conclusions for the combustion of <b>coal and/or lignite - Dust (BAT 22)</b> <b>The lower ends of all BATAEL ranges in Table 10.7 appear too low</b> to be used as ELVs applied in compliance with the current legislation with the techniques which are available.	Please ask experts, e.g. CEN TC 264 what lowest ELV can be achieved in respect of monitoring techniques in compliance with the requirements of the current legislation and applicable standards. Modify BATAEL ranges according to their recommendations.	As explained by ESWET in due time, i.e. during the Final meeting 1-9/6/2015 by a number of oral split views, then by ESWET written split view nr 1 on 22/7/2015 during the written consultation period, the uncertainty on the monitored values is too high in respect of the legislation requirements when ELVs are set at very low level. NB: uncertainty requirements are expressed as a percentage of the daily ELV. And for substances for which there is not yet a requirement in standards (e.g. because it was not required to monitor them up to now), the minimum uncertainty levels (%) are also depending on the ELV levels. This has been confirmed by INERIS institute study report nr. DRC-16-159382-06994A.
104	EURELECTRIC	10	2	1	5	773	BAT 22, Table 10.7. Values at lower end of dust range couldn't be properly measured using available equipment (AMS and SRM), systems and methods compliant with CEN Standards, currently installed in order to cover continuous monitoring and periodic measurements.	Table10.7 insert note: lower end of the range should be assessed considering EN standard for measurement	The LoQ and uncertainty associated with the measurement have to be taken in account in setting BAT_AEL range: identify the performances of the monitoring techniques available on the market in accordance with current EN Standard so to review lower end of the range as minimum achievable ELVs /BATAELs

105	EURACOAL	10	2	1	5	772	<p>Comment on: "Table 10.7: BAT-associated emission levels (BAT-AELs) for <b>dust</b> emissions to air from the combustion of coal and/or lignite"Based on the investigations of EIPPCB for dust emissions and the discussion during the TWG meeting, it was decided to add several footnotes. Our experience in operation of such power plants proves BAT-AEL were determined too low in all cases.</p>	<p>Table 10.7 should be amended:The amended table includes all the footnotes of the BAT-AEL. They may therefore be omitted.</p> <table border="1"> <thead> <tr> <th rowspan="3">Combustion plant total rated thermal input (MWth)</th> <th colspan="2">BAT-AELs (mg/Nm<sup>3</sup>) for <b>dust</b> emissions to air</th> </tr> <tr> <th>yearly average</th> <th>daily average or a average over the sampling period</th> </tr> <tr> <th>existing plant</th> <th>existing plant</th> </tr> </thead> <tbody> <tr> <td>&lt;100</td> <td>10-20</td> <td>15-28</td> </tr> <tr> <td>100-300</td> <td>10-20</td> <td>15-25</td> </tr> <tr> <td>300-1000</td> <td>10-15</td> <td>15-20</td> </tr> <tr> <td>≥ 1000</td> <td>5-10</td> <td>10-16</td> </tr> </tbody> </table>	Combustion plant total rated thermal input (MWth)	BAT-AELs (mg/Nm <sup>3</sup> ) for <b>dust</b> emissions to air		yearly average	daily average or a average over the sampling period	existing plant	existing plant	<100	10-20	15-28	100-300	10-20	15-25	300-1000	10-15	15-20	≥ 1000	5-10	10-16	<p>EIPPCB Assessment 2.2 indicates that re-assessment of available daily averages shows that all plants having yearly averages &lt; 10 mg/Nm<sup>3</sup> achieve a daily average below 16 mg/Nm<sup>3</sup>. Plants 387, 24 and 193, according to ADC and IDC, recorded a max daily average over 16 mg/Nm<sup>3</sup>. Plant 141 is the only one providing daily averages &lt; 3 mg/Nm<sup>3</sup> among all plants in ADC or IDC. In accordance with the experience of the operators, the lower value of the range should be increased.EIPPCB Assessment 2.2 indicates that a re-assessment of available daily averages shows that all plants having yearly averages of &lt;10 mg/Nm<sup>3</sup> achieve daily averages below 16 mg/Nm<sup>3</sup>. According to the 'Table and graphs working document', more than half of this set of plants recorded a 95th percentile over 10 mg/Nm<sup>3</sup>. Values lower than 5 mg/Nm<sup>3</sup> could be achieved as max daily average by plants fitted with wet ESP(BAT 22 b) in tail-end position. Best performances, lower than 10 mg/Nm<sup>3</sup> on a short-term basis, could be achieved by plants fitted with a combination of the most advanced secondary techniques, with preliminary filter (BAT 22 b or c) and tail-end wet FGD system (BAT 22 f). Wet FGD indeed reduces dust emissions when applied in combustion plants. However, wet FGD is a technique that is applied in the context of SO2 emissions reduction and not dust emissions reduction. In view of the above, in the cases where other SO2 removal techniques are applied (e.g. DSI, which may be applied for economic feasibility reasons in existing plants), then the upper end of the range of dust BAT AELs proposed in the revised D1 may not be achievable.</p>
Combustion plant total rated thermal input (MWth)	BAT-AELs (mg/Nm <sup>3</sup> ) for <b>dust</b> emissions to air																											
	yearly average	daily average or a average over the sampling period																										
	existing plant	existing plant																										
<100	10-20	15-28																										
100-300	10-20	15-25																										
300-1000	10-15	15-20																										
≥ 1000	5-10	10-16																										
106	Czech Republic	10	2	1	5	772	<p>BAT 22 (Dust) Table 10.7 Add new footnote to the higher end (8 mg/Nm<sup>3</sup>) of the yearly BAT-AEL range for existing lignite-fired plants of ≥ 1000 MWth. /MAJOR/</p>	<p><i>The higher end of the BAT-AEL range is 10 mg/Nm<sup>3</sup> for plants put into operation no later than 7 January 2014.</i></p>	<p>The BAT AEL should reflect specific character of lignite (e.g ash content). Proposed data are demonstrated on significant number of plants fitted with techniques listed under BAT 22. For more details see REVIEW OF THE BEST AVAILABLE TECHNIQUES (BAT) REFERENCE DOCUMENT FOR LARGE COMBUSTION PLANTS (LCP BREF), Seville, 22/06/2016 Chapter 11.10.1 /accepted split view/.</p>																			

107	Euroheat & Power	10	2	1	5	772	Increase the higher end of the yearly dust BAT-AEL range for existing lignite-fired plants of $\geq 1000$ MWth put into operation no later than 7 January 2014 according to the accepted split view by Euroheat & Power (11.10.1)	Increase the higher end of the yearly dust BAT-AEL range for existing lignite-fired plants of $\geq 1000$ MWth put into operation no later than 7 January 2014 to 10 mg/Nm <sup>3</sup> .	Rationale is elaborated in the valid split view 11.10.1
108	Greece	10	2	1	5	772	Valid split view 11.10.1 should be incorporated from chapter 12 to chapter 10. Greece supports CZ on this split view	Table 10.7 Add new footnote to the higher end (8 mg/Nm <sup>3</sup> ) of the yearly BAT-AEL range for existing lignite-fired plants of $\geq 1000$ MWth as follows: The higher end of the BAT-AEL range is 10 mg/Nm <sup>3</sup> for plants put into operation no later than 7 January 2014.	See rationale for split view 11.10.1
109	Czech Republic	10	2	1	6	773	BAT 23.f - Carbon sorbent injection in the flue gas - to change the applicability.	<i>Applicable within the constraints associated with the by-product quality requirements for recovery' and cross-media effects.</i>	There are high risks related to cross-media effects the use of Carbon sorbent injection would have. Text of BAT Conclusions is not fully consistent with LCP BREF FINAL DRAFT (June 2016) - p. 413 (negative impact on bag filter), p. 424 (problems on plants in China). For more details see REVIEW OF THE BEST AVAILABLE TECHNIQUES (BAT) REFERENCE DOCUMENT FOR LARGE COMBUSTION PLANTS (LCP BREF), Seville, 22/06/2016 Chapter 11.11 /partially accepted split view/.

110	EURELECTRIC	10	2	1	6	773	BAT 23, row f. Carbon sorbent injection in the flue gas-applicability column. Modify according to valid split view 11.11.	Not generally applicable. The applicability may be limited in case of plants using ESP or wet FGD in combination with ESP for dust reduction and considering the constraints associated with the quality required to by-product for recovery	Carbon sorbent injection (CSI) is not generally applicable, considering the following issues. CSI (i.e. as Activated Carbon Injection) leads potentially critical side-effects, with significant and fact-based risk of environmental and operating impact, which has to be duly assessed before application. This technique could be effective in combination with bag filter (see LCP draft 1 Ch. 5.1.4.4.3.2) but can affect the operation of electrostatic precipitator and scrubber. Factors that have influence mercury removal and/or the ESP's particulate collection efficiency include fly ash composition, specific collecting area, flue gas velocity through the ESP box, flue gas temperature, sulfur trioxide concentration in the flue gas, and ACI rate, among others. The fluidisation properties of activated carbon may make it more prone to reentrainment out of the hoppers into the ESP outlet gas stream. The use of CSI residues, irrespective of ESP or bag filter devices, may require additional treatment steps, without confidence on aimed results. Effects on by-products need to be deeply investigated, considering high environmental value of fly ashes and FGD gypsum recovery, with defined EU standards (e.g. EN 450).
111	Czech Republic	10	2	1	6	773	BAT 23.g - Halogenated additives - to change the applicability.	<i>Applicable within the constraints associated with the by-product quality requirements for recovery, the control of halogen emissions to the environment, and the long-term corrosion potential'</i>	The risks related to the use of halogenated additives were considered appropriately. The BAT Conclusions are not consistent with the rest of the BREF - limitations and concerns regarding halogenated additives are mentioned within LCP BREF FINAL DRAFT (June 2016) p. 428. For more details see REVIEW OF THE BEST AVAILABLE TECHNIQUES (BAT) REFERENCE DOCUMENT FOR LARGE COMBUSTION PLANTS (LCP BREF), Seville, 22/06/2016 Chapter 11.12 /accepted split view/.

112	EURELECTRIC	10	2	1	6	773	BAT 23, row g. Use of halogenated additives in the fuel or injected in the furnace. Modify according to valid split view 11.12	In description column : "Applicability restricted within the constraints associated with the control of halogen emissions to the environment and quality required to by-product for recovery, and within the constraints associated with the corrosion potential of equipment".In applicability column: "Emerging technique, not generally applicable".	The use of halogenated additive is not generally applicable, considering the following issues: Halogens addition in combustion leads potentially critical side-effects, with significant and fact-based risk of environmental and operating impact, which has to be duly assessed before application.Bromide addition to the coal or lignite may increase the bromine content of the FGD wastewater, as toxic organo-halogens and bromate. Effects of bromine compounds in by-products need to be deeply investigated, considering high environmental value of fly ashes and FGD gypsum industrial recovery, with defined EU standards. The industrial use of residues with application of this technique isn't tested, the disposal, as a consequence of high halogen content, could lead to huge economic and environmental costsBy operating point of view, the issue of most concern is the potential for bromide induced corrosion in the duct work, air heater, and in the FGD system. Halogen additives (esp. bromine) can affect plant operation and maintenance by corrosion as well as accumulation of bromine compounds in the scrubber suspension and therefore in the FGD waste water.
113	CEWEP	10	2	1	6	774	BAT conclusions for the combustion of <b>coal and/or lignite - Hg (BAT 23)All BATAEL values in Table 10.8 and 10.9 appear too low</b> to be used as ELVs with the techniques which are available.	Please ask experts, e.g. CEN TC 264 what changes have to be achieved in respect of monitoring techniques and standards to comply with the requirements of the current legislation and applicable standards if ELVs are very low. Take into account the experts recommendation.	As explained by ESWET in due time, i.e. during the Final meeting 1-9/6/2015 by a number of oral split views, then by ESWET written split view nr 1 (supported by CEWEP) on 22/7/2015 during the written consultation period, the uncertainty on the monitored values is too high in respect of the legislation requirements when ELVs are set at very low level. NB: uncertainty requirements are expressed as a percentage of the daily ELV. And for substances for which there is not yet a requirement in standards (e.g. because it was not required to monitor them up to now), the minimum uncertainty levels (%) are also depending on the ELV levels. This has been confirmed by INERIS institute study report nr. DRC-16-159382-06994A.

114	ESWET	10	2	1	6	774	BAT conclusions for the combustion of <b>coal and/or lignite - Hg (BAT 23)</b> <b>All BATAEL values in Table 10.8 and 10.9 appear too low</b> to be used as ELVs with the techniques which are available.	Please ask experts, e.g. CEN TC 264 what lowest ELV can be achieved in respect of monitoring techniques in compliance with the requirements of the current legislation and applicable standards. Modify BATAEL ranges according to their recommendations.	As explained by ESWET in due time, i.e. during the Final meeting 1-9/6/2015 by a number of oral split views, then by ESWET written split view nr 1 on 22/7/2015 during the written consultation period, the uncertainty on the monitored values is too high in respect of the legislation requirements when ELVs are set at very low level. NB: uncertainty requirements are expressed as a percentage of the daily ELV. And for substances for which there is not yet a requirement in standards (e.g. because it was not required to monitor them up to now), the minimum uncertainty levels (%) are also depending on the ELV levels. This has been confirmed by INERIS institute study report nr. DR-16-159382-06994A.
115	EURELECTRIC	10	2	1	6	774	BAT 23. Tables 10.8 and 10.9. Values at lower end of Hg range couldn't be properly measured using available equipment (AMS and SRM), systems and methods compliant with CEN Standards, currently installed in order to cover continuous monitoring and periodic measurements. No evidence reported for lignite-fired combustion plants to state that "The lower end of the BAT-AEL range [ $< 1 \mu\text{g}/\text{m}^3$ ]" can be achieved with specific mercury abatement techniques".	Table 10.8 and 10.9 delete note (2) insert note: lower end of the range should be assessed considering EN standard for measurement. Increase all lower ends of the BAT-AEL ranges from " $< 1 \mu\text{g}/\text{m}^3$ " to " $3 \mu\text{g}/\text{m}^3$ ".	The LoQ and uncertainty associated with the measurement have to be taken in account in setting BAT_AEL range: identify the performances of the monitoring techniques available on the market in accordance with current EN Standard so to review lower end of the range as minimum achievable ELVs /BATAELs. The lower end of the BAT-AEL range should have been increased to take into account that deriving BAT-AELs should be based data from reference plants represented without subtraction of uncertainty. See split view rationales from Eurelectric and Euracoal ( <b>Assessment of Split view rationale: split view 11.17.3, 22/06/2016; split view 11.18.1 and 11.18.3, 22/06/2016</b> )
116	EURACOAL	10	2	1	6	774	Table 10.9.: There is no distinction for Hg BAT AELs between existing lignite-fired plants with FBC and PC boiler.	Derive separate BAT-AELs for Hg for lignite-fired power plants with FBC and PC boilers.	Hg control is quite different in FBC and PC boilers. Similar to the capture of Hg with activated carbon, Hg is absorbed in FBC boilers due to the large carbon content in the bed material of the combustor. This leads to much lower Hg emissions in FBC boilers than in PC boilers. This kind of Hg capture mechanism cannot be used or retrofitted in PC boilers, so the control of Hg has to be achieved with other technologies in PC boilers. For this reason, separate Hg BAT-AELs for plants with FBC and PC boilers should be decided upon in Table 10.9, comparable to the BAT AELs for NOx and SO <sub>2</sub> (see also expert opinion of Prof. Kather, Hamburg University of Technology, Aug. 2016).

117	EURACOAL	10	2	1	6	774	Table 10.9.: Hg BAT AELs based on incomplete data set. Renewed assessment required.	Derive Hg -BAT AELs for lignite-fired power plants including power plants 133VC, 117-1 VC, 391V and 117-2VC.	In Figure 5.31, four lignite-fired power plants from the data collection (List of tables and graphs) were eliminated, although among these plants are the only ones equipped with continuous measurement. Corrected Hg BAT AELs including these power plants would result in BAT AELs with increased lower and higher ranges (see also expert opinion of Prof. Kather, Hamburg University of Technology, Aug. 2016).
118	Czech Republic	10	2	1	6	774	BAT 23 (Hg) Table 10.9 Add new footnote. /MAJOR/	<i>These BAT-AELs do not apply to plants operated &lt; 1500 h/yr.</i>	Reduction of requirements for plants, which are used mainly for emergency energy supply for the public during winter. Same footnote is already in BAT Conclusions for NOx, SO2 and dust. Hg from these plants would be still subject of publicly available monitoring and reporting via E-PRTR and IED art. 24 (3) b). For more details see REVIEW OF LCP BREF, Seville, 22/06/2016 Chapter 11.16 /accepted split view - LIMITATION BELOW 300 MW IS A TYPO!/
119	Czech Republic	10	2	1	6	774	BAT 23 (Hg) Table 10.9 Increase the higher end of the mercury BAT-AEL range for existing lignite-fired plants of < 300 MWth (10 µg/Nm3) and the higher end of the mercury BAT-AEL range for existing lignite-fired plants of > 300 MWth (7 µg/Nm3). /MAJOR/	<i>Increase the higher end of the mercury BAT-AEL range for existing lignite-fired plants of &lt; 300 MWth (10 µg/Nm3) to 14 µg/Nm3. Increase the higher end of the mercury BAT-AEL range for existing lignite-fired plants of &gt; 300 MWth (7 µg/Nm3) to 10 µg/Nm3.</i>	There is an enormous variability of the Hg in emissions due to natural conditions (Hg and halogen content in fuel) and abatement parameters within the span of the last years across the lignite combustion plants, which is not addressed in proposed BAT Conclusions. For more details see REVIEW OF THE BEST AVAILABLE TECHNIQUES (BAT) REFERENCE DOCUMENT FOR LARGE COMBUSTION PLANTS (LCP BREF), Seville, 22/06/2016 Chapter 11.18.1 and 11.18.3 /accepted split view/. In order to deliver high level of environmental ambitions it is proposed to apply lower BAT AEL than proposed in the split views.

120	EURACOAL	10	2	1	6	774	<p>The European Integrated Pollution Prevention and Control Bureau (EIPPCB) has analysed mercury emissions to air from the combustion of coal and lignite. For this purpose, data from actual power plants were used as well as published data. Critiques of the EIPPCB analysis by a number of EU Member States and EURACOAL all conclude that the BAT-associated emission levels (BAT-AELs) proposed by the EIPPCB are too strict. However, this view was not accepted in the technical working group (TWG). In fact, a majority of TWG members voted for even more ambitious BAT-AELs for mercury.</p>	<p>Table 10.9 should be amended: The footnote below table 10.9 doesn't reflect correctly the technical knowledge. It should therefore be omitted.</p> <table border="1"> <thead> <tr> <th rowspan="3">Combustion plant total rated thermal input (MWth)</th> <th colspan="2">BAT-AELs (<math>\mu\text{g}/\text{Nm}^3</math>) for mercury emissions to air from the combustion of lignite</th> </tr> <tr> <th colspan="2">yearly average or average of samples obtained one year</th> </tr> <tr> <th>new plant</th> <th>existing plant</th> </tr> </thead> <tbody> <tr> <td>&lt;300</td> <td>4-20</td> <td>4-20</td> </tr> <tr> <td><math>\geq 300</math></td> <td>3-20</td> <td>3-20</td> </tr> </tbody> </table>	Combustion plant total rated thermal input (MWth)	BAT-AELs ( $\mu\text{g}/\text{Nm}^3$ ) for mercury emissions to air from the combustion of lignite		yearly average or average of samples obtained one year		new plant	existing plant	<300	4-20	4-20	$\geq 300$	3-20	3-20	<p>In July/August 2016, Prof. Dr.-Ing. Alfons Kather of the Institute for Energy Systems at Hamburg University of Technology analysed the BAT-AELs for mercury emissions to air from existing lignite-fired power plants with a total rated thermal input of <math>\geq 300</math> MWth. He used the same data as for the TWG decision. Prof. Kather's report shows that the range for any new BAT-AELs for mercury emissions to air from existing lignite-fired power plants with pulverised combustion (PC) boilers should be set between 5 and 9 <math>\mu\text{g}/\text{Nm}^3</math>, based on his rigorous application of BAT philosophy to the data. Using only this data, taken from a limited number of mainly high-performing power plants, the Kather report shows that the BAT-AELs for lignite-fired power plants are incorrectly derived by the EIPPCB, being too strict. Consequently, the EIPPCB analysis cannot be used as the basis for any BAT-AELs or any resulting permit decisions. Furthermore, EURACOAL is of the opinion that the EIPPCB and the European Commission should take into account all available data from existing coal- and lignite-fired power plants with a total rated thermal input of <math>\geq 300</math> MWth, including the best performing, the well performing and the not-such-well performing installations, as foreseen by the Sevilla Process<sup>1)</sup>. A review of such data would lead to the BAT-AEL range proposed by EURACOAL for mercury of 3 to 20 <math>\mu\text{g}/\text{Nm}^3</math>.<sup>1)</sup> Schoenberger, Harald (2009), "Integrated pollution prevention and control in large industrial installations on the basis of best available techniques – The Sevilla Process", Journal of Cleaner Production, 17 (2009) pp.1526–1529, Elsevier</p>
Combustion plant total rated thermal input (MWth)	BAT-AELs ( $\mu\text{g}/\text{Nm}^3$ ) for mercury emissions to air from the combustion of lignite																					
	yearly average or average of samples obtained one year																					
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<300	4-20	4-20																				
$\geq 300$	3-20	3-20																				
121	EURELECTRIC	10	2	1	6	774	<p>BAT 23, Table 10.9: lower and upper ranges of BAT-AELs for mercury          Table 10.9: BAT-AELs for existing plants &lt; 300 MWth. Modify according to valid split view 11.18.1          Table 10.9: BAT-AELs for existing plants <math>\geq 300</math> MWth. Modify according to valid split view 11.18.3</p>	<p>Table 10.9: Reassess and increase lower and upper ranges of BAT-AELs for mercury for existing lignite-fired plants, up to 20 <math>\mu\text{g}/\text{m}^3</math> and for new lignite-fired plants to 10 <math>\mu\text{g}/\text{m}^3</math>.</p>	<p>The derivation of BAT-AEL ranges for mercury did not sufficiently take into account available reference plant data, measurement uncertainty and cross-media impacts. The derivation should pursue an integrated approach with respect to reference plants considering not only mercury emission performance but also co-emissions of other air pollutants such as SO<sub>2</sub> and dust. When comparing US performance data with European reference plant data, a scientifically sound conversion of units, applicable ELVs and operating conditions has to be pursued and differences in fuel characteristics and flue gas treatment have to be considered.</p>													

122	Euroheat & Power	10	2	1	6	774	Increase the higher end of the mercury BAT-AEL range for existing lignite-fired plants according to the accepted split views by Euroheat & Power (11.18.1 and 11.18.3)	Increase the higher end of the mercury BAT-AEL range for existing lignite-fired plants of < 300 MWth to 20 µg/Nm <sup>3</sup> . Increase the higher end of the mercury BAT-AEL range for existing lignite-fired plants of ≥ 300 MWth to 20 µg/Nm <sup>3</sup> .	Rationale is elaborated in the valid split views 11.18.1 and 11.18.3
123	Poland	10	2	1	6	774	Change the range of BAT-AEL for Mercury emissions to air from lignite-fired combustion plants	Add footnote (new) as follows: For existing plants: The higher end of the BAT-AEL range is 20 mg/Nm <sup>3</sup> in cases of plants combusting fuels with high mercury content and due to technical and economical restrictions specific mercury abatement techniques are not applicable. For new plants: The higher end of the BAT-AEL range is 10 mg/Nm <sup>3</sup> in cases of plants combusting fuels with high mercury content and due to technical and economical restrictions specific mercury abatement techniques are not applicable.	The proposed BAT AELs should consider economic feasibility and cost – benefit analysis - which was not allowed to look at in TWG meetings. Moreover, mercury emission directly follows from mercury content in fuel - which is highly variable even within same coal/lignite deposit. Especially lignite plants don't have possibilities to change the fuel and will have to deal with this issue, also taking into account estimated lifetime of plant and mine. Application of techniques proposed as BAT for reduction of mercury emissions to air is heavily burdened by the cross-media effects related with possible mercury reemission from residues, by-products or wastes. Some of the techniques like halogen additives, PAC, and DSI sorbents can affect operation of particulate control devices and scrubbers. Therefore BAT AELs range should reflect levels achievable by application of measures successfully tested on industrial scale in Europe. Also we would like to point, that BATAELs is based mostly on data from periodic monitoring (and data from non-reference plants) - and it should not be directly compared with continuous measurements - especially in case that there is lack of reference data and variable, site dependent, parameters. Derivation of BAT AELs should be based on reported data from continuous monitoring or properly set campaign of periodic measurements. Only in this way the long term variations of mercury content in fuel as well as measurements uncertainty and complex nature of mercury emissions can be taken into account. Results of single measurements are not reliable source of data which can be used for derivation of BAT AELs, especially in case of as complex pollutant as mercury.

124	EURACOAL	10	2	1	6	774	<p>The European Integrated Pollution Prevention and Control Bureau (EIPPCB) has analysed mercury emissions to air from the combustion of coal and lignite. For this purpose, data from actual power plants were used as well as published data. Critiques of the EIPPCB analysis by a number of EU Member States and EURACOAL all conclude that the BAT-associated emission levels (BAT-AELs) proposed by the EIPPCB are too strict. However, this view was not accepted in the technical working group (TWG). In fact, a majority of TWG members voted for even more ambitious BAT-AELs for mercury.</p>	<p>Table 10.8 should be amended: The footnote below table 10.8 doesn't reflect correctly the technical knowledge. It should therefore be omitted.</p> <table border="1"> <thead> <tr> <th rowspan="3">Combustion plant total rated thermal input (MWth)</th> <th colspan="2">BAT-AELs (<math>\mu\text{g}/\text{Nm}^3</math>) for mercury emissions to air from the combustion of coal</th> </tr> <tr> <th colspan="2">yearly average or average of samples obtained one year</th> </tr> <tr> <th colspan="2">existing plant</th> </tr> </thead> <tbody> <tr> <td>&lt;300</td> <td>4-20</td> <td></td> </tr> <tr> <td><math>\geq 300</math></td> <td>3-20</td> <td></td> </tr> </tbody> </table>	Combustion plant total rated thermal input (MWth)	BAT-AELs ( $\mu\text{g}/\text{Nm}^3$ ) for mercury emissions to air from the combustion of coal		yearly average or average of samples obtained one year		existing plant		<300	4-20		$\geq 300$	3-20		<p>Using only this data, taken from a limited number of mainly high-performing power plants, the BAT-AELs for coal-fired power plants cannot be correctly derived by the EIPPCB, being too strict. Consequently, the EIPPCB analysis cannot be used as the basis for any BAT-AELs or any resulting permit decisions. Furthermore, EURACOAL is of the opinion that the EIPPCB and the European Commission should take into account all available data from existing coal-fired power plants, including the best performing, the well performing and the not-such-well performing installations, as foreseen by the Sevilla Process. A review of such data would lead to the BAT-AEL range proposed by EURACOAL for mercury.</p>
Combustion plant total rated thermal input (MWth)	BAT-AELs ( $\mu\text{g}/\text{Nm}^3$ ) for mercury emissions to air from the combustion of coal																					
	yearly average or average of samples obtained one year																					
	existing plant																					
<300	4-20																					
$\geq 300$	3-20																					
125	Bulgaria	10	2	1	6	774	<p>BAT-associated emission level for mercury emissions to air from the combustion of lignite</p>	<p>No proposal - due to lack of ANY measurement data.</p>	<p>At present we do not have any data on mercury emissions from LCPs firing coal or lignite and respectively – we do not have information about its levels in emissions and about how the use of FGD installations influences emissions of mercury. We stress that the ONLY legal obligation in regard to mercury emissions is introduced by IED – “<i>For combustion plants firing coal or lignite, the emissions of total mercury SHALL BE MEASURED at least once per year</i>”. We find that it is premature to introduce ELVs before having information about Hg emission levels and about technically and economically viable possibilities to control these emissions.</p>													
126	UK	10	2	2	2	774	<p>Table 10.10, 10.15 has no preceding BAT statement</p>	<p>Insert a BAT statement on energy efficiency.</p>	<p>Editorial clarification</p>													

127	Sweden	10	2	2	3	775	In BAT 26 table 10.11 exclude or set indicative values for daily new plants connected to district heating nets which are running less than 500 hour per year. Add the existing footnote 6 also to daily average New plant.	Add footnote 6 in table 10.11 for daily average New plant.	In Sweden there are more than 400 independent district heating nets. Each district heating net should have an emergency production capacity as large as the sum of the production capacities of the base load and mid merit load boilers. The emergency production capacity must at least be as large as the production capacity of the largest boiler. These emergency boilers are normally not run at all, except once a year (around 10 or 15 hours) for testing operation to control that they still are functioning. Applying these BAT-AELs to new plants running <500 h/year violates the instructions of the BREF guidance document 2012/119/EU, which under the section 3.3 Individual BAT conclusions with associated environmental performance levels states that "An environmental performance level associated with BAT will be included where there is a sound basis for doing so. This will be done based on the information exchanged by the TWG [...]." The BAT-AELs defined for NOx can only be achieved with the use of SCR or SNCR. The information exchanged by the TWG shows that neither SCR nor SNCR is applicable to plants running <500 h/year, as evident by the applicability of techniques defined under BAT 26, 32 and 46. Since it is too late to derive new BAT-AELs specifically for new plants running <500h/year, we propose that footnote 6 in table 10.11 also apply to new plants so that the demands of 2012/119/EU is met .
128	EEB	10	2	2	3	775	We object to the change made by the EIPPCB which is alternating the substance (scope) of the relaxation	Keep the old text or replace "For plants burning fuels where the average [...] " by "For plants burning <b>only</b> fuels where the potassium content is [...]"	The change is beyond the remit of the EIPPCB to change for consistency without alternating the substance of the BAT-Conclusions. The new change is no longer making the NOx relaxation subject to the condition that fuels <u>individually</u> exceed a certain high alkalinity level. There was an agreement at the Final meeting to define "high alkaline content" as >200mg/kg dry for K and/or 300mg/kg dry for Na (see consolidated conclusions page 205). It was however very clear that the footnote relaxations may only be relied on if the plant is <u>ONLY</u> burning high alkali fuels, not if the average of mixed fuels are exceeding the levels. This means that only in case of a single fuel use, due to local availability constraints, that has a high alkalinity level such as straw, the relaxation may be relied on. However that should not be allowed in case of fuel blending.

129	Belgium	10	2	2	3	775	Upper end of BAT-AEL range for NO <sub>x</sub> for combustion of solid biomass and/or peat with a size of 50-100MWth	Decrease the upper end of the BAT-AEL range for NO <sub>x</sub> . For all new plants (incl. high alkali) 180 mg/Nm <sup>3</sup> (daily average), 150 mg/Nm <sup>3</sup> (yearly average). For all existing plants (incl. high alkali put into operation no later than 7 January 2014) 275 mg/Nm <sup>3</sup> (daily average).	Our proposal for new plants is based on emission data provided by reference plant 668, which is an older plant that dates from 1979, applying primary techniques and SNCR: 175 mg/Nm <sup>3</sup> (95 percentile), 128 mg/Nm <sup>3</sup> (average). A combination of primary techniques & SNCR is considered BAT for new plants. An exemption for high alkali plants cannot be justified based on the dataset. On the other hand plants burning (more) heavily polluting fuels, and thus having higher emissions, should be obliged to take additional measures in order to achieve similar emissions as plants burning cleaner fuels. Logically BAT will differ for both types of plants as the environmental benefit and economic feasibility (cost-effectiveness) will differ.
130	Belgium	10	2	2	3	775	Upper end of BAT-AEL range for NO <sub>x</sub> for combustion of solid biomass and/or peat with a size of 100-300MWth	Decrease the upper end of BAT-AEL range for NO <sub>x</sub> for new plants to 165 mg/Nm <sup>3</sup> (daily average).	Our proposal is based on the emission data provided by reference plant 13V: 163 mg/Nm <sup>3</sup> (95 percentile). Reference plant 13V only applies primary techniques, while a combination of primary techniques & SNCR / SCR is considered BAT for new plants. Plants applying primary techniques & SNCR / SCR all report emissions in the same range.
131	Belgium	10	2	2	3	775	Upper end of BAT-AEL range for NO <sub>x</sub> for combustion of solid biomass and/or peat with a size of = or >300MWth	Decrease the upper end of BAT-AEL range for NO <sub>x</sub> . For new plants: 85 mg/Nm <sup>3</sup> (daily average), 55 mg/Nm <sup>3</sup> (yearly average) For all existing plants: 165 mg/Nm <sup>3</sup> (daily average), 150 mg/Nm <sup>3</sup> (yearly average), thus to remove footnotes 4 and 5.	For new plants, our proposal is based on emission data provided by reference plant 31V, applying primary techniques and SCR: 64 mg/Nm <sup>3</sup> (95 percentile), 42 mg/Nm <sup>3</sup> (average). A combination of primary techniques & SCR is considered BAT for new plants. Reference plant 31V is a well-run plant, as it does not have a large variation between the yearly average and 95 percentile data. For existing plants, our proposal is based on emission data provided by reference plant 42V, applying primary techniques and SNCR: 145 mg/Nm <sup>3</sup> (95 percentile), 136 mg/Nm <sup>3</sup> (average). A combination of primary techniques & min. SNCR is considered BAT for existing plants. Reference plant 42V is a well-run plant, as it does not have a large variation between the yearly average and 95 percentile data. It was put into operation in 2011.

132	CEPI	10	2	2	3	775	Add footnotes for existing plants in table 10.11. Increase the cost-efficiency compared to the environmental benefits for existing biomass and peat plants.	A) Add a footnote to the yearly BAT-AELs for existing plants 100-300 MW: "The higher end of the BAT-AEL range is 240 mg/Nm <sup>3</sup> for BFB combustion plants put into operation no later than 7 January 2014"B) Add a footnote to the daily BAT-AELs for existing plants 100-300 MW: "The higher end of the BAT-AEL range is 275 mg/Nm <sup>3</sup> for BFB combustion plants put into operation no later than 7 January 2014"C) Add a footnote to the yearly BAT-AELs for existing plants <100 MW: "The higher end of the BAT-AEL range is 250 mg/Nm <sup>3</sup> for plants put into operation no later than 7 January 2014" D) Add a footnote to the daily BAT-AELs for existing plants <100 MW: "The higher end of the BAT-AEL range is 310 mg/Nm <sup>3</sup> for plants put into operation no later than 7 January 2014"	A-B) The applicability restrictions of the NOx abatement techniques should be taken into account when setting the BAT-AELs for existing plants. For existing BFB plants in the 100-300 MW category, the proposed BAT-AELs would mean an investment in SNCR+slip catalyst or SCR, leading to investment costs of 3-10 M€ (Source: <i>Cost-efficiency of reducing nitrogen emisisions in existing fluidised bed boilers (Pöyry, 2012), Technical and economic aspects ...for fluidized bed boilers (Novox, 2013)</i> both on BATIS). The NOx emissions are higher in BFB boilers than CFB boilers and for BFB boilers with load variation the applicability restriction of SNCR in existing plants becomes more evident. The BFB reference plants inside the BAT range have mostly had secondary measures installed already when building the plant. C-D) The proposed BAT-AELs for existing plants < 100 MW should be changed back to the initial proposal in the TWG. No justifications were given why the BAT-AELs were tightened also for the plants put into operation no later than 7 January 2014. Now there are existing plants even with secondary measures that are outside the range. The BAT-AELs should be set based on reference plants with primary techniques as stated in the background document of the TWG. The BAT-AELs also need to take into account plants with load variation. The BAT-AELs should be closer to the IED ELV's as for coal plants.
133	EURELECTRIC	10	2	2	3	775	BAT 26, Table 10.11. NOx BAT-AELs (daily and yearly) for the existing 50-100 MW biomass/peat plants should be modified according the accepted split view done be Eurelectric	Increase the upper ends of the NOX BAT-AEL ranges for existing plants to 250 mg/Nm <sup>3</sup> as yearly and 275 mg/Nm <sup>3</sup> as daily averages. Add footnote: for plants put into operation no later than 7 January 2014 the higher end of the NOX daily BAT-AEL range for existing plants <100 MWth is 310 mg/Nm <sup>3</sup>	The primary techniques should be sufficient in this size category, but BAT-AEL's proposed in Final Draft require SNCR or even SCR in cases where the applicability of SNCR is restricted. Rationale is detailed in the original split view and assessed as valid by EIPPCB.

134	Euroheat & Power	10	2	2	3	775	NOx BAT-AELs (daily and yearly) for the existing 50-100 MW biomass/peat plants should be modified according to the accepted split view by Euroheat & Power (12.2.1)	Increase the upper ends of the NOX BAT-AEL ranges for existing plants to 250 mg/Nm3 as yearly and 275 mg/Nm3 as daily averages. Add a footnote indicating that for plants put into operation no later than 7 January 2014 the upper end of the daily NOX BAT-AEL range for existing plants of < 100 MWth is 310 mg/Nm3	Rationale is elaborated in the valid split view 12.2.1
135	EURELECTRIC	10	2	2	3	775	BAT 26, Table 10.11. NOx BAT-AELs (daily and yearly) for the existing 100-300 MW biomass/peat plants should be modified according to the accepted split view done by Eurelectric	Increase the higher ends of the NOX BAT-AEL ranges to 220 mg/Nm3 as yearly and to 240 mg/Nm3 daily for BFB boilers of 100–300 MWth put into operation no later than 7 January 2014, in case of limitations of SNCR applicability.	The restrictions of retrofitting of SNCR and SCR should be taken into account for BFB's which do not originally have these techniques. Rationale is detailed in the original split view and assessed as valid by EIPPCB.
136	Euroheat & Power	10	2	2	3	775	NOx BAT-AELs (daily and yearly) for the existing 100-300 MW biomass/peat plants should be modified according to the accepted split view by Euroheat & Power (12.2.3)	Increase the higher end of the daily and yearly NOX BAT-AEL to 240 mg/Nm3 for BFB boilers of 100–300 MWth put into operation no later than 7 January 2014, in case of limitations of SNCR applicability.	Rationale is elaborated in the valid split view 12.2.3

137	Finland	10	2	2	3	775	Add footnotes for NOx BAT-AELs concerning existing plants in table 10.11.	1) Add footnote in the <100 MW/existing plants/yearly category (after footnote 8): - "For plants put into operation no later than 7 January 2014 the higher end of the BAT-AEL range is 250 mg/Nm <sup>3</sup> " 2) Add footnote in the <100 MW/existing plants/daily category (after footnote 10): - "For plants put into operation no later than 7 January 2014 the higher end of the BAT-AEL range is 310 mg/Nm <sup>3</sup> " 3) Add a new footnote in the 100-300 MW/existing plant/yearly category: "For boilers taken into operation no later than 7 January 2014 in case of limitations of SNCR applicability or BFB boilers put into operation no later than 7 January 2014 the higher end of the BAT-AEL range is 250 mg/Nm <sup>3</sup> " 4) Add a new footnote in the 100-300 MW/existing plant/daily category: "For boilers taken into operation no later than 7 January 2014 in case of limitations of SNCR applicability or BFB boilers put into operation no later than 7 January 2014 the higher end of the BAT-AEL range is 275 mg/Nm <sup>3</sup> "	Rationale for 1-2) The BAT-AELs for existing plants in the <100 MW category were tightened in the TWG meeting without justifications. The BAT-AELs should be set based on reference plants with primary techniques as stated in the background document of the TWG. Even plants with SNCR are now outside the proposed range. The BAT range should be closer to the IED as is the situation for coal plants. The proposed values discriminate biomass plants compared to fossil fuel plants. Rationale for 3-4) The proposed BAT-AELs in the 100-300 MW category would lead to disproportionate investment costs (3-10 M€; source e.g. Pöyry study from 2012 available in BATIS: Cost efficiency of reducing nitrogen oxide emissions in existing fluidised bed boilers) and operational costs for existing plants compared to the environmental benefits. The applicability restrictions of SNCR and SCR for existing plants should be taken into account. Most of the reference plants with secondary measures have had the measures already installed in a new plant where the same applicability restrictions don't exist. An investment in SNCR+slip catalyst or SCR cannot be justified for existing plants. The higher NOx emissions of BFB boilers compared to CFB boilers should be taken into account. BFB reference boilers with primary techniques and CO emission within the indicative range should also be used when setting the BAT-AELs.
138	UK	10	2	2	3	775	Table 10.11. Annual average NOx AEL for existing biomass >300MWth	As per the split view, the UK continues to assert that in certain circumstances the appropriate upper end of the AEL is 180mg/m <sup>3</sup> . The view of the TWG was that this was a matter for consideration under Article 15(4).	As detailed in UK split view

139	CEWEP	10	2	2	4	777	BAT conclusions for the combustion of <b>biomass and/or peat - SO2 (BAT 28)</b> The lower ends of BATAEL ranges for plants > 100 MW in Table 10.12 appear too low to be used as ELVs applied in compliance with the current legislation with the techniques which are available.	Please ask experts, e.g. CEN TC 264 what changes have to be achieved in respect of monitoring techniques and standards to comply with the requirements of the current legislation and applicable standards if ELVs are very low. Take into account the experts recommendation.	As explained by ESWET in due time, i.e. during the Final meeting 1-9/6/2015 by a number of oral split views, then by ESWET written split view nr 1 (supported by CEWEP) on 22/7/2015 during the written consultation period, the uncertainty on the monitored values is too high in respect of the legislation requirements when ELVs are set at very low level. NB: uncertainty requirements are expressed as a percentage of the daily ELV. And for substances for which there is not yet a requirement in standards (e.g. because it was not required to monitor them up to now), the minimum uncertainty levels (%) are also depending on the ELV levels. This has been confirmed by INERIS institute study report nr. DRC-16-159382-06994A.
140	ESWET	10	2	2	4	777	BAT conclusions for the combustion of <b>biomass and/or peat - SO2 (BAT 28)</b> The lower ends of BATAEL ranges for plants > 100 MW in Table 10.12 appear too low to be used as ELVs applied in compliance with the current legislation with the techniques which are available.	Please ask experts, e.g. CEN TC 264 what lowest ELV can be achieved in respect of monitoring techniques in compliance with the requirements of the current legislation and applicable standards. Modify BATAEL ranges according to their recommendations.	As explained by ESWET in due time, i.e. during the Final meeting 1-9/6/2015 by a number of oral split views, then by ESWET written split view nr 1 on 22/7/2015 during the written consultation period, the uncertainty on the monitored values is too high in respect of the legislation requirements when ELVs are set at very low level. NB: uncertainty requirements are expressed as a percentage of the daily ELV. And for substances for which there is not yet a requirement in standards (e.g. because it was not required to monitor them up to now), the minimum uncertainty levels (%) are also depending on the ELV levels. This has been confirmed by INERIS institute study report nr. DRC-16-159382-06994A.
141	Finland	10	2	2	4	776	Add applicability restrictions to techniques SDA and DSI	Modify the applicability of SDA and DSI to the following: "Generally applicable to new boilers. Not applicable to existing boilers equipped with ESP as dust abatement technique"	Almost all SO2 abatement techniques have been listed as generally applicable, even though sound evidence has been given to prove the applicability restrictions of the different techniques. In addition to the applicability restrictions of boiler sorbent injection to BFB boilers, there are also clear technical and economical restrictions on applying DSI and SDA in boilers equipped with an ESP. To work effectively DSI and SDA require the use of bag filter. The applicability of duct sorbent injection and spray-dry absorber is restricted in boilers having the BAT technique ESP as the dust abatement technique. To use duct sorbent injection and spray-dry absorber the plant would have to install bag filter, a dry sorbent injection system and new flue gas fans. Installing the bag filter would mean that the ESP, even if it is effective, would have to be replaced. The installation of these techniques to existing plants is not technically or economically justifiable.

142	CEPI	10	2	2	4	776	CEPI proposed to modify the applicability of techniques SDA and DSI for existing plants equipped with an ESP.	Modify the applicability of SDA and DSI to the following: "Generally applicable to <b>new boilers. Not applicable to existing boilers equipped with ESP as dust abatement technique</b> "	During the TWG process the applicability restrictions of the different SO <sub>2</sub> abatement techniques weren't taken into account, even if solid technical and economical arguments were given to prove the opposite. The applicability restrictions of boiler sorbent injection to BFB boilers is evident (no reference plants where the technique is functioning). There are also clear technical and economical restrictions on applying DSI and SDA in boilers equipped with an ESP. To work effectively DSI and SDA require the use of bag filter. The applicability of duct sorbent injection and spray-dry absorber is restricted in boilers having the BAT technique ESP as the dust abatement technique. To use duct sorbent injection and spray-dry absorber the plant would have to install bag filter, a dry sorbent injection system and new flue gas fans. Installing the bag filter would probably mean that the ESP, even if it is effective, would have to be removed. These modifications are not technically or economically justifiable in existing plants.
143	EURELECTRIC	10	2	2	4	777	BAT 28, Table 10.12. SO <sub>2</sub> BAT-AEL (daily and yearly) for the existing < 100 MW bio/peat plants should be modified according the accepted split view done by Eurelectric	Add footnote for <b>yearly</b> BAT-AEL for existing < 100 MW plants: <i>"The higher end of the BAT-AEL is 300 mg/NM3 when burning fuels where the average sulphur content is 0.1 % or higher."</i> Add footnote for <b>daily</b> BAT-AEL for existing < 100 MW plants: <i>"The higher end of the BAT-AEL is 330 mg/NM3 when burning fuels where the average sulphur content is 0.1 % or higher."</i>	The proposed BAT-AEL requires installation of DSI/SDA or scrubber and these investments are not justified in this size category. Rationale is detailed in the original split view and assessed as valid by EIPPCB.

144	CEPI	10	2	2	4	777	CEPI proposes to harmonise the BAT-AELs in table 10.12. for existing biomass and peat plants where the average sulphur content is 0.1 % or higher with the SO <sub>2</sub> BAT-AELs of coal plants. Increase the cost-efficiency compared to the environmental benefits for existing biomass and peat plants.	A) Modify footnote (yearly BAT-AELs) for the existing 100-300 MW plants to the following: "For existing plants burning fuels where the average sulphur content is 0.1 wt-% (dry) or higher, the higher end of the BAT-AEL range is 200 mg/Nm <sup>3</sup> ."B) Modify footnote 3 (daily BAT-AELs for existing 100-300 MW) plants to the following: "For existing plants burning fuels where the average sulphur content is 0.1 wt-% (dry) or higher, the higher end of the BAT-AEL range is 275 mg/Nm <sup>3</sup> ."C) Increase the higher ends of the yearly and daily BAT-AEL ranges for existing plants of < 100 MWth where the average sulphur content is 0.1 % or higher. Daily: 330 mg/Nm <sup>3</sup> , yearly 200 mg/Nm <sup>3</sup> .	The biomass and peat plants have been mistreated compared to the coal plants when setting the SO <sub>2</sub> BAT-AELs, both in terms of the levels and in comparison with the IED ELVs for the fuels in question. The proposed BAT-AELs for biomass and peat plants would lead to unjustifiable investment and operational costs compared to the environmental benefits. The technical and economical restrictions of the SO <sub>2</sub> abatement techniques should be taken into account. Now the proposed general applicability of the techniques have wrongly been used to justify the very strict BAT-AELs. For the existing plants where the average sulphur content is 0.1% or higher, only a few plants have been used to set the BAT-AELs, which is not on line with the BREF guidance. In addition, a plant with secondary measures haven't been approved as a valid reference plants. To reach the proposed BAT-AELs, investments of 4- >10 M€ (Source: Pöyry) would be needed for most plants. The techniques needed, especially for BFB boilers, are bagfilter+DSI, bagfilter+SDA or a wet scrubber. Higher BAT-AELs for plants burning fuels where the average sulphur content is 0.1 wt-% (dry) or higher are justified. According to CEPI, the submitted data doesn't allow setting daily values. But if these are still given, they have to take into account plants having load variation.
145	Euroheat & Power	10	2	2	4	777	SO <sub>2</sub> BAT-AEL (daily and yearly) for the existing < 100 MW bio/peat plants should be modified according to the accepted split view by Euroheat and Power (12.4.1)	Increase the upper ends of the SO <sub>2</sub> BAT-AEL ranges for existing plants to 200 mg/Nm <sup>3</sup> as yearly and 330 mg/Nm <sup>3</sup> as daily averages.	Rationale is elaborated in the valid split view 12.4.1

146	Finland	10	2	2	4	777	Harmonise the BAT-AELs for biomass and peat plants to be in line with the SO <sub>2</sub> BAT-AELs of coal plants. This should be done by modifications to the footnotes concerning BAT-AELs in table 10.12. for existing plants where the average sulphur content is 0.1 % or higher.	1) Increase the higher end of the yearly BAT-AEL range to 160 mg/Nm <sup>3</sup> for existing plants of ≥ 100 MWth where the average sulphur content is 0.1% or higher (change footnote 1).2) Increase the higher end of the yearly BAT-AEL range to 300 mg/Nm <sup>3</sup> and the daily BAT-AEL range to 330 mg/Nm <sup>3</sup> for existing plants of < 100 MWth where the average sulphur content is 0.1% or higher (add a footnote).	The proposed BAT-AEL for existing plants of where the average sulphur content is 0.1% or higher is not derived according to the BREF guidance as the values are based on a very limited number of reference plants. Even a plant with flue-gas condenser hasn't been used to set the BAT-AELs. The needed techniques to reach the proposed BAT-AELs would be DSI, SDA or wet scrubber for most plants, with huge investment and operational costs that can't be justified compared to the environmental benefits. CFB boilers with high sulphur content can't even reach the proposed BAT-AEL with boiler sorbent injection and for BFB boilers boiler sorbent injection isn't even an option. The proposed BAT-AELs are very strict compared to the IED and totally unjustifiable compared to the coal plants for which the proposed BAT-AELs are very close to the IED ELVs. With the proposed BAT-AELs almost all plants using peat (also as a supporting fuel) would be candidates for art 15.4. derogations. This is not the way to set up BAT-AELs, were reference plants should play an important role.
147	CEWEP	10	2	2	4	777	BAT conclusions for the combustion of <b>biomass and/or peat - HCl and HF (BAT 28)</b> The lower ends of <b>BATAEL ranges for HCl and all BATAEL values</b> in Table 10.512.bis appear too low to be used as ELVs with the techniques which are available.	Please ask experts, e.g. CEN TC 264 what changes have to be achieved in respect of monitoring techniques and standards to comply with the requirements of the current legislation and applicable standards if ELVs are very low. Take into account the experts recommendation.	As explained by ESWET in due time, i.e. during the Final meeting 1-9/6/2015 by a number of oral split views, then by ESWET written split view nr 1 (supported by CEWEP) on 22/7/2015 during the written consultation period, the uncertainty on the monitored values is too high in respect of the legislation requirements when ELVs are set at very low level. NB: uncertainty requirements are expressed as a percentage of the daily ELV. And for substances for which there is not yet a requirement in standards (e.g. because it was not required to monitor them up to now), the minimum uncertainty levels (%) are also depending on the ELV levels. This has been confirmed by INERIS institute study report nr. DRC-16-159382-06994A.

148	ESWET	10	2	2	4	777	BAT conclusions for the combustion of <b>biomass and/or peat - HCl and HF (BAT 28)</b> <b>The lower ends of BATAEL ranges for HCl and all BATAEL values</b> in Table 10.512.bis appear too low to be used as ELVs with the techniques which are available.	Please ask experts, e.g. CEN TC 264 what lowest ELV can be achieved in respect of monitoring techniques in compliance with the requirements of the current legislation and applicable standards. Modify BATAEL ranges according to their recommendations.	As explained by ESWET in due time, i.e. during the Final meeting 1-9/6/2015 by a number of oral split views, then by ESWET written split view nr 1 on 22/7/2015 during the written consultation period, the uncertainty on the monitored values is too high in respect of the legislation requirements when ELVs are set at very low level. NB: uncertainty requirements are expressed as a percentage of the daily ELV. And for substances for which there is not yet a requirement in standards (e.g. because it was not required to monitor them up to now), the minimum uncertainty levels (%) are also depending on the ELV levels. This has been confirmed by INERIS institute study report nr. DRC-16-159382-06994A.
149	Euroheat & Power	10	2	2	4	777	HCl BAT-AELs (footnote 1bis) should be modified according to the accepted split view by Euroheat & Power (12.5)	Footnote (1bis) to be modified: "For plants burning fuels where the average Cl content is $\geq 0.1$ wt-% (dry), or for existing plants co-combusting biomass with sulphur-rich fuel (e.g. peat) or using alkali chloride converting additives (e.g. elemental sulphur), the higher end of the BAT-AEL range for the yearly average for new plants is 15 mg/Nm <sup>3</sup> , the higher end of the BAT-AEL range for the yearly average for existing plants is 25 mg/Nm <sup>3</sup> or 50 mg/Nm <sup>3</sup> in the case of existing plants operated with ESP. The daily BAT-AEL range does not apply to these plants."	Rationale is elaborated in the valid split view 12.5

150	Finland	10	2	2	4	777	Table 10.12-bis HCl BAT-AELs (footnote 1bis) should be modified as there is no applicable HCl abatement technique for the existing plants equipped only with ESP. The modification could be done according to the accepted split view done by Finland.	Footnote (1bis) to be modified: "For plants burning fuels where the average Cl content is $\geq 0.1$ wt-% (dry), or for existing plants co-combusting biomass with sulphur-rich fuel (e.g. peat) or using alkali chloride converting additives (e.g. elemental sulphur), the higher end of the BAT-AEL range for the yearly average for new plants is 15 mg/Nm <sup>3</sup> , the higher end of the BAT-AEL range for the yearly average for existing plants is 25 mg/Nm <sup>3</sup> or <b>50 mg/Nm<sup>3</sup> in the case of existing plants operated with ESP</b> . The daily BAT-AEL range does not apply to these plants."	There is no applicable HCl abatement technique for the existing plants equipped only with ESP. DSI and SDA do remove HCl but these techniques are not confirmed to be applicable in plants equipped only with ESP. Rationale is more detailed in the original split view by Finland.
151	EURELECTRIC	10	2	2	4	777	BAT 28, Table 10.12-bis HCl BAT-AELs (footnote 1bis) should be modified according the accepted split view done by Eurelectric	Footnote (1bis) to be modified: "For plants burning fuels where the average Cl content is $\geq 0.1$ wt-% (dry), or for existing plants co-combusting biomass with sulphur-rich fuel (e.g. peat) or using alkali chloride converting additives (e.g. elemental sulphur), the higher end of the BAT-AEL range for the yearly average for new plants is 15 mg/Nm <sup>3</sup> , the higher end of the BAT-AEL range for the yearly average for existing plants is 25 mg/Nm <sup>3</sup> or <b>50 mg/Nm<sup>3</sup> in the case of existing plants operated with ESP</b> . The daily BAT-AEL range does not apply to these plants."	HCl removal techniques (DSI, SDA, Scrubber) are not applicable in plants equipped only with ESP. Rationale is detailed in the original split view and assessed as valid by EIPPCB.

152	CEPI	10	2	2	4	777	<p>Add to the footnote (1.bis) that the higher end of the BAT-AEL range for the yearly average for existing plants is 50 mg/Nm<sup>3</sup> in the case of existing plants operated with an ESP.</p>	<p>New text (in bold/italic) for footnote on table 10.12 - bis:- (1bis) For plants burning fuels where the average Cl content is ≥ 0.1 wt-% (dry), or for existing plants co-combusting biomass with sulphur-rich fuel (e.g. peat) or using alkali chloride-converting additives (e.g. elemental sulphur), or for plants with an average Cl content in the fuel of &lt; 0.1 wt-% (dry) operated &lt; 1500 h/yr, the higher end of the BATAEL range for the yearly average for new plants is 15 mg/Nm<sup>3</sup> , the higher end of the BAT-AEL range for the yearly average for existing plants is 25 mg/Nm<sup>3</sup> <b>or 50 mg/Nm<sup>3</sup> in the case of existing plants operated with ESP.</b> The daily BAT-AEL range does not apply to these plants. For existing plants with an average Cl content in the fuel of ≥ 0.1 wt-% (dry) operated &lt; 1500 h/yr, the higher end of the BAT-AEL range for the yearly average is 50 mg/Nm<sup>3</sup>.</p>	<p>Footnote should be reviewed because HCl BAT-AEL 50 mg/Nm<sup>3</sup> for existing plants operated with ESP is justified due to combustion chemistry and abatements technique restrictions for these boilers (DSI, DAS). There is enough evidence on reference boilers that justifies the setting of proposed BAT AEL although there is considerable limited data on this specific issue. During TWG a specific working group was created to elaborate the proposed redaction of the footnote and during the meeting it was achieved a large consensus on the proposal. The rationale for the comment is described in CEPI's split view available in BATIS Forums &gt; Large Combustion Plants &gt; Review of the LCP BREF 2011- &gt; 12 - Final TWG meeting &gt; 08 - Split views</p>
153	Portugal	10	2	2	4	776	<p>BAT 28 - Biomass/peat techniques to prevent and/or reduce SO<sub>x</sub>, HCl and HF emissions to air. Split view 12.3 identified in chapter 12 should be incorporated in chapter 10. Portugal supports CEPI on this split view.</p>	<p>1) Change the applicability of technique e) duct sorbent injection: Generally applicable to new boilers. Not applicable to existing boilers equipped with ESP. 2) Change the applicability of technique f) spray-dry absorber (DAS) to the following: Generally applicable to new boilers. Not applicable to existing boilers with the ESP and dust abatement technique.</p>	<p>See rationale for split view 12.3 ("Assessment of split view rationales", - Seville, 22/06/2016)</p>

154	Portugal	10	2	2	4	777	BAT 28 - Table 10.12 - bis - Split view 12.5 identified in chapter 12 should be incorporated in chapter 10. Portugal supports CEPI on this split view.	Table 10.13 (footnote1 bis) For plantes burning fuels where the average Cl content is $\geq 0.1$ wt-% (dry), or for existinh plants co-combusting biomass with a sulphur-rich fuel (e.g. peat) or using alkali chloride-converting additives (e.g. elemental sulphur), or for plants with an average Cl content in the fuel of $< 0.1$ wt-% (dry) operated $< 1500$ h/yr, the higher end of the BAT-AEL range for the yearly average for new plant is $15 \text{ mg/Nm}^3$ the higher end of the BAT-AEL range for the yearly average for existing plants is $25 \text{ mg/Nm}^3$ or $50 \text{ mg/Nm}^3$ in the case of existing plants operadted with ESP. The daily BAT-AEL range does not apply to these plants. For existing plants with an average Cl content in the fuel of $\geq 0.1$ wt-% (dry) , operated $< 1500$ h/yr, the higher end of the BAT-AEL range for the yearly average is $50 \text{ mg/Nm}^3$ .	See rationale for split view 12.5 ("Assessment of split view rationales", - Seville, 22/06/2016)
155	CEWEP	10	2	2	5	778	BAT conclusions for the combustion of <b>biomass and/or peat - Dust (BAT 29)</b> The lower ends of all BATAEL ranges in Table 10.13 appear too low to be used as ELVs applied in compliance with the current legislation with the techniques which are available.	Please ask experts, e.g. CEN TC 264 what changes have to be achieved in respect of monitoring techniques and standards to comply with the requirements of the current legislation and applicable standards if ELVs are very low. Take into account the experts recommendation.	As explained by ESWET in due time, i.e. during the Final meeting 1-9/6/2015 by a number of oral split views, then by ESWET written split view nr 1 (supported by CEWEP) on 22/7/2015 during the written consultation period, the uncertainty on the monitored values is too high in respect of the legislation requirements when ELVs are set at very low level. NB: uncertainty requirements are expressed as a percentage of the daily ELV. And for substances for which there is not yet a requirement in standards (e.g. because it was not required to monitor them up to now), the minimum uncertainty levels (%) are also depending on the ELV levels. This has been confirmed by INERIS institute study report nr. DRC-16-159382-06994A.

156	ESWET	10	2	2	5	778	<p>BAT conclusions for the combustion of <b>biomass and/or peat - Dust (BAT 29)</b></p> <p><b>The lower ends of all BATAEL ranges</b> in Table 10.13 appear too low to be used as ELVs applied in compliance with the current legislation with the techniques which are available.</p>	<p>Please ask experts, e.g. CEN TC 264 what lowest ELV can be achieved in respect of monitoring techniques in compliance with the requirements of the current legislation and applicable standards. Modify BATAEL ranges according to their recommendations.</p>	<p>As explained by ESWET in due time, i.e. during the Final meeting 1-9/6/2015 by a number of oral split views, then by ESWET written split view nr 1 on 22/7/2015 during the written consultation period, the uncertainty on the monitored values is too high in respect of the legislation requirements when ELVs are set at very low level. NB: uncertainty requirements are expressed as a percentage of the daily ELV. And for substances for which there is not yet a requirement in standards (e.g. because it was not required to monitor them up to now), the minimum uncertainty levels (%) are also depending on the ELV levels. This has been confirmed by INERIS institute study report nr. DRC-16-159382-06994A.</p>
157	Sweden	10	2	2	5	778	<p>BAT 29, , table 10.13 BAT-AEL for Existing Plants of &lt; 100 MWth Daily Average</p>	<p>Sweden proposes to harmonise the BAT-AELs for dust emission daily averages for existing plants in Solid biomass and/or peat, BAT 29, and HFO/gas oil in boilers, BAT 34, respectively, for plants put into operation no later than 7th January 2014. Proposal; Add footnote (3) in table 10.13 for daily averages solid biomass and/or peat existing plants of &lt; 100 MWth; "The higher end of the BAT-AEL range is 24 mg/Nm<sup>3</sup> for plants put into operation no later than 7th January 2014".</p>	<p>• Argument A; Level proposed in BP April 2015 sect. 1.4.5.2 table 10.13 Solid biomass and/or peat for Plants of &lt; 100 MWth; "Set a daily average BAT-AEL (or average over the sampling period) for existing plants of 2–24 mg/Nm<sup>3</sup>." • Argument B; Footnote added in table 10.18 at final TWG meeting June 2015 for HFO/gas oil in boilers &lt; 300 MWth; "The higher end of the BAT-AEL range is 25 mg/Nm<sup>3</sup> for plants put into operation no later than 7th January 2014."</p>

158	CEPI	10	2	2	5	778	BAT AEL upper limits for dust emissions should be increased considering the summary on rational column and detailed CEPI Split View information.	Increase the higher ends of the yearly dust BAT-AEL ranges for plants of < 100 MWth put into operation no later than 7 January 2014 to 22 mg/m <sup>3</sup> N and plants of 100 - 300 MWth to 18 mg/m <sup>3</sup> N Increase the higher ends of the daily dust BAT-AEL ranges for plants of < 100 MWth put into operation no later than 7 January 2014 for 40 mg/m <sup>3</sup> N and plants of 100 - 300 MWth put into operation no later than 7 January 2014 to 35 mg/m <sup>3</sup> N	BAT AEL upper limits should be reviewed because it is possible to find examples of boiler with relevant BAT (ESP or bag filters) in place, greenfield or recently retrofitted (therefore, in its early stage of investment cycle) with levels of dust emissions not in line with the BAT AEL range proposed by EIPPCB, including boilers from energy and other sectors. Although, not accepted by EIPPCB, the SV included proposals for reviewing the daily values based on BATIS available data and the fact that there was not directly available for this averaging period which in CEPI position was not properly taken in account when final BAT AEL was defined. The rationale for the comment is described in CEPI's split view available in BATIS Forums > Large Combustion Plants > Review of the LCP BREF 2011- > 12 - Final TWG meeting > 08 - Split views.
159	Portugal	10	2	2	5	778	BAT 29 -Table 10.13 - Split view 12.8 identified in chapter 12 should be incorporated in chapter 10. Portugal supports CEPI on this split view.	Table 10.13 - Change the yearly average and daily average BAT AEL's for existing and new plants (for < 100 Mwth and 100-300 MWth, accordingly to values proposed in the mentioned split view).	See rationale for split view 12.8 ("Assessment of split view rationales", - Seville, 22/06/2016)
160	CEWEP	10	2	2	6	778	BAT conclusions for the combustion of <b>biomass and/or peat - Hg (BAT 30)</b> All BATAEL ranges in Table 10.14 appear too low to be used as ELVs with the techniques which are available.	Please ask experts, e.g. CEN TC 264 what changes have to be achieved in respect of monitoring techniques and standards to comply with the requirements of the current legislation and applicable standards if ELVs are very low. Take into account the experts recommendation.	As explained by ESWET in due time, i.e. during the Final meeting 1-9/6/2015 by a number of oral split views, then by ESWET written split view nr 1 (supported by CEWEP) on 22/7/2015 during the written consultation period, the uncertainty on the monitored values is too high in respect of the legislation requirements when ELVs are set at very low level. NB: uncertainty requirements are expressed as a percentage of the daily ELV. And for substances for which there is not yet a requirement in standards (e.g. because it was not required to monitor them up to now), the minimum uncertainty levels (%) are also depending on the ELV levels. This has been confirmed by INERIS institute study report nr. DRC-16-159382-06994A.

161	ESWET	10	2	2	6	778	BAT conclusions for the combustion of <b>biomass and/or peat - Hg (BAT 30)</b> All BATAEL ranges in Table 10.14 appear too low to be used as ELVs with the techniques which are available.	Please ask experts, e.g. CEN TC 264 what lowest ELV can be achieved in respect of monitoring techniques in compliance with the requirements of the current legislation and applicable standards. Modify BATAEL ranges according to their recommendations.	As explained by ESWET in due time, i.e. during the Final meeting 1-9/6/2015 by a number of oral split views, then by ESWET written split view nr 1 on 22/7/2015 during the written consultation period, the uncertainty on the monitored values is too high in respect of the legislation requirements when ELVs are set at very low level. NB: uncertainty requirements are expressed as a percentage of the daily ELV. And for substances for which there is not yet a requirement in standards (e.g. because it was not required to monitor them up to now), the minimum uncertainty levels (%) are also depending on the ELV levels. This has been confirmed by INERIS institute study report nr. DR-16-159382-06994A.
162	Euroheat & Power	10	2	2	6	778	Dust BAT-AEL for existing biomass fired plants	Increase the higher ends of the yearly and daily dust BAT-AEL ranges for plants of < 100 MWth put into operation no later than 7 January 2014 to 22 mg/Nm3(yearly) and 25 mg/Nm3(daily),	Rationale is elaborated in the valid split view 12.8.3
163	UK	10	3	1	1	779	Table 10.15 has no preceding BAT statement	Insert a BAT statement on energy efficiency.	Editorial clarification
164	EEB	10	3	1	2	781	We strongly object to the change made by the EIPPCB which is altering the substance (scope) of the relaxation	<b>Keep the old text with explicit limitation to the 100-500MWth or delete the whole footnote (preferred option).</b>	<b>Same as comment #4.</b> The change is beyond the remit of the EIPPCB to change for consistency without alternating the substance of the BAT-Conclusions. The new change (removing the size limit of 500MWth) is arbitrarily extending a relaxation clause to prevent secondary NOx abatement also to the largest LCP size group. This extension has not been agreed at the Final TWG meeting. Consistency needs to be ensured vis à vis the BREF aims and objectives and the BREF review rule. Since when do BAT-AEL have to be "consistent" in the sense of aligning to the lowest common denominator that have been politically agreed in the IED? The added value of the BAT conclusions to the IED ELVs are seriously put into question. There is no link to sound technico-economic information and applicability restrictions in BAT 32, rather the contrary. An applicability restriction is available only for the <100MWth size group.

165	EUROMOT	10	3	2	1	784	The valid split view 13.8 BAT 35 BAT-AEELs for energy efficiency levels of HFO and/or gas oil fired reciprocating engines should be reintegrated from chapter 12 to chapter 10.	Table 10.19. Change the lower end of the net electrical efficiency range for a new HFO- and gas-oil-fired reciprocating engine - single cycle to 40 %. Change the net electrical efficiency of the new HFO- and gas-oil-fired reciprocating engine - combined cycle to > 46.9 %.	No 53 (BAT 35 Table 10.19) in chapter 12. See rationale for the valid split view 13.8. 1) Definition of the net electrical efficiency was suddenly fundamentally changed in autumn 2015 by including the high voltage (HV) transformer which was not earlier the case in the process (note that a decentralized plant might not be equipped with a HV transformer if alternator voltage is at the same voltage as the receiving local grid. Information if equipped with or without a HV transformer are missing for many references in the BATIS database) A HV transformer energy loss might be in the range of 0.5 %. 2) A bigger diesel engine plant is a multi engine plant. It is commonly known that bigger engine units have higher efficiencies than small ones. In order to cover the engine unit range starting from 15 MWth the lower efficiency threshold is to be 40 %. 3) In the BATIS reference data base is only one engine plant (consisting of 8 <b>big</b> engines) equipped with a steam turbine, a steam turbine has a lower efficiency than a diesel engine. In order not in the future to lock out plants with smaller engine units equipped with a steam turbine the lower efficiency range in the BATIS database (of the only plant with a steam turbine) is to be used as the lower threshold value i.e. 46.9 %.
166	UK	10	3	2	1	784	Table 10.19 footnote 4: this exclusion should be applied to the climatic conditions rather than location, a hot dry region will have periods of cold wet weather, and vise versa	Amend footnote to read: "...using a radiator as a cooling system in dry, hot climatic condition geographic locations"	Legal clarity

167	EURELECTRIC	10	3	2	2	785	<p>Table 10.20. <b>Existing diesel engines</b>, for which LCP BREF will constitute the first EU environmental regulation setting up ELV, <b>cannot be asked to comply retroactively with an aggregation rule.</b></p>	<p>Add a note to table 10.20 (idem for tables 10.21 and 10.22) "In order to define the total rated thermal input, the application of the aggregation rule is limited to new plants only."</p>	<p>The "virtual stack aggregation rule" of IED chapter III only applies to combustion plants which have been granted a permit for the first time on or after 1 July 1987. This date is derived from the directive 88/609/EEC which established the first set of ELV for large boilers. As explained by the Commission to a Member State (See Commission statement in <a href="https://ippc.mos.gov.pl/ippc/custom/Annex%20to%20PL%20letter_docx.pdf">https://ippc.mos.gov.pl/ippc/custom/Annex%20to%20PL%20letter_docx.pdf</a>), this is because "the intention of this provision is to avoid that combustion plants are intentionally constructed [after this date] in such a way that they would not have to comply with the LCP ELV".However in the case of diesel engines, the <b>LCP BREF will be the first EU regulation setting up ELV for this category of installations.</b> Hence existing diesel engines can not be suspected to have been "intentionally constructed" in order to avoid the application of European regulation based on plant capacity. Consequently diesel engines which have been granted a permit for the first time before the date of publication of the BAT conclusions (and not only before the 1 July 1987) should not be asked to demonstrate that "taking technical and economic factors into account, their flue-gases could, in the judgment of the competent authority, be discharged through a common stack".</p>
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168	EURELECTRIC	10	3	2	2	785	<p>BAT 36 and table 10.20. The applicability of <b>SCR for diesel engines</b> (BAT 36.c) and the associated BAT-AEL (table 10.20) should be revised in order to take into account the case of electrically isolated islands (SIS/MIS).</p>	<p>The applicability of SCR (BAT 36.c) should be completed with at least the following restriction: "economic restrictions and/or lack of proper industrial infrastructure for the supply and/or the use of reagent in remote areas such as islands".The following footnote should be added in table 10.20 : "For new plants equipped with SCR and located in remote islands, the higher end of the yearly NOx BAT-AEL is 240 mg/Nm3 and the higher end of the daily NOx BAT-AEL is 300 mg/Nm3."Apply footnotes (4) and (5) in Table 10.20 to new plants located in remote islands that cannot be fitted with secondary abatement techniques for techno-economic reasons.</p>	<p>The BAT and BAT-AEL of the LCP BREF should explicitly take into account the specificities of SIS compared to mainland (e.g. infrastructural issues, waste management issues, space limitations, sharp electricity demand variations) as it was decided at Kick-off meeting in January 2012 (See KOM report, section 3.1 "General and common issues"), and not solely rely on the local use of IED art. 15.4.The qualification of SCR (but also FGD and FF) as BAT for liquid fuel diesel engines has been based solely on a single case study (Delimara plant in Malta), which is not a SIS/MIS (already interconnected to Italy) and which is going to be converted from HFO fired to NG fired plant within 2016. All the other reference plants being part of a SIS/MIS and for which a properly filled-in questionnaire was submitted, have not been taken into account. Therefore, the information used to derive BAT AELs is not representative of the situation, thus violating the rules set in the Guidance document 2012/119/EU. NOx BAT-AEL for new plants in SIS should be based on the performances of a real plant, namely the plant 691 (La Réunion), which is the best performing from all the plants located in SIS (since Malta is not a SIS). This modification, limited to plants located in remote islands, is fully consistent with the Gothenburg Protocol revised in 2012, that foresees a transition period of 10 years for these category of plants. EURELECTRIC calls upon the Commission to fully integrate the results of the assessment by the EIPPCB of the splits views N°13.4.1 and N°13.5.1 in the chapter 10 of the LCP BREF.</p>

169	Greece	10	3	2	2	785	<p>Valid Split View 13.4.1 (BAT 36 - BAT for NO<sub>x</sub> reduction in HFO and gas oil reciprocating engines) should be incorporated in chapter 10. Additionally, the applicability restrictions for SCR should be extended.</p>	<p>The applicability restrictions of SCR (BAT 36) for both new and existing plants should include the following additional constraints: Plants operated with frequent load variations Plants with frequent start-ups and shut-downs Plants located in places with infrastructural limitations. There may be logistical restrictions in remote areas, such as islands, for supplying the reagent or managing the used catalysts. Plants located in places with water shortage. The applicability may be limited due to the water availability required for the urea solution preparation. Economic viability constraints. There may be economical restrictions in remote areas, such as islands, where the cost of electricity production is high and air quality is fully compliant with EU directive 2008/50/EC. Space constraints even for new plants being part of a SIS/MIS. The applicability for new plant may be limited by lack of space availability, in the case that the new plant is installed within an existing site, which cannot be extended, like in small islands.</p>	<p>The qualification of SCR (selective catalytic reduction), FGD (flue gas desulphurization) and FF (fabric filters) as BAT for liquid fuel diesel engines and consequently the adopted BAT AELs, has been based solely on a single case study (Delimara plant in Malta), which is not a SIS/MIS (already interconnected to Italy) and which is going to be converted from HFO fired to NG fired plant within 2016. All the other reference plants being part of a SIS/MIS and for which a properly filled-in questionnaire was submitted, have not been taken into account. Therefore, the information used to derive BAT AELs is not representative of the situation, thus violating both the rules set in the Guidance document concerning the data that should be used to derive BAT conclusions (see extracts below) and the KOM decision of the TWG. It should be highlighted that the vast majority of liquid fuel diesel engines being part of SIS/MIS are not equipped with secondary emissions abatement techniques due to technical and economic constraints. The adopted BAT AELs should reflect this situation.</p>
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170	Italy	10	3	2	2	785	In BAT 36, the 'Applicability' section of the technique c. "Selective catalytic reduction (SCR)" needs to be integrated with additional restrictions.	In BAT 36, the current 'Applicability' section for the technique c. "Selective catalytic reduction (SCR)" should include the additional restrictions as follows (text in black and bold):[...] <b>Possible economic restrictions and/or lack of proper industrial infrastructure for the supply and/or the use of reagent in remote areas, such as islands.</b>	Regarding the need to review and complement the considerations relevant to the applicability of the "Selective catalytic reduction (SCR)" to reciprocating engines, in BAT 36, Italy submitted a formal dissenting view to the EIPPC Bureau, with the related underlying rationales [ref. IT note DVA-2015- 0020232 sent to the EIPPC Bureau on 31 July 2015].It should be noted that the outcomes of the assessment carried out by the EIPPC Bureau on such an issue confirmed enough technical arguments for supporting the inclusion of additional restrictions (i.e. economic restrictions and/or lack of proper industrial infrastructures) in the applicability of SCR technique in particular for remote areas, such as islands [ref. EIPPCB Document 'Assessment of split view rationales', Seville, 22/06/2016; Final Draft, Chapter 12, page 868].
171	EUROMOT	10	3	2	2	785	The valid split view 13.5.1 BAT 36 - NOx BAT-AEL for HFO and / or gas oil fired reciprocating engines should be reintegrated from chapter 12 to chapter 10	Table 10.20: Increase the higher ends of the yearly and daily NOx BAT-AEL ranges for new plants equipped with SCR and located on remote islands: 240 mg/Nm3 (yearly) and 300 mg/Nm3 (daily). Apply also footnotes (4) and (5) to new plants that cannot be fitted with secondary abatement techniques for techno-economic reasons.	No 55 (BAT 36 table 10.20) in chapter 12. See rationale of the valid split view 13.5.1. 1) Specific operation of new engines operated on remote islands (SIS/MIS) equipped with SCR NOx BAT-AEL should be based on best performing plants in SIS/MIS and not on Malta (not a "remote island") results. 2) New plants which cannot due to techno-economic reasons fitted with secondary abatement techniques should have leaner NOx-limits: If SCR cannot be used due to technical constraints or/and it can be demonstrated that benefits associated with cost of SCR on a diesel engine are lower than associated costs /method based on the BREF ECM 2006)..
172	EUROMOT	10	3	2	2	785	The valid split view 13.4.1 BAT 36: NOx BAT techniques for HFO and/or gas oil fired reciprocating engines should be reintegrated from chapter 12 to chapter 10	Chapter 10.3.2.2 BAT 36 table: Add an applicability restriction to the technique SCR: <i>"Possible economic restrictions and/or lack of proper industrial infrastructure for the supply and/or the use of reagent in remote areas, such as islands."</i>	No 54 (BAT 36) in chapter 12. See rationale for the valid split view 13.4.1.

173	France	10	3	2	2	785	<b>Table 10.20 - NOx BATAEL for diesel engines:</b> The valid split view 13.4.1 should be considered to set the BAT-AEL in chapter 10	Increase the higher end of the range of daily NOx BAT-AEL ranges for new engines to 245 mg/Nm <sup>3</sup> and keep the yearly NOx BAT-AEL for new engines to 225 mg/Nm <sup>3</sup>	French authorities shared some information during the final meeting about the new engines operated in France, which served to set the NOx BAT-AEL for new engines. <b>These plants comply with the yearly NOx BAT-AEL of the BREF of 225 mg/Nm<sup>3</sup> for new engines, which is consistent with the ELV fixed in the Gothenburg Protocol.</b> During the final meeting there were some doubts about the provisions of the Gothenburg Protocol which shorten the discussions. And the NOx daily BAT-AEL was chosen equal to the NOx yearly BAT-AEL, which is not relevant. French Authorities propose to adapt the NOx daily BAT-AEL and propose a NOx daily average of 247,5 mg/Nm <sup>3</sup> (=110 % of the NOx yearly BAT-AEL).
174	Greece	10	3	2	2	785	The valid split view 13.5.1 (BAT 36 - NOx BATAEL for diesel engines) should be incorporated from chapter 12 in chapter 10.	Increase the higher ends of the yearly and daily NOx BAT-AEL ranges for new plants equipped with SCR and located in remote islands : 240 mg/Nm <sup>3</sup> (yearly), 300 mg/Nm <sup>3</sup> (daily)	See rationale of split view 13.5.1. The specific operation of diesel engines in SIS affects the performance of SCR, in both new and existing plants. NOx BAT-AEL for new plants in SIS should be based on the performance of reference plants being part of SIS and not on case studies. This proposal for modification, limited to plants located in remote islands, is fully consistent with the Gothenburg Protocol, that foresees a transition period of 10 years for these category of plants.
175	Greece	10	3	2	2	785	Due to applicability restrictions in SIS/MIS concerning secondary abatement techniques, BAT AELs should be adapted accordingly. Valid Split View 13.5.1 should be incorporated in Chapter 10.	Apply footnotes (4) and (5) in Table 10.20 to new plants that cannot be fitted with secondary abatement techniques for techno-economic reasons.	See rationale for comments 1 and 2 above
176	UK	10	3	2	2	785	Table 10.20. Daily and annual NOx for new engines	As per our split view, the UK continues to assert that the daily AEL range for certain plant is 1150-1900mg/m <sup>3</sup> and that footnote 2 should be extended to new plant. The view of the TWG was that this was a matter for consideration under Article 15(4).	As detailed in UK split view

177	EUROMOT	10	3	2	2	785	<p>The valid/reassessed split view 13.5.5 (BAT 37) for HFO fired reciprocated engines should be reintegrated from chapter 12 to chapter 10.</p> <p><b>Modify valid</b> split view "<i>Increase the higher indicative level for CO to 190 .. 192 mg/Nm<sup>3</sup></i>". <b>To</b> "<i>Increase the higher indicative level for CO to 190 .. 192 mg/Nm<sup>3</sup> and increase the higher indicative level for TVOC to 74 mg/Nm<sup>3</sup></i>" Insert into text below table 10.20.</p>	<p>No 58 (BAT 37) in chapter 12, See rationale for valid split view 13.5.5. From the EIPPCB split view assessment validity of supporting rationale: "<i>.. The higher CO levels .. are supported by information from plants of the data set equipped with SCR ..</i>". Thus there is a need to raise the upper threshold CO level. TVOC: Euromot requests split view to be reassessed, see attached "Letter to the JRC on Euromot's comments on the split views (submitted March 2016)" dated September 14th 2016 indicating the big need to raise the upper threshold indicative limit for TVOC for the HFO fired engine plant. TVOC indicative levels are set on a very limited data amount (in totally 15 yearly average periodic measurements (generally based on 1 .. 2 samples only) data from 3 plants (totally 15 engines) (in plants 427, 428, 430) in Portugal measured with the US EPA 25 A standard, different from the EN standard to be used in EU. Euromot has for years in many documents (e.g." Euromot Position 06 May 2015 Feedback on LCP BREF Data Collection 2011 – 2012 at European Plant HFO/gas oil in engine NOx, CO, NH3 and TOC emission to air", sent to BATIS May 2015) sent to the LCP BREF process stated that measured. TVOC values in the BATIS database are in general too low and only the highest measured value in plant engine 427-7 makes sense. EIPPCB sent on May 12th 2015 an e-mail with a request to Portugal based on the input of Euromot and asked Portugal to confirm amongst all the TVOC measurement results. No answer seems to have been given to this EIPPCB request from Portugal (TVOC figures still today the same in BATIS and no reply letter from Portugal on this request). EUROMOT is thus of the opinion based on above that also reported highest measured TVOC value of 74 mg/Nm<sup>3</sup> (15 % O<sub>2</sub>) calculated as C needs to also be considered when setting the upper indicative TVOC BAT range for the HFO fired engine.</p>
178	UK	10	3	2	2	785	<p>Table 10:20 - Column A is superfluous as it merely repeats the Scope of these BAT conclusions</p> <p>Delete the column titled: "<i>Combustion plant total rated thermal input (MWth)</i>". This comment also applies to Tables 10.21, 10.22, 10.25, 10.29</p>	<p>Unnecessary</p>

179	EURELECTRIC	10	3	2	3	786	Table 10.21. <b>Existing diesel engines</b> , for which LCP BREF will constitute the first EU environmental regulation setting up ELV, <b>cannot be asked to comply retroactively with an aggregation rule.</b>	Add this note to column "Combustion plant total rated thermal input (MWth)" of the table 10.21: In order to define the total rated thermal input, the application of the aggregation rule is limited to new plants only.	The "virtual stack aggregation rule" of IED chapter III only applies to combustion plants which have been granted a permit for the first time on or after 1 July 1987. This date is derived from the directive 88/609/EEC which established the first set of ELV for large boilers. As explained by the Commission to a Member State (See Commission statement in <a href="https://ippc.mos.gov.pl/ippc/custom/Annex%20to%20PL%20letter_docx.pdf">https://ippc.mos.gov.pl/ippc/custom/Annex%20to%20PL%20letter_docx.pdf</a> ), this is because "the intention of this provision is to avoid that combustion plants are intentionally constructed [after this date] in such a way that they would not have to comply with the LCP ELV". However in the case of diesel engines, the <b>LCP BREF will be the first EU regulation setting up ELV for this category of installations.</b> Hence existing diesel engines can not be suspected to have been "intentionally constructed" in order to avoid the application of European regulation based on plant capacity. Consequently diesel engines which have been granted a permit for the first time before the date of publication of the BAT conclusions (and not only before the 1 July 1987) should not be asked to demonstrate that "taking technical and economic factors into account, their flue-gases could, in the judgment of the competent authority, be discharged through a common stack".
180	Greece	10	3	2	3	786	Applicability restrictions for DSI and wet FGD application in HFO and gas oil reciprocating engines should be extended.	Add the following applicability restrictions for BAT 39.d (wet FGD): "The applicability may be limited due to the water availability on site" Add the following applicability restrictions for both BAT 39.c and BAT 39.d: "There may be logistical restrictions in remote areas for supplying the reagent and managing the residues, due to lack of the proper infrastructure." "The applicability for retrofitting existing and new plants installed in an existing site in a SIS/MIS may be limited due to lack of the space availability." "There may be technical constraints in a SIS/MIS	See rationale for comment 2 above

									due to the high number of start-up/shutdowns and frequent load variations”	
181	Cyprus	10	3	2	3		786	During the LCP BREF review process as well as the final TWG meeting that took place in Seville in June 2015 Cyprus proposed to change footnote 3 of Table 10.21-BAT38 in order to increase the upper end of the SO2 yearly/daily BAT-AEL from the combustion of HFO in existing plants (reciprocating engines) and especially the ones in Small Isolated Systems. For this issue Cyprus raised and finally submitted a split view during the final TWG meeting. However, the EIPPC Bureau considered that there were not enough appropriate technical arguments to support the specific split view.	Cyprus proposes to change footnote 3 of Table 10.21-BAT38 in order to increase the upper ends of the SO2 daily and yearly BAT-AELs range to 550/500 mg/Nm3 from the combustion of HFO in existing plants (reciprocating engines) and especially the ones situated in Small Isolated Systems, if no secondary abatement technology can be applied and in case that fuel with sulphur content of less than 0.5% is not available.	During the discussion that took place in the final TWG meeting (June 2015) it was recognized that there are technical constraints to apply secondary abatement techniques for SO2 reduction in existing reciprocating engines and especially in combustion plants less than 300MWth. Therefore, the only remaining BAT that can be applied in existing HFO fired-engines, that have technical constraints to apply the secondary abatement techniques included in the BAT 38 list, is the fuel choice and specifically the use of an HFO-fuel with sulphur content of 0.5%. Therefore the implementation of the specific decision to introduce the use of an HFO-fuel with sulphur content of 0.5%, will depend on the availability of such a fuel which may be not widely used and available in Small Isolated Systems and remote islands. In addition, the vast majority of reference plants (engines) which submitted questionnaires use fuel with sulphur content between 0.85-1%. The specific decision to introduce the use of an HFO-fuel with sulphur content of 0.5%, in cases where no secondary abatement technology can be used in existing engines, was introduced and taken during the final TWG meeting while no thorough prior investigation was performed about the availability and/or price for such a fuel (cost/benefit analysis) especially in remote areas and Small Isolated Systems.
182	EURELECTRIC	10	3	2	3		786	<b>Table 10.21 - SO2 BATAEL for diesel engines:</b> The valid split view 13.6 should be reintegrated from chapter 12 to chapter 10.	Modify footnote (3) applying to new and existing plants: "The higher end of the yearly BAT-AEL range is 280 mg/Nm3 and the higher end of the daily BAT-AEL range is 300 mg/Nm3 if no secondary abatement technique can be applied."	it is considered as of utmost importance to keep this flexibility open <u>for new diesel engines</u> and not only for existing ones (as recognised by the EIPPCB in his updated assessment of June 2016), in order to keep the possibility to equip islands/SIS/MIS with this kind of technology in the future, as a complementary source of energy to intermittent RES. For further rationale, see the assessment of the valid split view 13.6. by the IPPC Bureau.

183	EUROMOT	10	3	2	3	786	The valid split view 13.6 BAT 38: SO <sub>2</sub> BAT AEL for HFO/and/or gas oil fired reciprocating engines should be reintegrated from chapter 12 to chapter 10	table 10.21: Modify footnote (3) applying to new and existing plants: "The higher end of the yearly BAT-AEL range is 280 mg/Nm <sup>3</sup> and the higher end of the daily BAT-AEL range is 300 mg/Nm <sup>3</sup> if no secondary abatement technique can be applied"	No 59 (BAT 38 table 10.21) in chapter 12. See rationale for the valid split view 13.6. Lack of proper industrial infrastructure for supply and/or the use of reagent, etc. in remote areas such as islands is thus taken into account.
184	Greece	10	3	2	3	786	Valid split view 13.6 (BAT 38 - SO <sub>2</sub> BAT AEL for HFO and gas oil reciprocating engines) should be incorporated from chapter 12 in chapter 10.	Modify footnote (3) applying to new and existing plants: "The higher end of the yearly BAT-AEL range is 280 mg/Nm <sup>3</sup> and the higher end of the daily BAT-AEL range is 300 mg/Nm <sup>3</sup> if no secondary abatement technique can be applied.	it is considered as of utmost importance to keep this flexibility open <u>for new diesel engines in</u> and not only for existing ones (as already recognised by the EIPPCB in its assessment) due to the fact that it is not possible to apply secondary SO <sub>2</sub> abatement measures in SIS/ MIS. See rationale for comments 1 and 3 above.
185	UK	10	3	2	3	786	Table 10.21. SO <sub>2</sub> AELs for new and existing plants	As per our split view, the UK continues to assert that the upper end of the daily AEL range for certain plant is 590mg/m <sup>3</sup> and that footnote 2 should be extended to new plant. The view of the TWG was that this was a matter for consideration under Article 15(4).	As detailed in UK split view

186	EURELECTRIC	10	3	2	4	787	Table 10.22. <b>Existing diesel engines</b> , for which LCP BREF will constitute the first EU environmental regulation setting up ELV, <b>cannot be asked to comply retroactively with an aggregation rule.</b>	Add this note to column "Combustion plant total rated thermal input (MWth)" of the table 10.22: In order to define the total rated thermal input, the application of the aggregation rule is limited to new plants only.	The "virtual stack aggregation rule" of IED chapter III only applies to combustion plants which have been granted a permit for the first time on or after 1 July 1987. This date is derived from the directive 88/609/EEC which established the first set of ELV for large boilers. As explained by the Commission to a Member State (See Commission statement in <a href="https://ippc.mos.gov.pl/ippc/custom/Annex%20to%20PL%20letter_docx.pdf">https://ippc.mos.gov.pl/ippc/custom/Annex%20to%20PL%20letter_docx.pdf</a> ), this is because "the intention of this provision is to avoid that combustion plants are intentionally constructed [after this date] in such a way that they would not have to comply with the LCP ELV". However in the case of diesel engines, the <b>LCP BREF will be the first EU regulation setting up ELV for this category of installations.</b> Hence existing diesel engines can not be suspected to have been "intentionally constructed" in order to avoid the application of European regulation based on plant capacity. Consequently diesel engines which have been granted a permit for the first time before the date of publication of the BAT conclusions (and not only before the 1 July 1987) should not be asked to demonstrate that "taking technical and economic factors into account, their flue-gases could, in the judgment of the competent authority, be discharged through a common stack".
187	EURELECTRIC	10	3	2	4	786	BAT 39. The applicability of bag filters and ESP should be restricted for HFO and gas oil reciprocating engines located in remote islands.	The applicability of BAT 39 c and d (Bag filter and electrostatic precipitator) should include the following restrictions: "There may be logistical restrictions in remote areas for managing the residues due to lack of proper industrial infrastructure." "The applicability for retrofitting existing and new plants on existing site may be limited due to lack of space" "There may be technical constraints in the case of small isolated systems due to the high number of start-ups and shutdowns." "There may be economical restrictions in remote areas such as islands."	The BAT and BAT-AEL of the LCP BREF should explicitly take into account the specificities of SIS compared to mainland (e.g. infrastructural issues, waste management issues, space limitations, sharp electricity demand variations) as it was decided at Kick-off meeting in January 2012 (See KOM report, section 3.1 "General and common issues"), and not solely rely on the local use of IED art. 15.4.

188	Greece	10	3	2	4	786	Applicability restrictions for bag filters and ESP application in HFO and gas oil reciprocating engines should be extended.	The applicability of BAT 39 c and d (Bag filter and electrostatic precipitator) should include the following restrictions: "There may be logistical restrictions in remote areas for managing the residues due to lack of proper industrial infrastructure." "The applicability for retrofitting existing and new plants on existing site may be limited due to lack of space" "There may be technical constraints in the case of small isolated systems due to the high number of start-ups and shutdowns." "There may be economical restrictions in remote areas such as islands where air quality is fully compliant with EU directive 2008/50/EC."	See rationale for comment 2 above
189	EUROMOT	10	3	2	4	787	The valid/reassessed split view 13.7.4 BAT 39 - Dust AELs for HFO and / or gas oil fired reciprocating engines should be reintegrated from chapter 12 to chapter 10. The split view needs some modification.	<b>Modify valid split view.</b> "Add a footnote mentioning that yearly dust BAT-AELs for existing plants using only fuel choice apply at engine MCR loads of > 85 %, in steady state conditions". <b>to</b> " Add a footnote mentioning that yearly <b>and daily average</b> dust BAT-AELs for existing <b>and new</b> plants using only fuel choice apply at engine MCR loads of > 85 %, in steady state conditions". <b>Insert</b> this to table 10.22.	No 62 (BAT 39 Table 10.22) in chapter 12. 1) See rationale of the valid split view 13.7.4 and submitted document: "EUROMOT Letter to the JRC on EUROMOT's comments on the split views (submitted March 2016)", dated 14 September 2016 ("): For plants applying BAT 39 "Fuel choice" there is a need to set a lower threshold for the engine load range (> 85 % at steady state load) because at low loads engine efficiency decreases. I.e. due to the less efficient combustion at part loads in the engine cylinders, the specific fuel consumption and amongst all soot fraction of the particulate increase. As a consequence the particulate emission increases (in LCP BREF Final Draft (June 2016) section 6.1.4.2 is stated " When combusting heavy fuel oil, the dust mainly consists of the ash and sulphur (resulting in sulphate) content of the fuel oil and, to a smaller extent, of soot and hydrocarbons)". <b>"EIPPCB assessment of comments to SV.pdf " (dated 27.06 2016) conclusion of 13.7.4 was "Consider SV valid only when using fuel choice".</b> Majority of existing plants are expected to utilize the "fuel choice" option of BAT 39 due to space restrictions, etc.. In order to



191	EUROMOT	10	3	2	4	787	The valid split view 13.7.1 BAT 39 - Dust AELs for HFO and / or gas oil fired reciprocating engines should be reintegrated from chapter 12 to chapter 10	Table 10.22: Increase the higher ends of the yearly and daily dust BAT-AEL ranges for <b>new plants</b> : 20 mg/Nm <sup>3</sup> (yearly) and 30 mg/Nm <sup>3</sup> (daily). Increase the higher ends of the yearly and daily dust BAT-AEL ranges for <b>new plants located on remote islands/SIS/MIS</b> : 35 mg/Nm <sup>3</sup> (yearly), 45 mg/Nm <sup>3</sup> (daily).	No 60 (BAT 39 Table 10.22) in chapter 12. See rationale of the valid split view 13.7.1: 1) This modification would be in line with MCPD 2015/2193 ( <i>MCPD stipulates a dust limit of 75 mg/Nm<sup>3</sup> for new plants in SIS/MIS</i> ) that recognizes specific needs of SIS/MIS (EIPPCB referred themselves to the MCPD when setting the yearly average dust limit in the Final TWG meeting in Seville 2015). 2) As well with <b>the need for more time to develop and test new secondary dust reduction techniques</b> . 3) Set emission limits shall be achievable with available feasible emission abatement techniques <b>which unfortunately is NOT the case with the emission limits (now set well beyond BAT) for the new plant set in table 10.22</b> of the Final LCP BREF (June 2016) Draft document for new plants. This will <b>harm European export industry severely</b> because some financial institutions require fulfilment of EU Directives in their financed projects also outside EU areas (see e.g. European Investment Bank "Energy Lending Criteria" at <a href="http://www.eib.org/infocentre/publications/all/eib-energy-lending-criteria.htm">http://www.eib.org/infocentre/publications/all/eib-energy-lending-criteria.htm</a> page 26 item 114).
192	Greece	10	3	2	4	787	Valid split view 13.7.1 (BAT 39 - Dust BAT AEL for diesel engines) should be incorporated from chapter 12 in chapter 10.	Increase the higher ends of the daily and yearly dust BAT-AEL ranges for new plants : 30 mg/Nm <sup>3</sup> (daily), 20 mg/Nm <sup>3</sup> (yearly) Increase the higher ends of the daily and yearly dust BAT-AEL ranges for new plants located in remote islands/ SIS/ MIS: 45 mg/Nm <sup>3</sup> (daily), 35 mg/Nm <sup>3</sup> (yearly)	See rationale of the split view 13.7.1. This modification <u>would be fully in line the MCPD 2015/2193</u> that recognises the specificity of SIS as well as the need for more time to develop and test dust removal techniques for HFO engines (the MCPD fixes a dust ELV of 75 mg/Nm <sup>3</sup> for new medium size diesel engines being part of SIS). See rationale for comments 1 and 4 above.
193	Greece	10	3	2	4	787	Due to applicability restrictions in SIS/MIS concerning secondary abatement techniques, BAT AELs should be adapted.	Increase the yearly and daily BAT AELs for existing plants located in remote islands/ SIS/ MIS: 50 mg/Nm <sup>3</sup>	See rationale for comments 1 and 4 above

194	UK	10	3	2	4	787	Table 10.22. Dust AELs for new plants	As per our split view, the UK continues to assert that the upper end of the daily AEL range for certain plant is 45mg/m <sup>3</sup> and that the annual value is 35mg/m <sup>3</sup> . The view of the TWG was that this was a matter for consideration under Article 15(4).	As detailed in UK split view
195	Spain	10	3	2		783	Add at the end of the first paragraph the a phrase to clarify that the aggregation rules does not apply to diesel engines that had came into operation before the IED entered into force.	Add at the end of the first paragraph the following phrase: <b>"In order to define the total rated thermal input, the application of the aggregation rule is limited to plants coming into operation after 6 January 2011."</b>	The IED was the first environmental regulation for the diesel engines and, even in this Directive, there are excluded of the fulfilment of the ELV set in Annex V. - In the particular case of Spain, those engines are normally located in small isolated systems where they start operating in a immediately and progressively way that vary depending on the electricity needs. Due to that special operation mode, they are normally small engines located on the same site. - Response of the Commission of 25 June 2012, to a query from the Polish Government regarding the applicability of the rule under the IED (Question 5: Applicability of the "aggregation rule" – Notion of "technical" and economic factors" The Polish authorities remark that Article 29(2) IED does not specify how competent authorities should interpret the expression "taking technical and economic factors into account" to determine whether several combustion plants not discharging their waste gases via a common stack should be considered as a single combustion plant or not. Response. According to Article 29(2) IED and in line with the subsidiarity principle, it is up to the competent authority to assess and determine whether several combustion plants, which are not sharing a common stack, could actually do so, taking into account technical and economic factors. When doing so, they should keep in mind that the intention of this provision is to avoid that combustion plants are intentionally constructed in such a way that they would not have to comply with the provisions of Chapter III IED.) we consider that the application of the aggregation rule to those engines is not congruent. 1st July 1987 (set in art 29.2 of the IED) is the date for entering into force the first European regulation for Large combustion plants, Council Directive 88/609/EEC of 24 November 1988 on the limitation of emissions of certain pollutants into the air from large combustion plants. -



200	UK	10	3	3	2	788	BAT 41 - c. SCR: Applicability text is confusingly worded.	Amend text to read: " <i>Retrofitting to existing combustion plants may be constrained by the availability of sufficient space</i> ". Note that this comment also applies to BAT 42a - Applicability of oxidation catalysts.	Editorial clarification
201	Slovenia	10	3	3		789	<u>Emission limit values for the emergency load mode - dual fuel</u> Emission limit values should be applied for the combustion plant operating less than 500 hours every year for a given fuel. Emission limit values should not be applied for the combustion plant operation less than 500 hours every year for a given fuel although the total plant operation hours are higher. This mode should also include the situation when a combustion plant uses back-up fuels alone or simultaneously with the main fuels for less than 500 hours every year. E.g. if you have a dual fuel (natural gas as a primary fuel and gas-oil as a secondary fuel) and a secondary fuel is going to be used less than 500 h/yr, than BAT-AEL should not be applied because this would not be environmental friendly and also technically and economically feasible. To fulfil AELs for oil combustion, you have to use less efficient burners with water/steam mixing or in case of modern low NOx burners install SCR DeNox which causes emissions of NH3, ammonia slip, increase health risk because of ammonia handling,	In the chapter 10.3.3.2/Table 10.24 should be stated that indicative values are for the plant operated with gas oil less than 500 h/yr in the case of dual fuel gas turbines. In the chapter 10.3.3.3/Tabele 10.25 two notes should be added:-Yearly average should be stated: These BAT-AELs do not apply to plants operated with gas oil less than 500 h/ yr in the case of dual fuel gas turbines.-Daily average should be stated: These levels are indicative for plants operated with gas oil less than 500 h/ yr in the case of dual fuel gas turbines.	

								<p>storage... You can conclude that the DeNOx installation will not benefit the environment but it will harm the environment even more than if AELs are not applied. Dry low NOx (DLN) burners are considered BAT for modern gas turbines. Gas turbines with DLN are efficient and achieve low emissions of NOx and CO without water/steam or ammonia use. DLN dual fuel gas turbines are available, however with higher NOx emission levels when using liquid fuel than from natural-gas-fired systems. In such case if gas-oil is used only as backup fuel (e.g. emergency use or less than 500 h/year) but overall combustion plant operating hours exceed 500 h/year (e.g. highly efficient CHP gas turbine combined cycle plant with DLN burners using natural gas most of the time, but also gas-oil as backup fuel for a limited time, but less than 500 h/yr), NOx AEL will not be reached for gas-oil combustion. As stated in BAT 41 (10.3.3.2) SCR is not applicable for combustion plants operated less than 500-1500 h/yr. The same should apply also in this case of dual fuel combustion plants, which operate less than 500 h/yr on liquid fuel.</p>		
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202	EUROMOT	10	4	1	1	791	The valid split view 10.12 BAT-AEELs for energy efficiencies for the combustion of natural gas should be reintegrated from chapter 12 to chapter 10	Table 10.26. 1) Expand footnote (6) by adding: " <i>These levels might not be achievable in plants burning natural gas fuels with a methane number of less than 80</i> " 2) Add a footnote applicable to all BAT-AEELs for gas engines mentioning that " <i>These levels may be negatively impacted in the case of plants equipped with a high voltage transformer</i> "	No 63 (BAT 44 Table 10.26) in chapter 12. See rationale for the split view 10.12. 1) Definition of the net electrical efficiency was suddenly fundamentally changed in autumn 2015 by including the high voltage (HV) transformer which was not earlier the case in the LCP BREF update process (note that a decentralized plant might not be equipped with a HV transformer if alternator voltage is at the same voltage as the receiving local grid. Information if equipped with or without a HV transformer are missing for many references in the BATIS database. One reference (no 186) with a high reported electrical efficiency was known to be without a HV transformer) A HV transformer energy loss might be in the range of 0.5 %. 2) The natural gas MN (Methane Number) has a big impact on the lean burn gas efficiency and output capacity.
203	Belgium	10	4	1	2	794	Upper end of BAT-AEL range for NOx for all existing CCGT with a size of = or > 600 MWth with a net total fuel utilisation = or > 75%	Decrease the upper end of the BAT-AEL for this type of plants from 65mg/Nm <sup>3</sup> to 55mg/Nm <sup>3</sup> (thus to remove footnote 16).	The vast majority of plants (incl. plants put into operation before 7 January 2014) can, at all times, comply with the normal upper value of the BAT- AEL range (55mg/Nm <sup>3</sup> ). Exceedance of the upper value of the BAT-AEL range are generally within the margin of error. Plants that do not comply after the margin of error is taken into account are not considered to be ~ BAT and/or their emission data cannot be taken into account.
204	ETN	10	4	1	2	794	Footnote 7 in table 10.27	Change footnote text from "<1500 hrs/year" to "<4500 hrs/year"	With the increase of intermittent renewables in the energy system, the role of turbines as flexibility providers - ensuring the stability of the grid and security of supply - becomes crucial. This new role needs to be considered; as it is different from the typical use of turbines.
205	EUTurbines	10	4	1	2	794	Footnote 7 in table 10.27	Change footnote text from "<1500 hrs/year" to "<4500 hrs/year"	With the increase of intermittent renewables in the energy system, the role of turbines as flexibility providers - ensuring the stability of the grid and security of supply - becomes crucial. This new role needs to be considered; as it is different from the typical use of turbines.

206	ETN	10	4	1	2	794	BAT 49 table 10.27 Note 13 to be modified to be consistent with note 12	Change 39% to 37% in two places  For plants with a net electrical efficiency (EE) greater than 39 37%, a correction factor may be applied to the higher end of the range, corresponding to [higher end] x EE / 39 37, where EE is the net electrical energy efficiency or net mechanical energy efficiency of the plant determined at ISO baseload conditions.	Per 7.1.2.2 (PDF page 601), emission levels depend upon the type of Gas Turbine and per Table 7.4 (PDF page 603) electrical efficiencies case 2. The rationale to use Plant 16-1V & 16-2V as the basis of the Eta algorithm has to be questioned, as these plants are the highest efficiency OCGT plants within the data set. For CCGT, the highest was not used but the 95th % value at 55%, highest CCGT value was plant 483 at 57.8% or 119-2V at 57.5%. Please use the same rationale for OCGT at 37% not 39% (0.95 x 39%)
207	EUTurbines	10	4	1	2	794	BAT 49 table 10.27 Note 13 to be modified to be consistent with note 12	Change 39% to 37% in two places. For plants with a net electrical efficiency (EE) greater than 39 37%, a correction factor may be applied to the higher end of the range, corresponding to [higher end] x EE / 39 37, where EE is the net electrical energy efficiency or net mechanical energy efficiency of the plant determined at ISO baseload conditions.	Per 7.1.2.2 (PDF page 601), emission levels depend upon the type of Gas Turbine and per Table 7.4 (PDF page 603) electrical efficiencies case 2. The rationale to use Plant 16-1V & 16-2V as the basis of the Eta algorithm has to be questioned, as these plants are the highest efficiency OCGT plants within the data set. For CCGT, the highest was not used but the 95th % value at 55%, highest CCGT value was plant 483 at 57.8% or 119-2V at 57.5%. Please use the same rationale for OCGT at 37% not 39% (0.95 x 39%)
208	ETN	10	4	1	2	795	Consistency with table	Change 39% to 37% in two places New OCGT of $\geq 50$ MWth: $< 5-40$ mg/Nm <sup>3</sup> . For plants with a net electrical efficiency (EE) greater than 39 37 %, a correction factor may be applied to the higher end of this range, corresponding to [higher end] x EE / 39 37, where EE...	Consistency with table 10.27 and the changes to Note 13.

209	EUTurbines	10	4	1	2	794	Footnote 12 in table 10.27 As thermal NOx increase is obvious through technology progress in energy efficiency optimization, there should a more significant recognition in formula	For plants with a net electrical efficiency (EE) greater than 55 %, a correction factor may be applied to the higher end of the BAT-AEL range, corresponding to [higher end] <b>x 1,06</b> x EE / 55, where EE is the net electrical efficiency of the plant determined at ISO baseload conditions.	Energy Efficiency is the key target for Turbine innovation to fight climate change. Thermal NOx increase needs to better reflect in <b>Emission Bonus Formula in Footnote 12. This results</b> for 60% efficiency in 34,7 mg/Nm <sup>3</sup> instead of 32,7 mg/Nm <sup>3</sup>
210	EUTurbines	10	4	1	2	795	Consistency with table	Change 39% to 37% in two places. New OCGT of ≥ 50 MWth: < 5–40 mg/Nm <sup>3</sup> . For plants with a net electrical efficiency (EE) greater than 39 37 %, a correction factor may be applied to the higher end of this range, corresponding to [higher end] x EE / 39 37, where EE...	Consistency with table 10.27 and the changes to Note 13.
211	ETN	10	4	1	2	794	Footnote 22 in table 10.27	Revert to footnote text ">70% of baseload power"	DLN effective operation cannot easily be defined because it depends on the gas turbine configuration. It is preferred to state a percentage power number and clarify that the available power changes due to operating conditions. The baseload power will be quoted in the permits.
212	EUTurbines	10	4	1	2	794	Footnote 22 in table 10.27	Revert to footnote text ">70% of baseload power available on the day"	DLN effective operation cannot easily be defined because it depends on the gas turbine configuration. It is preferred to state a percentage power number and clarify that the available power changes due to operating conditions.

213	EURELECTRIC	10	4	1	2	794	Table 10.27-Gas turbine load threshold for NOX BAT-AELs	Add a footnote: 'The BAT-AELs are only applicable above 70 % load according to ISO standards'.	As coherence in legislation is a much needed asset in order to achieve a level playing field throughout Europe, it is necessary to make the BREF LCP AEL's applicable above 70 % nominal load. This limitation of applicability is equally set in the IED. Questionnaire data was not explicitly requested to cover the period between the minimum start-up load for stable generation and 70 % load, but generically only normal operating conditions. So if CCGTs have only had to report emissions above 70 % load historically and provided data on this basis, then there is a risk of inappropriate benchmark data being applied. Since the EIPPCB proposes BAT-AELs not consistent with IED prescription, it should provide evidence, in order to assure that there are no inconsistencies in the analysed data, that emission data collected through the questionnaire and used to set the BAT-AEL ranges are really representative of operating conditions below the 70 % Gas Turbine load. The survey on 14 plants is not enough to ensure coherence in the data used to derive BAT-AEL ranges.
214	Belgium	10	4	1	2	795	Indicative emission levels for CO (comment also valid for other chapters/BAT-conclusions)	Set BAT-AELs instead of "indicative emission levels" for CO	Indicative emission levels are not defined in IED, nor in BREF Guidance doc. Therefore, the status of indicative emission levels is not clear. Not providing BAT-AELs on CO poses the risk that installations will not perform in the most efficient way, resulting in higher emissions of not only CO but also PM, VOC and PAH. Moreover, since the CO emission levels are indicative, no in-depth analysis of the emission level values was made. We pose serious questions about the values, for example in table 10.28 and 10.39. It is not clear why there is differentiation between new and existing plants or operation time in some cases, . Data on CO emissions is available in the questionnaires. We therefore propose to set BAT-AELs for CO emissions, based on the data made available on BATIS.
215	EURELECTRIC	10	4	1	2	794	Table 10.27-Existing CCGT with a net total fuel utilisation $\geq 75$ % (50-600 MW)	Increase the upper end of the yearly BAT-AEL for plants with a net total fuel utilisation of $\geq 75$ % set in footnote (18) from 55 mg/Nm <sup>3</sup> to 75 mg/Nm <sup>3</sup> .	The currently proposed maximum yearly average seems to be based on plant 1006: a 498 MWth CCGT used for district heating equipped with DLN running for 6.040 hours in the reference year with an average load of 94 %. Commissioned in 2009.The maximum values of the yearly ranges for NOX should be increased to 75 mg/Nm <sup>3</sup> in footnote (18), in order to include also the following plants which are all equipped with BAT technologies







220	EUROFER	10	4	2	1	796	<p>EUROFER considers that the Split-view number 23,24 raised on Energy efficiency (Table 10.30 and 10.31 BAT 51) have not been properly assessed by EIPPCB taken into account the particularities of the sector and formally have not been included in the EIPPCB's split-views assessment report.</p>	<p>EUROFER suggests that table 10.30 (BAT51) should read as follows: Combustion plant type BAT-AEELs (2) Existing multi-fuel firing gas boilers Net electrical efficiency(3) : 27 (6) - 40 Net total fuel utilisation(4): 40-60 New multi-fuel firing gas(1) Net electrical efficiency(3) : 36 (5) - 40 Net total fuel utilisation(4): 50-70 (1) The wide range of energy efficiencies in CHP plants is very much largely dependent on the specific situation and the local demand of for electricity and heat.(2) These BAT-AEELs do not apply in the case of plants operated in peak- or emergency-load modes. (3) These BAT-AEELs apply to plants generating only power. (4) These BAT-AEELs apply 1) to CHP plants and 2) to plants generating only heat. If the net fuel utilisation cannot be measured then boiler efficiency has to be substituted(5) Maximum achieved by a reference plant (Installed in 2010). Under some circumstances, simulations and calculations demonstrate lower values (31%)(6) Derived from 7 reference plants using iron and steel process gases.</p>	<p>EIPPCB is on the opinion that the information provided to TWG and circulated in October 2015 includes the formal assessment of concerns raised in the EUROFER advanced 'split view' document dated July 2015. EUROFER would like to remark that a technical approach was submitted before the Final Meeting in the "EUROFER alternative proposal of BAT" report on 20 May 2015 for discussion during the Final Meeting, but due to lack of time was included as one leftover for discussion on a webinar but, again, due to lack of time, had to be submitted via written consultation on July 2015. EUROFER stresses that the proposal submitted in the written consultation process (and included as well in the split-views report) did not received negative feedback/comment from any of the TWG members. It is the utmost importance to take into consideration the following:a) The rational expressed by the EIPPCB on October 2015, based on the EUROFER comments are in contradiction to the current LCP BREF Final Draft, section 7.3 (page 629-630): "The energy efficiency of an integrated steelworks combustion plant firing process gases is lower than the energy efficiency of a commercial power plant. Commercial large combustion plant installations are generally optimised for energy output, whereas those in or associated with an integrated steelworks are operated to utilise the process gases made available and must accommodate variations in the amounts and compositions of the fuels, often at very short notice." b) The update of BAT 4 Fuel choice in the LCP BREF final draft confirms as well the previous point.c) The proposal of BAT-AEELs in BAT51 are based on the result of the TFEE (Task force of Energy Efficiency) in which EUROFER did not take part. The reason behind this decision was that the well-known particularities of the sector effectively preclude the inclusion of LCPs utilising I&amp;S process gases with power generation plants using natural gas when considering energy efficiency (as per point a above). The conclusions reached by the TFEE for the I&amp;S sector are based on commercial power generation plants using I&amp;S process gases (two boiler plants, numbers 360,361 and one CCGT, plant 15) which cannot be considered representative of the sector.</p>
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221	EUROFER	10	4	2	1	797	EUROFER considers that the Split-view number 23,24 raised on Energy efficiency (Table 10.30 and 10.31 BAT 51) has not been properly assessed by EIPPCB taken into account the particularities of the sector and formally have not been included in the EIPPCB's split-views assessment report.	EUROFER suggests that table 10.30 (BAT51) should read as follows:CHP CCGTs Net total fuel utilisation % 50-82(3) CCGT generating only power or CHP CCGT: Existing plan - Net electrical efficiency 42(1) -48(2) ; New plant > 44(2) (1) Derived from 2 reference plants using Iron and Steel Gases.(2) This figure is not achievable for plants using exclusively iron and steel process gases.(3) If the net fuel utilization cannot be measured then boiler efficiency has to be substituted.	See rational comment number 12This is a critical issue for EUROFER in accordance to point 1 of section 1.3 of the BREF guidance (2012/119/EU) in relation to IED Art 13 Forum opinion
222	EUROFER	10	4	2	2	797	EUROFER Split-views with a positive assessment of technical rationale according to EIPPCB's report (22/06/2016) have been included in Chapter 12 of the LCP BREF Final draft. The amendments have to be considered in Chapter 10 BAT conclusions	Amend chapter 10 BAT conclusions including dissenting view number 74, (table 12.2 on page 870 LCP BREF Final draft):  <i>Remove 'Selective non-catalytic reduction (SNCR)' from the techniques listed in table of BAT 52</i>	See technical rationale in the EIPPCB's split-views assessment report (page 208-210)  This is a critical issue identified by EUROFER in accordance to point 6 of section 1.3 of the BREF guidance (2012/119/EU) in relation to IED Art 13 Forum opinion
223	EUROFER	10	4	2	2	799	EUROFER Split-views with a positive assessment of technical rationale according to EIPPCB's report (22/06/2016) have been included in Chapter 12 of the LCP BREF Final draft. The amendments have to be considered in Chapter 10 BAT conclusions	Amend chapter 10 BAT conclusions including dissenting view number 75, (table 12.2 on page 870 LCP BREF Final draft): <i>Remove 'oxidation catalyst' from the techniques listed in table of BAT 54</i>	See technical rationale in the EIPPCB's split-views assessment report (page 211-213)This is a critical issue identified by EUROFER in accordance to point 6 of section 1.3 of the BREF guidance (2012/119/EU) in relation to IED Art 13 Forum opinion

224	EUROFER	10	4	2	2	799	EUROFER Split-views with a positive assessment of technical rationale according to EIPPCB's report (22/06/0216) have been included in Chapter 12 of the LCP BREF Final draft. The amendments have to be considered in Chapter 10 BAT conclusions	Amend chapter 10 BAT conclusions including dissenting view number 76, (table 12.2 on page 870 LCP BREF Final draft): <i>Change the tables title as follows: 'BAT-associated emission levels (BAT-AELs) for NOX emissions to air from the combustion of a minimum of 90 % iron and steel process gases for boilers and a minimum of 55 % iron and steel process gases for CCGTs in table 10.32 (BAT52 and BAT53)</i>	See technical rationale in the EIPPCB's split-views assessment report (page 213-215)  This is a critical issue identified by EUROFER in accordance to point 6 of section 1.3 of the BREF guidance (2012/119/EU) in relation to IED Art 13 Forum opinion
225	EUROFER	10	4	2	2	799	EUROFER Split-views with a positive assessment of technical rationale according to EIPPCB's report (22/06/0216) have been included in Chapter 12 of the LCP BREF Final draft. The amendments have to be considered in Chapter 10 BAT conclusions	Amend chapter 10 BAT conclusions including dissenting view number 77, (table 12.2 on page 870 LCP BREF Final draft): <i>Remove footnote (1) in table 10.32 (BAT52 and BAT53)</i>	See technical rationale in the EIPPCB's split-views assessment report (page 216-217)  This is a critical issue identified by EUROFER in accordance to point 6 of section 1.3 of the BREF guidance (2012/119/EU) in relation to IED Art 13 Forum opinion

226	EUROFER	10	4	2	2	799	<p>EUROFER Split-views with a positive assessment of technical rationale according to EIPPCB's report (22/06/0216) have been included in Chapter 12 of the LCP BREF Final draft. The amendments have to be considered in Chapter 10 BAT conclusions</p>	<p>Amend BAT conclusions including split view number 78, (table 12.2 on page 870 LCP BREF Final draft): - <i>Change footnote (7) to: 'the yearly range of 20–100 mg/Nm3 and daily range of 22–110 mg/Nm3 can be achieved with the implementation of SCR. The higher end of the range is associated with up to 32 % COG in the fuel mix.'</i> in table 10.32 (BAT52)- <i>Increase the higher end of the yearly NOX BAT-AEL range for plants put into operation no later than 7 January 2014 to 140 mg/Nm3 in table 10.32 (BAT52)- Change footnote (6) to: 'In the case of plants put into operation no later than 7 January 2014, the higher end of the range is 160 mg/Nm3 corresponding up to 32 % COG in the fuel mix. Furthermore, the higher end of the BAT-AEL range may be exceeded when SCR cannot be used and when using a high share of COG (e.g. &gt; 32 %) and/or combusting COG with a relatively high level of H2. In this case the higher end of the range is 325 mg/Nm3 for plants put into operation no later than 27 November 2003 or 220 mg/Nm3 for plants put into operation after this date.'</i> in table 10.32 (BAT52)- <i>Increase the lower end of the daily NOX BAT-AEL range for existing boilers to 45 mg/Nm3 in table 10.32 (BAT52)</i></p>	<p>See technical rationale in the EIPPCB's split-views assessment report (page 217-224) This is a critical issue identified by EUROFER in accordance to point 6 of section 1.3 of the BREF guidance (2012/119/EU) in relation to IED Art 13 Forum opinion</p>
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227	EUROFER	10	4	2	2	799	EUROFER Split-views with a positive assessment of technical rationale according to EIPPCB's report (22/06/0216) have been included in Chapter 12 of the LCP BREF Final draft. The amendments have to be considered in Chapter 10 BAT conclusions	Amend the text included Chapter 10 BAT conclusions including dissenting view number 79, (table 12.2 on page 870 LCP BREF Final draft): <i>Increase the higher end of the daily NOX BAT-AEL range for CCGTs combusting iron and steel process gases in the case of plants put into operation no later than 7 January 2014 to 80 mg/Nm3 in table 10.32 (BAT53)</i>	See technical rationale in the EIPPCB's split-views assessment report (page 224-227)This is a critical issue identified by EUROFER in accordance to point 6 of section 1.3 of the BREF guidance (2012/119/EU) in relation to IED Art 13 Forum opinion
228	EUROFER	10	4	2	2	797	EUROFER Split-view number 6, in relation to techniques to reduction NOx emissions to air from boilers has been assessed in the EIPPCB's split-view assessment report, but without support of the technical rationale provided by EUROFER on SCR applicability - technique e. (BAT52)	EUROFER suggests to add in the applicability of the technique e. SCR in BAT52 the following:"may be applicable to existing plants in specific situations where local conditions require further NOx reduction (e.g. environmental standards are not likely to be met.). For new plants only where the local air quality standards cannot be met using the in-process techniques, again incorporated in the initial design."	EIPPCB is on the opinion that local local conditions are to be dealt with within the provisions of Article 15(4) of the IED. EUROFER would like to remark that a provision is required in the same way that for I&S BAT conclusions (consistency with the applicability of SCR technique for Sinter Plants (BAT 23 Iron and Steel BREF) should be sought). EUROFER suggests to add in the text that 'This technique might be an option where environmental quality standards are unlikely to be met through the application of other techniques'On the other hand EIPPCB refers that the applicability of SCR to a combustion plant and to a sinter plant may differ as they are different types of plants, thus there is no perceived contradiction between the LCP BAT conclusion and the Iron and Steel BAT conclusions.EUROFER would like to stress that we are referring to end of pipe techniques to reduce the pollutant emissions in a similar environment, and suggests an alignment on the applicability of the technique in the same way as for the I&S BAT conclusions.This point is considered by EUROFER in accordance to point 1 of section 1.3 of the BREF guidance (2012/119/EU) in relation to IED Art 13 Forum opinion

229	EUROFER	10	4	2	2	798	EUROFER Split-view number 7, in relation to techniques to reduction NOx emissions to air from CCGTs has been assessed in the EIPPCB's split-view assessment report, but without support of the technical rationale provided by EUROFER on SCR applicability - technique c. (BAT53)	EUROFER suggests to add in the applicability of the technique c. SCR in BAT53 the following:"This technique might be an option where environmental quality standards are unlikely to be met through the application of other techniques"	The rationale expressed by EIPPCB refers that specific situations where local conditions require further NOX reduction are not supposed to be dealt with in the BREF context, which takes a sectoral approach. EUROFER would like to remark that a provision is required in the same way that for I&S BAT conclusions (and consistency with the applicability of SCR technique for Sinter Plants (BAT 23 Iron and Steel BREF) should be sought). EUROFER suggests to add in the text that 'This technique might be an option where environmental quality standards are unlikely to be met through the application of other techniques'On the other hand EIPPCB refers that the applicability of SCR to a combustion plant and to a sinter plant may differ as they are different types of plants, thus there is no perceived contradiction between the LCP BAT conclusion and the Iron and Steel BAT conclusions.EUROFER would like to stress that we are referring to end of pipe techniques to reduce the pollutant emissions in a similar environment, and suggests an alignment on the applicability of the technique in the same way as for the I&S BAT conclusions.EUROFER considers that this point is in accordance to point 1 of section 1.3 of the BREF guidance (2012/119/EU) in relation to IED Art 13 Forum opinion.
230	EUROFER	10	4	2	2	799	EUROFER Split-view number 10, in relation to boilers recovering sensible heat from sinter cooler waste gases (oxygen reference level in tables 10.32, and 10.34 (BAT 52 and BAT56) has been assessed in the EIPPCB's split-view assessment report, but without support of the technical rationale provided by EUROFER.	EUROFER suggests to add in table 10.32 (BAT52) and 10.34 (BAT56) the following new footnote:For boilers utilising hot air exhausted from sinter plant coolers the emission value is given at the oxygen level of the measurement, according to BAT32 – Iron and Steel BREF	The rationale expressed by EIPPCB refers that BAT 32 of the I&S BREF does not make any reference to the oxygen content linked to the recovery in, for example, steam generation of the sensible heat from the sinter cooler waste gas. EUROFER would like to remark that the no reference to oxygen level indicates that the measure has to be reported at the measured normal operation conditions, without any oxygen correction as LCP BAT conclusion refers.On the other hand, EIPPCB refers that Plant 615 recovers energy from the sinter plant hot air and reports air emission levels at a reference oxygen level of 3 %, like the other plants of the sector, but that statement is not correct, and the values were reported as EIPPCB requested, not at measured level. ??This point is considered by EUROFER in accordance to point 1 of section 1.3 of the BREF guidance (2012/119/EU) in relation to IED Art 13 Forum opinion

231	EUROFER	10	4	2	2	799	<p>EUROFER Split-view number 13, in relation to BAT AELs NOx - yearly for existing boilers (Table 10.32) has been assessed in the EIPPCB's split-view assessment report, but without support of the technical rationale provided by EUROFER, in the part related to plants firing up to 100 % COG put into operation no later than 27 November 2003 requesting a BAT AEL up to 250 mg/Nm<sup>3</sup>. However, the rationale provided by EIPPCB refers that should also be considered that additional primary or secondary techniques (e.g. SCR) may be used for plants emitting more NOX such as those burning a high share of COG, taking into consideration the applicability of the techniques to prevent and/or reduce those NOX emissions (Plant 395 burning almost exclusively COG is not fitted with such additional primary techniques or SCR which are considered applicable by the TWG).</p>	<p>EUROFER suggests to add a new footnote in table 10.32 (BAT52) as follows: NOx Yearly average - Existing boiler For existing plants firing up to 100% COG and put in to operation no later than 27th November 2003, the upper end of the BAT AEL is 250 mg NOx /Nm<sup>3</sup>.</p>	<p>EUROFER would like to remark that BAT-AEL should take into account that under normal operation conditions, the Coke Oven Gas (COG) availability can vary from 0 % to 100 % in the short or long term, and BAT-AELs for NOx emissions must reflect all the possible situations, taking into account the quality composition of the gas. Based on that, and the fact that there is no possibility of fuel choice (see update BAT4 and information included in chapter 7.3 on this issue), EUROFER requests to consider the particularities of plants like 395 in the proposed BAT-AEL range. This point is considered by EUROFER in accordance to point 1 of section 1.3 of the BREF guidance (2012/119/EU) in relation to IED Art 13 Forum opinion</p>
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232	EUROFER	10	4	2	2	799	EUROFER Split-view number 15, in relation to BAT AELs NO <sub>x</sub> - yearly for existing CCGTs (Table 10.32) has been assessed in the EIPPCB's split-view assessment report, but without support of the technical rationale provided by EUROFER, in the part related to plants put in operation no later than 7th January, 2014, requesting a higher end of BAT-AEL range of 65 mg/Nm <sup>3</sup> . However the rationale included by EIPPCB considers that data from plant 008 was not considered as the plant was operated < 1500 h/yr and a footnote proposed to exclude these plants from the yearly BAT-AEL range. However, this footnote was removed during the TWG final meeting.	EUROFER suggests to add a new footnote in table 10.32 (BAT52) NO <sub>x</sub> Yearly average - Existing CCGT In the case of plants put in operation no later than 7th January, 2014, the higher end of BAT-AEL range is 65 mg/Nm <sup>3</sup> .	EUROFER would like to remark that plant 008 provided a measured maximum value of 65.6 mg NO <sub>x</sub> /Nm <sup>3</sup> in 2012 and should be considered as reference. The relative amounts of process gas in any one year is dependent upon the level of hot metal production in the BF and steel in the BOF in the integrated I&S works and no other representative data was collected in the revision process. This point is considered by EUROFER in accordance to point 1 of section 1.3 of the BREF guidance (2012/119/EU) in relation to IED Art 13 Forum opinion
233	UK	10	4	2	2	799	Table 10.32 describes BAT-AELs for the combustion of 100% iron & steel gases but it is unclear what AELs would apply if there was less than 100%.	Was this considered by the TWG? Suggest that text is added saying that the AEL is adjusted pro-rata depending on the % contribution of iron & steel process gases. Note that this comment also applies to Tables 10.34, 10.36, 10.39, 10.40, 10.41, 10.42, 10.45	Legal clarity
234	EUROFER	10	4	2	3	800	EUROFER Split-views with a positive assessment of technical rationale according to EIPPCB's report (22/06/0216) have been included in Chapter 12 of the LCP BREF Final draft. The amendments have to be considered in Chapter 10 BAT conclusions	Amend BAT conclusions including dissenting view number 76, (table 12.2 on page 870 LCP BREF Final draft): <i>Change the tables title as follows: 'BAT-associated emission levels (BAT-AELs) for SO<sub>2</sub> emissions to air from the combustion of a minimum of 90 % iron and steel process gases for boilers and a minimum of 55 % iron and steel process gases for CCGTs in table 10.34 (BAT56)</i>	See technical rationale in the EIPPCB's split-views assessment report (page 213-215) This is a critical issue identified by EUROFER in accordance to point 6 of section 1.3 of the BREF guidance (2012/119/EU) in relation to IED Art 13 Forum opinion

235	EUROFER	10	4	2	3	800	<p>EUROFER Split-views with a positive assessment of technical rationale according to EIPPCB's report (22/06/0216) have been included in Chapter 12 of the LCP BREF Final draft.</p> <p>The amendments have to be considered in Chapter 10 BAT conclusions</p>	<p>Amend chapter 10 BAT conclusions including dissenting view number 80, (table 12.2 on page 870 LCP BREF Final draft):</p> <p>- <i>Change footnote (2) to: 'The higher end of the BAT-AEL range may be exceeded when using a high share of COG (e.g. &gt; 23 %). In this case, the higher end of the BAT-AEL range is 425 mg/Nm3.'</i></p> <p>in table 10.34 (BAT56) - <i>Add a footnote related to the higher end of the SO2 BAT-AEL ranges mentioning that they correspond to a COG share of up to 23 % in the case of the daily BAT-AEL, and of up to 38 % in the case of the yearly BAT-AEL</i> in table 10.34 (BAT56)</p>	<p>See technical rationale in the EIPPCB's split-views assessment report (page 229-233)</p> <p>Critical issue for EUROFER in accordance to point 6 of section 1.3 of the BREF guidance (2012/119/EU) in relation to IED Art 13 Forum opinion</p>
236	EUROFER	10	4	2	3	800	<p>LCP BREF Final draft includes in BAT 4 the following text: '<i>... or by the integrated site's fuel balance.</i>', added to the applicability restrictions of the technique 'fuel choice' as a result of an assessment made in the BP in Section 2.13 p. 293 (the conclusion of which was accidentally not previously inserted). Same consideration has to be taken into account in BAT 56</p>	<p>Applicability of BAT 56 technique b should read as follows, taken into account the update included on BAT4 - Fuel choice of the LCP BREF Final text: <i>Generally applicable within the constraints associated with the availability of different types of fuel or by the integrated site's fuel balance.</i></p>	<p>BAT56 technique b (process gas management system and auxiliary fuel choice) should incorporate in the applicability section the assessment on BAT4 due to is referring to the same critical issue (no possibility of fuel choice). This point is linked as well with the EUROFER split view number 17 This is a critical issue identified by EUROFER in accordance to point 6 of section 1.3 of the BREF guidance (2012/119/EU) in relation to IED Art 13 Forum opinion</p>

237	EUROFER	10	4	2	3	800	<p>EUROFER Split-view number 17, in relation to techniques to reduction SO<sub>2</sub> emissions to air from the combustion of iron and steel process gases has been assessed in the EIPPCB's split-view assessment report, but without support of the technical rationale provided by EUROFER. However it is important to remark the link of the rationale behind EUROFER proposal and the update included in BAT 4 - fuel choice of the LCP BREF Final draft, supporting EUROFER previous comments.</p>	<p>EUROFER suggests to rename the technique b BAT 56 as auxiliary fuel choice with the following text:Description: See description in Section 10.8</p> <ul style="list-style-type: none"> <li>o Select auxiliary fuels such as: <ul style="list-style-type: none"> <li>• natural gas;</li> <li>• liquid fuels with sulphur content of ≤ 0.4 % (in boilers) where possible.</li> </ul> </li> </ul> <p>Use of a limited amount of fuels with higher sulphur content. Applicability: Generally applicable, within the constraints associated with the availability of different type of fuel iron and steel process gases and auxiliary fuels.</p>	<p>EUROFER considers that an update of the assessment should be done by EIPPCB taken into account the acknowledged no possibility of fuel choice in the management of I&amp;S process gases.</p> <p>The technical considerations relevant to applicability of process gas management (7.3.3.1.2 ) refers to applicability in integrated iron and steelworks but has to be considered as well in conjunction with the BAT4 fuel choice and restrictions on applicability for integrated sites.</p> <p>EUROFER considers that this point is in accordance to point 1 of section 1.3 of the BREF guidance (2012/119/EU) in relation to IED Art 13 Forum opinion.</p>
238	EUROFER	10	4	2	3	800	<p>EUROFER Split-view number 18, in relation to BAT AELs SO<sub>2</sub> - yearly for existing or new boilers (Table 10.34) has been assessed in the EIPPCB's split-view assessment report, but without support of the technical rationale provided by EUROFER, in the part related to boilers utilising 100% COG requesting a yearly BAT-AEL up to 400 mg SO<sub>2</sub> /Nm<sup>3</sup>.However the rationale included by EIPPCB refers an example plant burning almost 100 % COG whose emissions are within the yearly BAT-AEL range proposed (Plant 395).</p>	<p>EUROFER suggests to add a new footnote in table 10.34 (BAT56) as follows:Combustion plant type yearly BAT-AELs (mg/Nm<sup>3</sup>) - SO<sub>2</sub> new or existing boilerFor boilers utilising 100% COG the BAT-AEL range is 400 mg SO<sub>2</sub> /Nm<sup>3</sup></p>	<p>EUROFER would like to remark that it is not representative of the situation of plants firing 100 %COG under normal operation conditions in compliance or alignment to I&amp;S BAT conclusions. Relationship between the proportion of COG in the mix and the SO<sub>2</sub> emission is well recognized. The H<sub>2</sub>S level in the COG is defined under BAT 48 in the I&amp;S BREF and then should be considered in the BAT under LCP BREF as well.This point is considered by EUROFER in accordance to point 1 of section 1.3 of the BREF guidance (2012/119/EU) in relation to IED Art 13 Forum opinion</p>

239	EUROFER	10	4	2	3	800	<p>EUROFER Split-view number 19, in relation to BAT AELs SO<sub>2</sub> - yearly for existing or new CCGTs (Table 10.34) has been assessed in the EIPPCB's split-view assessment report, but without support of the technical rationale provided by EUROFER, in the part related to increase the upper end of the yearly BAT-AEL range for new and existing CCGTs to 50 mg/Nm<sup>3</sup> and to add contextual information (linked to 27 % COG share in the fuel mix)However the rationale included by EIPPCB refers to plant 001 data as reference.</p>	<p>EUROFER suggests modifications in table 10.34 (BAT56) - SO<sub>2</sub> new or existing CCGTs as follows:Change the higher end of the yearly BAT-AEL from 45 to 50 mg/Nm<sup>3</sup> and add the following footnote: The higher end of the range corresponds with up to 27% COG in the fuel mix.</p>	<p>EUROFER would like to remark that a higher end of BAT-AEL is requested to cover different COG input in the CCGTs under normal operation conditions (values depend mainly on the annual utilization of COG and the sulphur content under I&amp;S BREF). The representativeness of the sector is more realistic with an upper range of 50 mg/Nm<sup>3</sup> (to cover situations firing more COG than reference plant 001 over different years).This point is considered by EUROFER in accordance to point 1 of section 1.3 of the BREF guidance (2012/119/EU) in relation to IED Art 13 Forum opinion</p>
240	EUROFER	10	4	2	4	801	<p>EUROFER Split-views with a positive assessment of technical rationale according to EIPPCB's report (22/06/0216) have been included in Chapter 12 of the LCP BREF Final draft. The amendments have to be considered in Chapter 10 BAT conclusions</p>	<p>Amend chapter 10 BAT conclusions including dissenting view number 76, (table 12.2 on page 870 LCP BREF Final draft): <i>Change the tables title as follows: 'BAT-associated emission levels (BAT-AELs) for dust emissions to air from the combustion of a minimum of 90 % iron and steel process gases for boilers and a minimum of 55 % iron and steel process gases for CCGTs</i> in table 10.36 (BAT58)</p>	<p>See technical rationale in the EIPPCB's split-views assessment report (page 213-215)  This is a critical issue identified by EUROFER in accordance to point 6 of section 1.3 of the BREF guidance (2012/119/EU) in relation to IED Art 13 Forum opinion</p>

241	EUROFER	10	4	2	4	801	EUROFER Split-views with a positive assessment of technical rationale according to EIPPCB's report (22/06/0216) have been included in Chapter 12 of the LCP BREF Final draft. The amendments have to be considered in Chapter 10 BAT conclusions	Amend chapter 10 BAT conclusions including dissenting view number 81 and 82, (table 12.2 on page 870 LCP BREF Final draft): - <i>Increase the higher end of the daily dust BAT-AEL range for boilers combusting iron and steel process gases to 15 mg/Nm3</i> in table 10.36 (BAT58)- <i>Remove the yearly dust BAT-AEL range for CCGTs combusting iron and steel process gases</i> in table 10.36 (BAT58)	See technical rationale in the EIPPCB's split-views assessment report (page 235-239)This is a critical issue identified by EUROFER in accordance to point 6 of section 1.3 of the BREF guidance (2012/119/EU) in relation to IED Art 13 Forum opinion
242	EUTurbines	10	4	3		802	BAT 59.f - Consistency with BAT 61 table 10.37	Delete BAT 59.f	Since CCGT/CHP is not used offshore, BAT 59 .f (PDF page 838) should be removed.
243	UK	10	4	3		803	Table 10.37 is in the wrong place	Move Table 10.37 to after BAT 60	Editorial clarification
244	UK	10	5	1	2	804	Table 10.38 has no preceding BAT statement	Insert a BAT statement on energy efficiency.	Editorial clarification
245	Cefic	10	5	1	3	806	The same holds for Table 10.28: both tables do not indicate a reference oxygene concentration and one could assume that there is not distinction. However the chapter 10, "general considerations" contains a table showing the different reference oxygen level. Unless one reads the whole chapter it is not easy to get the connection between the BAT-AELs in e.g. Table 10.28 and Table 10.39 and the one at the beginning of chapter10	Add a reference in table 10.28 and 10.39 to the table showing the oxygene reference values at the beginning of chapter 10.	Avoid confusion (and a significant likelihood for mistakes) and make the whole document easier to read.

246	Cefic	10	5	1	5	807	<p>BAT67: Cefic appreciates that no new information should be considered in the BREF process. However effective Jan 1, 2016 monitoring requirements for Large Combustion Plants &gt;100 MW need to comply with a certain confidence level of the monitoring. As Cefic had expressed before the monitoring of dust of such low levels cannot be conducted in a reliable manner fulfilling the (IED Annex 5, part 3): emission monitoring for SOx, NOx and dust requires cont. measurement in ref. to the 95% confidence intervall the level of uncertainty should not exceed 30%).</p>	<p>Reconsider the monitoring requirements for low concentrations when burning gas</p>	<p>Operators just learn after installing new analyzers attempting to comply with Annex 5, part 3 that adhering to the confidence levels at low concentrations is very challenging</p> <p>In addition to its own arguments Cefic would like to refer to a request by ESWET to bring the monitoring issue to the agenda of the Art 13 meeting. This request covers comparable problem, namely the fact that several low BAT AEL levels cannot be measured in a reliable manner.</p>
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247	Cefic	10	5	1		804	BAT-AEL for process fuels in combination with other fuels for SO <sub>2</sub> , NO <sub>x</sub> and dust	Remove reference to 100% process fuels in table 10.39, 10.40, 10.42	The data provided by chemical industry covered mostly multi-fuel firing combustion plants with process fuels from chemical industry being only a part of the fuel mix used. This 100% was copied from I& S sector where the other fuel percentage is marginal and up to about 10% maximum in most cases. For SO <sub>2</sub> , only 3 of the 12 plants that have been used as reference for setting the BAT-AEL range, use 100% process fuels. All the others are mixed with other fuels from 16 % and up to 95% and in average 41%. For dust only 4 plants out of 15 plants are 100% process fuels. For NO <sub>x</sub> none of the plants that set the BAT-AEL range is 100% process fuel. Mixtures range from 37 to 84% process fuels with an average at 59%. The EIPPCB bureau accepted the Split view considering that CEFIC provided sufficient technical arguments. Chemical sector had only a very short discussion time at the final TWG meeting( compared to other sectors) as such the TWG may not have fully appreciated the arguments. Restricting Techniques and BAT-AEL ranges to pure process fuels would cause significant difficulties for operators and permitting authorities alike. Permitting authorities would have to derive emission limit values that foresee all potential fuel mixes; this will neither be practical nor does it do justice to the primary objective of making best use of process fuels.
248	UK	10	6	1	1	810	BAT 70bis: This sentence is more complex than it needs to be and the wording can vbe simplified without removing any of the BAT requirement.	Amend text to read "In order to prevent increased emissions from During the co-incineration of waste..."	Editorial clarification
249	UK	10	6	1	1	810	BAT 72: This sentence is more complex than it needs to be and the wording can vbe simplified without removing any of the BAT requirement.	Amend text to read "In order to minimise the impact on residues recycling of maximise the potential for the recycling or residues from the co-incineration of waste..."	Editorial clarification

250	CEWEP	10	6	1	4	811	BAT conclusions for the <b>coincineration of waste with coal and/or lignite - SO<sub>2</sub>, HCl, HF (BAT 76)</b> . Same comments as for BAT 21 above.	Same proposal as for BAT 21 above.	Same rationale as for BAT 21 above.
251	CEWEP	10	6	1	4	811	BAT conclusions for the <b>coincineration of waste with biomass and/or peat- SO<sub>2</sub>, HCl, HF (BAT 77)</b> . Same comments as for BAT 28 above.	Same proposal as for BAT 28 above.	Same rationale as for BAT 28 above.
252	ESWET	10	6	1	4	811	BAT conclusions for the <b>coincineration of waste with coal and/or lignite - SO<sub>2</sub>, HCl, HF (BAT 76)</b> . Same comments as for BAT 21 above.	Same proposal as for BAT 21 above.	Same rationale as for BAT 21 above.
253	ESWET	10	6	1	4	811	BAT conclusions for the <b>coincineration of waste with biomass and/or peat- SO<sub>2</sub>, HCl, HF (BAT 77)</b> . Same comments as for BAT 28 above.	Same proposal as for BAT 28 above.	Same rationale as for BAT 28 above.
254	CEWEP	10	6	1	5	811	BAT conclusions for the <b>coincineration of waste with coal and/or lignite - Dust &amp; Metals (BAT 78)</b> . Same comments as for BAT 22 above. All BATAEL ranges in Table 10.51 appear too low to be used as ELVs with available techniques.	Please ask experts, e.g. CEN TC 264 what changes have to be achieved in respect of monitoring techniques and standards to comply with the requirements of the current legislation and applicable standards if ELVs are very low. Take into account the experts recommendation.	Same rationale as for BAT 22 above.

255	CEWEP	10	6	1	5	811	<p>BAT conclusions for the <b>coincineration of waste with biomass and/or peat- - Dust &amp; Metals (BAT 79)</b> Same comments as for BAT 29 above.</p> <p>All BATAEL ranges in Table 10.52 appear too low to be used as ELVs with the techniques which are available.</p>	<p>Please ask experts, e.g. CEN TC 264 what changes have to be achieved in respect of monitoring techniques and standards to comply with the requirements of the current legislation and applicable standards if ELVs are very low. Take into account the experts recommendation.</p>	<p>As explained by ESWET in due time, i.e. during the Final meeting 1-9/6/2015 by a number of oral split views, then by ESWET written split view nr 1 (supported by CEWEP) on 22/7/2015 during the written consultation period, the uncertainty on the monitored values is too high in respect of the legislation requirements when ELVs are set at very low level. NB: uncertainty requirements are expressed as a percentage of the daily ELV. And for substances for which there is not yet a requirement in standards (e.g. because it was not required to monitor them up to now), the minimum uncertainty levels (%) are also depending on the ELV levels. This has been confirmed by INERIS institute study report nr. DRC-16-159382-06994A.</p>
256	ESWET	10	6	1	5	811	<p>BAT conclusions for the <b>coincineration of waste with coal and/or lignite - Dust &amp; Metals (BAT 78)</b>. Same comments as for BAT 22 above.</p> <p>All BATAEL ranges in Table 10.51 appear too low to be used as ELVs with available techniques.</p>	<p>Same proposal as for BAT 22 above. Please ask experts, e.g. CEN TC 264 what minimum ELV can be achieved in respect of monitoring techniques in compliance with the requirements of the current legislation and applicable standards. Modify BATAEL ranges according to their recommendations.</p>	<p>Same rationale as for BAT 22 above.</p>
257	ESWET	10	6	1	5	811	<p>BAT conclusions for the <b>coincineration of waste with biomass and/or peat- - Dust &amp; Metals (BAT 79)</b> Same comments as for BAT 29 above. All BATAEL ranges in Table 10.52 appear too low to be used as ELVs with the techniques which are available.</p>	<p>Please ask experts, e.g. CEN TC 264 what lowest ELV can be achieved in respect of monitoring techniques in compliance with the requirements of the current legislation and applicable standards. Modify BATAEL ranges according to their recommendations.</p>	<p>As explained by ESWET in due time, i.e. during the Final meeting 1-9/6/2015 by a number of oral split views, then by ESWET written split view nr 1 on 22/7/2015 during the written consultation period, the uncertainty on the monitored values is too high in respect of the legislation requirements when ELVs are set at very low level. NB: uncertainty requirements are expressed as a percentage of the daily ELV. And for substances for which there is not yet a requirement in standards (e.g. because it was not required to monitor them up to now), the minimum uncertainty levels (%) are also depending on the ELV levels. This has been confirmed by INERIS institute study report nr. DRC-16-159382-06994A.</p>

258	CEWEP	10	6	1	6	812	BAT conclusions for the <b>coincineration of waste with coal and/or lignite, biomass and/or peat -Mercury (BAT 80)</b> . Same comments as for BAT 23 and 30 above.	Same proposal as for BAT 23 and 30 above.	Same rationale as for BAT 23 and 30 above.
259	ESWET	10	6	1	6	812	BAT conclusions for the <b>coincineration of waste with coal and/or lignite, biomass and/or peat -Mercury (BAT 80)</b> . Same comments as for BAT 23 and 30 above.	Same proposal as for BAT 23 and 30 above.	Same rationale as for BAT 23 and 30 above.
260	CEWEP	10	6	1	7	812	BAT conclusions for the <b>coincineration of waste with coal and/or lignite, biomass and/or peat - PCDD/F TVOC (BAT 81)</b> Same comments as for BAT 4bis and 29 above. All BATAEL ranges in Table 10.54 appear too low to be used as ELVs with the techniques which are available	Same proposal as for BAT 4bis and 29 above. Please ask experts, e.g. CEN TC 264 what minimum ELV can be achieved in respect of monitoring techniques in compliance with the requirements of the current legislation and applicable standards. Modify BATAEL ranges according to their recommendations.	Same rationale as for BAT 4bis and 29 above.
261	ESWET	10	6	1	7	812	BAT conclusions for the <b>coincineration of waste with coal and/or lignite, biomass and/or peat - PCDD/F TVOC (BAT 81)</b> Same comments as for BAT 4bis and 29 above. All BATAEL ranges in Table 10.54 appear too low to be used as ELVs with the techniques which are available	Same proposal as for BAT 4bis and 29 above. Please ask experts, e.g. CEN TC 264 what minimum ELV can be achieved in respect of monitoring techniques in compliance with the requirements of the current legislation and applicable standards. Modify BATAEL ranges according to their recommendations.	Same rationale as for BAT 4bis and 29 above.

262	EPPSA	10	8	2		817	New row to be listed in the table	The following topics, per each reference column, should be considered in the new row:1) Technique: Dry Bottom Ash Handling System2) Description: The Dry Bottom Ash Handling System conveys the bottom ash in a dry state out of the steam generator. Ash is cooled down by ambient air, that is drawn back into the steam generator at high temperature. Heat losses are reduced (as bottom ash enthalpy, residual unburned particles and boiler radiation across throat), allowing to increase the steam generator efficiency. As a consequence, coal consumption and CO2 emissions are reduced.	
263	UK	10	8	2		817	Description of 'Process gases management system' could be clarified	Amend text to read: " <i>A system that enables <u>those</u> iron and steel process gases that can be used as fuels (e.g. blast furnace, coke oven, basic oxygen furnace gases) to be directed to the combustion plants. <u>This</u> dependsing on the availability of these fuels and on the type of combustion plants in an integrated steelworks"</i>	Editorial clarification

264	EPPSA	10	8	6		821 - 822	New row to be listed in the table	The following topics, per each reference column, should be considered in the new row:1) Technique: Dry Bottom Ash Handling System2) Description: No water is needed to cool and transport bottom ash. Bottom ash is conveyed by means of high temperature resistant mechanical conveyors and cooled in dry state by means of ambient air, naturally drawn into the steam generator by its negative pressure.	
265	Czech Republic	10				749	BAT AELs for emissions to air - proposal to introduce additional text for clarification of the relation among the levels for different averaging periods.	<i>"Where emission levels associated with the best available techniques (BAT-AELs) are given for different averaging periods, all of those BAT-AELs apply. "</i>	In GLS BAT Conclusions different formats of BAT-AELs are used. Lack of clarification in the question of applicability resulted in significant problems in permit reviews. Similar clarification as proposed is used in PP BAT Conclusions. It has been a common understanding that both averaging periods apply however our experience shows that from legal point of view it is essential to add this text.
266	EEB	10				746	Keep the sentence : "Where emission levels associated with the best available techniques (BAT-AELs) are given for different averaging periods, all of those BAT-AELs apply. "We strongly object the deletion. Keeping this sentence is absolutely needed for implementation purposes.	Keep the sentence : <b>"Where emission levels associated with the best available techniques (BAT-AELs) are given for different averaging periods, all of those BAT-AELs apply. "</b>	This provision is to be kept for implementation purposes and effectiveness of the revised BAT-C. The EEB has focussed on the BAT-AEL referred to as yearly averages and we cannot accept that competent authorities can choose to ignore these by complying with the higher / more laxist daily averaged BAT-AEL ranges instead. It has been a common understanding by TWG members that <u>both averaging periods apply</u> , we cannot accept this sudden change of approach. More clarity is always welcome when the objective is to promote harmonised implementation and prevent exploitation of vagueness on how BAT-C need to be implemented. The removal of this important statement is just serving those parties that exploit flexibility in order to downgrade environmental standards.
267	Denmark	10				739	Liquid fuel(e.g. heavy fuel and gasoil) . It is not clear from the scope if e.g. biooil is included. All BAT-conclusions only apply for heavy oil and gasoil.	Clarify	Biooil is normally used as a substitute/additive for liquied fuels and should therefore be regulated as such. The MCP directive includes biooil (gasoil and other liquid fuels)

268	EEB	10			742	<p>The definition of "new" combustion plant as it stands has far reaching flaws in terms of practical impact of the revised LCP BREF.</p>	<p>Modify by : "a combustion plant first <b>operated at the installation following the publication of these BAT conclusions</b> or a replacement of a combustion plant on the existing foundations of the installation, <b>or replacement of an installation on the same site which has a technical connection and which could have an effect on emissions and pollution following the publication of these BAT conclusions. The BAT conclusions apply from the date of the publication of these BAT conclusions</b>"</p>	<p>See split view no 3 circulated 21 October 2015. This is of fundamental importance to the EEB. The current formulation allows for potential abuses by permitting authorities and fundamentally undermines the effectiveness of the LCP BAT standards in practical terms. The proposed modification will also ensure legal consistency with the definitions of what is a new or existing plant by member states • As it stands, the standards for "new plants" will only apply effectively to combustion plants that have been permitted after the publication of the BAT conclusions i.e. not likely prior to Q2 2017 or even later if further delays for publication would occur. This provision effectively promotes the status quo in environmental performance for existing plants (in the sense of energy generation through combustion in installations above a certain threshold) which concerns roughly 98% of all coal/lignite plants for the decades to come • the cut-off date refers to when a "combustion plant" has been permitted which are to be understood as boilers i.e. "Any technical apparatus in which fuels are oxidised in order to use the heat thus generated". This would mean that the stakeholders assume that the only relevant parameter to consider in relation to differentiating the stricter BAT benchmarks ("new" plant standards) from the laxist BAT-C standards ("existing" plants) is the first permit date / and <u>complete replacement</u> date of a boiler/turbine/engine. The precise terms used in these definitions have far reaching consequences in terms of effective environmental performance. A Large Combustion Plant is much more than a boiler and environmental performance is improved by the abatement techniques or other installations at the same site with technical connection which are not themselves defined as "combustion plant" (boiler/engine/turbine). <b>Significant emission reductions are achieved without boiler/engine/turbine change e.g. in case of replacement of abatement installations such as FGD units or systems / new dust filter types which are not themselves defined as a "combustion plant" according to the currently used definition but significantly affect environmental performance of the LCP.</b> The reference to "complete replacement" also raises legal uncertainty on what is meant with this. These elements should be considered since it is the uptake of the level of performance standards that is at stake here. Whilst boiler types and age indeed</p>
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272	EEB	10					<p><b>Throughout the BAT conclusions: All footnote derogations or relaxations referring to higher values obtained for plants that are existing plants under Chapter III of the IED (whenever the footnote refers to "plants put into operation no later than 7 January 2014" and /or 'plants put into operation no later than 27 November 2003" have to be removed, since these constitute an alignment to the IED Annex V Emission Limit Values This derogation is arbitrary and not based on sound technico economic facts. It is not more than a Transitional National Plan (TNP) users reward scheme.</b></p>	<p><i>Throughout the BAT conclusions: All footnote derogations or relaxations referring to higher values that refer to "plants put into operation no later than 7 January 2014"</i>  Option 1 (preferred) : <b>DELETE.</b>  Option 2 (backup compromise):  Add to the footnotes "[...] <b>subject to prior validation of a derogation pursuant to Article 15(4) of the Industrial Emissions Directive</b>".</p>	<p><b>Same comment as comment #4.</b> The EEB is confident that NGOs of the countries wanting to make use of this derogation would be ready to accept a compromise through Art 15(4) of the IED. This should be handled case by case and not undermined through negotiations in the LCP BREF. If "consistency" is indeed sought for by the COM then it should be with the agreed procedure agreed by the legislator, the current approach is nothing else than a polluters/laggards reward system and has no place in a BAT document.</p>
273	EURACOAL	10			766 - 774	<p>EIPPCB has assessed the combustion of coal and lignite in power plants. During the final TWG meeting, members evaluated several techniques. The results of the whole process are described in Chapter 10.2.1. EURACOAL does not agree with all these results.</p>	<p>EURACOAL has proposed in split views necessary amendments. They should be integrated in Chapter 10.2.1.</p>	<p>EURACOAL has proposed numerous improvements. These are described in split views. It is important to include them in chapter 10.2.1 so that the experiences of operators are properly reflected.</p>	
274	EURELECTRIC	10			739	<p>Combustion plants benefitting from <b>IED temporary derogations</b> (article 33 to 35) should not have to comply with the BAT conclusions until the end the temporary derogation.</p>	<p>Add an explicit reference to IED articles 33, 34 and 35 temporary derogations either in the scope the BAT conclusions or in the definition of combustion plant.</p>	<p>The IED temporary derogations art. 33 (Limited Lifetime Derogation) and art. 35 (District Heating Plants) are effective respectively until end 2023 and end 2022. The IED FAQ from the Commission (<a href="http://ec.europa.eu/environment/industry/stationary/ied/faq.htm#ch3">http://ec.europa.eu/environment/industry/stationary/ied/faq.htm#ch3</a>) recognises that the IED Article 15(3) does not apply for these plants (at least for certain air pollutants); The LCP BAT conclusions should take into account these IED provisions in order to avoid useless administrative burden for plants operators and competent authority (formal obligation to justify the non applicability of LCP BAT conclusions, since the Commission IED FAQ has no legal status).</p>	

275	Euroheat & Power	10				739	Combustion plants benefitting from IED temporary derogations (article 33 to 35) should not have to comply with the BAT conclusions until the end the temporary derogation.	Add an explicit reference to IED Articles 33, 34 and 35 temporary derogations either in the scope of the BAT conclusions or in the definition of a combustion plant.	The IED temporary derogations art. 33 (Limited Lifetime Derogation) and art. 35 (District Heating Plants) are effective respectively until end 2023 and end 2022. The IED FAQ from the Commission ( <a href="http://ec.europa.eu/environment/industry/stationary/ied/faq.htm#ch3">http://ec.europa.eu/environment/industry/stationary/ied/faq.htm#ch3</a> ) recognises that the IED Article 15(3) does not apply for these plants (at least for certain air pollutants); The LCP BAT conclusions should take into account these IED provisions in order to avoid useless administrative burden for plants operators and competent authority (formal obligation to justify the non applicability of LCP BAT conclusions, since the Commission IED FAQ has no legal status).
276	France	10				xxix	Combustion plants benefitting from Limited life time derogation according to the article 33 of the directive 2010/75/EU on industrial emissions (IED) should not have to comply with the BAT conclusions until the end the temporary derogation.	These BAT conclusions do not address the following: [...] combustion plants benefitting from limited life time derogation according to the article 33 of the directive 2010/75/EU on industrial emissions.	French authorities want to avoid administrative burden for the competent authorities and for operators of combustion plants concerned by the article 33 of the IED. Combustion plants concerned must be closed at the latest the 31 December 2023, only three years after the application of the BAT-AEL of the LCP BREF (we can presume an application of the BAT-AEL in 2021). Furthermore, The European commission has already acknowledged that the IED Article 15(3) does not apply for these plants for certain air pollutants (see IED FAQ : <a href="http://ec.europa.eu/environment/industry/stationary/ied/faq.htm#ch3">http://ec.europa.eu/environment/industry/stationary/ied/faq.htm#ch3</a> ). However the interpretation made in the FAQ is incorrect. The article 33 of the IED avoids only the application of the ELV introduced in the article 30 of the IED and doesn't avoid the application of the article 15(3) : <i>"During the period from 1 January 2016 to 31 December 2023, <b>combustion plants may be exempted from compliance with the emission limit values referred to in Article 30(2) and with the rates of desulphurisation referred to in Article 31, where applicable, and from their inclusion in the transitional national plan referred to in Article 32 provided that the following conditions are fulfilled</b>" (article 33(1) of the IED)</i>

277	Poland	10				739	Combustion plants that use special provisions set in art 32 to 35 of IED should be temporarily excluded from obligation to keep BATAELs until the end the IED's derogation.	Add an explicit reference to IED temporary derogations, f.e. "BATAELs set in these BAT conclusions do not apply to combustion plants, benefiting from derogation mechanisms, set in article 32 to 35 of IED, until a given derogation ends.	The IED derogations set in art. 33 (Limited Lifetime) and art. 35 (District Heating) will be in force in time, when BATc will enter into force. This will lead to legal problem, which also has been recognized by the EC (FAQ). In this situation, implementing decision will limit the acquired rights laid down in the Directive. Moreover, reference only to those substances for which the derogation was granted is not enough. In practice, environmental protection equipment have influence on all other emissions as co-benefit. For example, the installation that uses the derogation for SO2 has more time to build a new, efficient FGD. And the entry into force BATAELs for HCl will shorten the time specified in the Directive. Same goes for derogations for dust and the requirement to keep mercury levels and many more. Introduction of proposed provision will make no influence to IED implementation, but will significantly help are reduce unnecessary administrative burdens.
278	EURELECTRIC	10				741	The definition of "combustion plant" in the LCP BREF should be consistent with the data collection used to derive BAT-AEL. The <b>aggregation rule</b> should be limited to the case where two or more units physically share one flue-gas release point (and not used for "virtually" aggregated units with no physical connection, which is an implementation issue).	The definition of combustion plant should be amended as it was in D1, namely "Any technical apparatus in which fuels are oxidised in order to use the heat thus generated. For the purposes of these BAT conclusions, where the flue-gases of two or more such apparatuses are mixed before discharge, the combination formed by such apparatuses shall be considered as a single combustion plant. For calculating the total rated thermal input of such a combination, the capacities of all combustion units concerned, which have a rated thermal input of at least 15 MW, shall be added."	The legitimacy of the LCP BREF is based on the comprehensive data collection, which is based on a clear definition of combustion plant as "having only one flue-gas release point where air emissions are monitored". Hence the concept of "virtual stack" is not a technical concept and has nothing to do in the LCP BREF. It was introduced very late in the process (i.e. at the Final Meeting in June 2015) and without a proper assessment of the implications of such a important change. Indeed it would make obsolete the data analysis carried out by the EIPPCB in order to derive BAT-AEL as a function of boiler capacity (since the boiler capacity would be significantly different with the aggregation rule). The BAT applicable to units that do not share a common stack but "could" should be considered as an implementation issue of the LCP BREF and left to Member States.

279	Euroheat & Power	10						<p>The definition of the combustion plant should be changed. The aggregation rule should be applied only in the cases where the flue-gases of two or more units have only one flue-gas release point.</p>	<p>Combustion plant definition to be modified: <i>"Any technical apparatus in which fuels are oxidised in order to use the heat thus generated. For the purposes of these BAT conclusions, a combination formed of two or more separate combustion plants where the flue-gases are discharged through a common stack is considered a single combustion plant. For calculating the total rated thermal input of such a combination, the capacities of all individual plants concerned, which have a rated thermal input of at least 15 MW, shall be added together."</i></p>	<p>Data is collected at plant level with a plant being defined in the questionnaire as 'having only one flue-gas release point where air emissions are monitored.' 'Combustion plant' definition for the purpose of BAT conclusions should correspond the used determination of the reference plant. Only then the link between BAT conclusions and the techniques and emissions of the actual plants are maintained. The combustion plant definition in draft will result in unjustified BAT-AEL's for boilers aggregated actually or virtually in the same stack.</p>
280	Euroheat & Power	10				741	<p>Total rated power of a plant cannot exceed the available output capacity.</p>	<p>Definition of Combustion Plant[...] For calculating the total rated thermal input of such a combination, the capacities of all individual combustion plants concerned, which have a rated thermal input of at least 15 MW, shall be added together, <u>up to a power lower than or equal to available output power capacity of the plant, calculated as the sum of useful energy output and losses, including deliberate cooling.</u></p>	<p>The purpose of a plant is to provide a certain useful power. Presence of necessary spare capacity for emergency use, in order to secure that power output must not contribute to a plants total rated power for plants not intended nor designed for the simultaneous operation of the spare capacity and the capacity it replaces. Consideration must be paid to the fact that the power of a plant can be restricted not only by its installed capacity but also by technical restrictions in output capacity.</p>	

281	Euroheat & Power	10					769 There is an instruction given at the 771 end of page 747 "When a part of a 772 combustion plant discharging flue- 775 gases through one or more separate 777 ducts within a common stack is 778 operated less than 1500 h/yr, that 781 part of the plant may be considered 782 separately for the purpose of these 783 BAT conclusions." In order to make 784 this work as intended, the word 786 "plants" needs to be substituted by 787 the word "units" in relevant footnotes 789 to the BAT-AEL tables. 795	For clarification, substitute all text "plants operated <" by "units operated <" in all the BAT-AEL tables in chapter 10. For example table 10.15 footnotes 2 and 3.	The instruction at the end of page 747 refers to a part of a plant, which must be one or more units. In order to make the reference "for the purpose of these BAT conclusions" viable, the footnotes intended to be activated by the instruction on page 747 must refer to units, not to entire plants.
282	EURELECTRIC	10					Include in BAT Conclusions special BAT AELs concerning electrically isolated islands (SIS/MIS), wherever applicable.	Include in BAT Conclusions special BAT AELs concerning electrically isolated islands (SIS/MIS), wherever applicable.	At the Kick-off meeting of the TWG for the revision of LCP BREF , (KOM report, section 3.1 "General and common issues") it was decided that: "the review assessment will consider local conditions (e.g. temperature, humidity, small isolated systems)". However, even though the information concerning SIS, which has been provided by both the interested MSs (i.e. MSs which have SIS within their territory, such as Greece) and the industry, including the manufacturers, was extensive enough, including reference plants, as well as technical and economic information and opinions, it was not taken into account. The Final TWG meeting conclusions, do not distinguish between plants located in mainland and plants being part of a SIS/MIS, ignoring the specificities of remote islands (e.g. infrastructural issues, waste management issues, space limitations, sharp electricity demand variations). Therefore, the above mentioned decision of the TWG was violated.

283	Greece	10						Include in BAT Conclusions special BAT AELs concerning electrically isolated islands (SIS/MIS), wherever applicable.	Include in BAT Conclusions special BAT AELs concerning electrically isolated islands (SIS/MIS), wherever applicable.	At the Kick-off meeting of the TWG for the revision of LCP BREF , (KOM report, section 3.1 “General and common issues”) it was decided that: “the review assessment will consider local conditions (e.g. temperature, humidity, small isolated systems)”. However, even though the information concerning SIS, which has been provided by both the interested MSs (i.e. MSs which have SIS within their territory, such as Greece) and the industry, including the manufacturers, was extensive enough, including reference plants, as well as technical and economic information and opinions, it was not taken into account. The Final TWG meeting conclusions, do not distinguish between plants located in mainland and plants being part of a SIS/MIS, ignoring the specificities of remote islands (e.g. infrastructural issues, waste management issues, space limitations, sharp electricity demand variations). Therefore, the above mentioned decision of the TWG was violated.
284	France	10						During the working groups with the EIPPCB, the specific case of these plants could not be exposed. The EIPPCB did not take into account information from combustion plants that do not meet the emission limit values of chapter III of IED. The EIPPCB also considered that the operators of the combustion plants located in small isolated systems can use the derogation in Article 15 (4) of IED. However, the derogation 15(4) does not secure investments made to comply with the IED. It also causes an administrative burden for the competent authorities with instructions of derogations from BAT-AEL, while data about the plants operated by Albioma were not taken into account when drafting the BAT conclusions.	To exclude combustion plants firing coal and bagasse operated in small isolated systems from the LCP BREF.	Some of power plants firing coal and bagasse located in the overseas departments (La Réunion, Martinique and Guadeloupe) are also used to provide heat to the sugar industry during sugar campaign. Because of their location in small isolated systems, the provisions of the chapter III of the IED will be applicable from 1 January 2020 . According to the operator, the BAT-AEL on NOx for the combustion of bagasse is not achievable with their burner technology and the use of a denitrification technique is not possible for technical and economic reasons.

285	Euroheat & Power	10				767 774 779 784 787 791 796 804	CHP plants fulfilling the requirements for high-efficiency cogeneration under Directive 2012/27/EU on energy efficiency should be considered as in compliance with BAT	Euroheat & Power proposal for BAT 18, BAT 25, BAT 31, BAT 35, BAT 40, BAT 44, BAT 51, BAT 64: Include a footnote at the BAT-AEEL tables: "CHP plants fulfilling the requirements for high-efficient cogeneration under Directive 2012/27/EU on energy efficiency are considered as in compliance with BAT."	We would like you to take into consideration the comments relevant to this issue as made by the Euroheat & Power on 1. draft of LCP BREF, Background paper and BAT-Conclusions draft and sent ahead of the final meeting to the EIPPCB (and uploaded to BATIS). Euroheat & Power welcomes the changes made to the respective chapter on energy efficiency for Combined Heat and Power (CHP) plants negotiated so far within the written procedure (e.g. as in the slides of 77 – footnote 7, 137 – footnote 12, 200 – footnote 6, 269 – footnote 5, 336 – footnote 5, 337 – footnote 2, 377 – footnote 5). Nevertheless we believe the duplicities in EU legal acts need to be avoided whenever possible. Hence we suggest an amendment by which the CHP plants should be considered as complying with BAT(-AEELs) if it is demonstrated that a CHP plant is fulfilling requirements for high-efficient cogeneration within Directive 2012/27/EU on energy efficiency. This directive provides sufficiently robust scheme for calculation of effectiveness of cogeneration plants, even with periodical adjustment of harmonised reference values etc. This proposal refers to EU legislation, namely the Directive 2012/27/EU on energy efficiency. This proposal is based on the following information already made available to the EIPPCB at the time of drafting the conclusions on BAT for the BREF or has been provided within the commenting period corresponding to such a draft: Euroheat & Power comments on the 1. draft of the LCP BREF BAT Conclusions for the Final Meeting (09/2013) Euroheat & Power comments on Background paper and BAT-Conclusions draft and sent ahead of the final meeting Euroheat & Power comments on BAT-Conclusions draft and sent after the final meeting (documents available in BATIS).
286	Sweden	10				746	Headline "Emission levels associated with the best available techniques (BAT-AELs)" is inconsistent with the content of this paragraph.	Change headline to "Exemptions from emission levels associated with the best available techniques (BAT-AELs)".	Clarity
287	Euroheat & Power	10				746	Headline "Emission levels associated with the best available techniques (BAT-AELs)" is inconsistent with the content of this paragraph.	Change headline to "Exemptions from emission levels associated with the best available techniques (BAT-AELs)".	Clarity

288	Sweden	10				746	Liquid-fuel-fired and gas-fired turbines and engines for emergency use operated less than 500 h/yr are exempted from BAT-AELs when such use is not compatible with the use of BAT, but boilers sharing the same circumstances are not included in this exemption. This is inconsistent.	Change the text in "Emission levels associated with the best available techniques" to also include boilers: The BAT-AELs set out in these BAT conclusions may not apply to liquid-fuel-fired and gas fired turbines, engines and boilers for emergency use operated less than 500 h/yr, when such emergency use is not compatible with the use of BAT.	Applying these BAT-AELs to new plants running <500 h/year violates the instructions of the BREF guidance document 2012/119/EU, which under the section 3.3 Individual BAT conclusions with associated environmental performance levels states that "An environmental performance level associated with BAT will be included where there is a sound basis for doing so. This will be done based on the information exchanged by the TWG [...]." The BAT-AELs defined for NOx can only be achieved with the use of SCR or SNCR. The information exchanged by the TWG shows that neither SCR nor SNCR is applicable to plants running <500 h/year, as evident by the applicability of techniques defined under BAT 26, 32 and 46.
289	Euroheat & Power	10				746	Liquid-fuel-fired and gas-fired turbines and engines for emergency use operated less than 500 h/yr are exempted from BAT-AELs when such use is not compatible with the use of BAT, but boilers sharing the same circumstances are not included in this exemption. This is inconsistent.	Change the text in "Emission levels associated with the best available techniques" to also include boilers: The BAT-AELs set out in these BAT conclusions may not apply to liquid-fuel-fired and gas fired turbines, engines and boilers for emergency use operated less than 500 h/yr, when such emergency use is not compatible with the use of BAT.	Applying these BAT-AELs to new plants running <500 h/year violates the instructions of the BREF guidance document 2012/119/EU, which under the section 3.3 Individual BAT conclusions with associated environmental performance levels states that "An environmental performance level associated with BAT will be included where there is a sound basis for doing so. This will be done based on the information exchanged by the TWG [...]." The BAT-AELs defined for NOx can only be achieved with the use of SCR or SNCR. The information exchanged by the TWG shows that neither SCR nor SNCR is applicable to plants running <500 h/year, as evident by the applicability of techniques defined under BAT 28, 32 and 46.
290	UK	10				739	Scope: 3rd bullet point. The LCP BRef should not include BAT conclusions for the co-incineration of hazardous waste, these should be included in the Incineration BREF. The LCP BRef should only consider waste defined in Art 3(31)(b)	Delete 'hazardous waste from scope'.	The definition of waste and the cross over between 2 BRefs is complex and open to confusion. It would be clearer if the co-incineration of hazardous waste was dealt with by one BRef alone, any combustion AELs can be extracted from the LCP BRef. The complexity of the issue is set out in the diagram produced by the Swedish delegation in 2015.

291	Sweden	10				739 - 740	Exclude from this LCP BAT Waste co-incineration plants burning hazardous waste less than 40% percent.	This split view proposes to include all burning of hazardous waste in co-incineration plants to the WI BREF and to exclude burning of hazardous waste in co-incinerations plants in the LCP BREF. Proposal A; Exclude from Scope of the BREF LCP all co-incinerations plants burning hazardous waste irrespective of percentage of hazardous waste. Proposal B; Include to Scope of the BREF WI co-incinerations plants burning hazardous waste.	Argument A; Some activities under point 5.2 (b) of Annex II IED will not be covered by a BREF as the Scope in the WI and LCP BREFs are defined. Argument B; Article 46 (2) IED with reference to Annex VI part 4 IED for emissions from co-incineration less than 40 % hazardous waste and part 3 for emissions from co-incineration more than 40 % hazardous waste.
292	UK	10				741	Definitions: The definitions for "Combustion plant" and "Combustion unit" set up circular arguments.	Amend "Combustion Unit" to read " <i>Individual technical apparatus in which fuels are oxidised in order to use the heat thus generated</i> ". Remove this same sentence from the definition of "Combustion plant", and replace "plants" with "units" on the 3 occasions it appears in the definition. Similarly, replace "plant" with "unit" in the definition of "Boiler".	Legal clarity
293	UK	10				742	Definitions: The text for 'Post combustion plant' is a description of the technique and not a definition.	Move this text to the section 10.8	Editorial clarification
294	UK	10				745	Acronyms: PEMS not needed in Acronyms as it is already in the table of Definitions	Delete PEMS	Editorial clarification
295	Belgium	10				LCP Final Draft_062016.pdf from BATIS	Base BAT-AEL on actual technical and economic arguments.	Remove footnotes that provide derogations referring to "plants put into operation no later than 7 January 2014".	Footnotes that provide derogations on BAT-AEL while referring to plants put into operation no later than 7 January 2014, are adjusted to the existing regulations on LCPs in the IED (Annex V). All BAT-AEL, including derogations in footnotes, should be based on actual technical and economic arguments. The approach followed in this BREF undermines the entire BREF process.

296	EEB	10				746 provide a possible definition of 'emergency use'	<b>Add: "Emergency use is defined as a state of the power system that is not normal in accordance with the EU Network Code on Operational Security"</b>	The relaxations are purely arbitrary and not backed up by any technical (and not even economic) facts. It constitutes a sidelining of the agreed derogation procedure foreseen by the IED pursuant to Article 15(4) where the (dis)proportionality of costs compared to the benefits claims for meeting a certain level of emissions is properly weighted by the competent authority given the specific conditions for the installation concerned and subject to public participation. These upfront relaxations based on limited operating hours for existing plants is in our view a distortion of competition in the liberalised energy market. Special treatment should not apply to power generation operating in the liberalised wholesale electricity and balancing markets. Any derogation should be limited to out-of-market emergency conditions. At times of peak energy demand when renewable energy sources are not (sufficiently) available, air quality is more likely to be poor. The derogations / relaxations will create the perverse situation of rewarding the worst performing plants (with exemptions from BAT performance) the Industrial Emissions Directive is trying to avoid (more rationale is provided in the Briefing provided by RAP/EEB to the comments on the Background paper submitted to BATIS 21/05/2015)
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297	FEAD	10				739 - 822	To assess what minimum ELV can be achieved in respect of monitoring techniques in compliance with the requirements of the current legislation and applicable standards.	To check feasibility of ELVs equalling BAT-AELs by monitoring experts, e.g. CEN TC 264 , in order to assess what minimum ELV can be achieved in respect of monitoring techniques in compliance with the requirements of the current legislation and applicable standards. The aim should be to avoid that BAT-AEL values in the proposed LCP BREF (and in any other BREF, e.g. WI and WT) are too low to be used as ELVs in respect of the performances of the available monitoring techniques. Hence, BAT-AEL ranges should be adjusted according to the recommendations from the experts. At a minimum, a disclaimer must be added into the BAT Conclusions indicating that some BAT-AEL values cannot be used as ELVs.	See the INERIS institute study report nr. DRC-16-159382-06994A. The conclusions derived from the study should also contribute to the improvement of other ongoing BREFs such as the Waste Treatment and Waste Incineration.
298	Euroheat & Power	10					Emissions limit values below levels possible to calibrate	Ask the relevant CEN Technical Committee to comment on the availability and suitability of equipment, systems and methods to measure, in compliance with the CEN standards, emissions within the range of the proposed BAT-AELs. Automated measuring systems (AMS), data acquisition and handling systems (DAHS) and standard reference methods (SRM) must be checked in order to cover continuous monitoring and periodic measurements.	Rationale is elaborated in the split views 11.13, 12.81 and 15.1

299	FuelsEurope	10				746	Despite of the fact that setting ELVs (based on BAT-AELs) and prescribing compliance check through appropriate monitoring requirements in permits are IED related implementation matters, it is of utmost importance that the Member States competent authorities are explicitly informed - via the inclusion of a specific provision in those BAT conclusions - of the need to adequately select the ELVs after a feasibility assessment has been performed with the support of monitoring experts.	After the sentence " <i>The monitoring associated with the BAT-AELs for emissions to air is given in BAT 3 ter.</i> " insert " <b>A feasibility assessment, including consideration of measurement uncertainties, may be appropriate before setting the emission limit values that ensures that, under normal operating conditions, emissions do not exceed the emission levels associated with the best available techniques as laid down in this Decision.</b> "	In the split views assessment dated 22/2/2016 (pp. 111-113/255) it is stated that : " <i>The split view refers to the use of BAT-AELs for setting ELVs and to the consideration of measurement uncertainties, which are implementation and compliance issues going beyond the remit of the LCP TWG.</i> " Since compliance issues are implementation matters for Member States competent authorities to deal with at the time they have to apply the IED article 15(3) which explicitly mandates to set ELVs within the BAT-AELs ranges, it is of utmost importance that the consideration of measurement uncertainties hence the selection of an adequate value for monitoring purposes (since not all values are a priori suitable in all circumstances) are brought to their attention in the relevant BAT conclusions.
300	ETN	11	6	1	7	856	Table 10.27 AELs cannot be achieved if higher turbine temperatures are implemented. Also supporting comment No. 9	improving the materials and cooling to enable turbine inlet temperatures of 1500 °C for frame-type gas turbines and 1700 °C for aeroderivative gas turbines to be achieved; Please, add: this will also increase formation of NOx in parallel. In that case the BAT-AELs of gas turbines have to be increased accordingly.	Future changes to material and cooling methods to increase turbine inlet temperature to 1700 C, will improve efficiency but will increase thermal NOx formation rate
301	EU Turbines	11	6	1	7	856	Table 10.27 AELs cannot be achieved if higher turbine temperatures are implemented. Also supporting comment No. 7	Improving the materials and cooling to enable turbine inlet temperatures of 1500 °C for frame-type gas turbines and 1700 °C for aeroderivative gas turbines to be achieved; Please, add: this will also increase formation of NOx in parallel. In that case the BAT-AELs of gas turbines have to be increased accordingly.	Future changes to material and cooling methods to increase turbine inlet temperature to 1700 C, will improve efficiency but will increase thermal NOx formation rate

302	MARCOGAZ	11	6	1	7	856	First bullet point: Increase of turbine inlet temperature can increase efficiency, but will also increase formation of NOx in parallel. In that case the BAT-AELs of gas turbines have to be increased accordingly.		Higher temperatures effect in an increase of the formation of thermal NOx. Consequently BAT-AELs have to be increased accordingly.
303	EURACOAL	12				860	EIPPCB reports: "At the final TWG meeting in June 2015, a high degree of consensus was reached on most of these BAT conclusions. However, 89 dissenting views were expressed by different members of the TWG." This statement does not reflect the process followed. After the TWG meeting, it was necessary to hold a webinar and afterwards any remaining comments were given in writing.	This paragraph should be amended: "At the final TWG meeting in June 2015, a <u>high</u> degree of consensus was reached on most of these BAT conclusions. However, <u>some required long and difficult negotiations, and others resulted in no compromise. Ultimately, 89 dissenting views (including numerous proposals)</u> were expressed by different members of the TWG."	It must be understood that the result of the BREF LCP process was determined by a small number of TWG members who actively voted against BAT-AELs or who abstained. In each case, all other members were then assumed to support the BAT-AEL under consideration, even though they never actually voted. It is unknown how many members have expertise on particular BAT-AELs, but it is clear that votes against BAT-AELs came from those with political interests rather than technical expertise. The summary paragraph on dissenting views does not reflect that EURACOAL alone has dissenting views in 8 split views and makes 30 suggestions for improving the draft.
304	EURACOAL	12				862	Table 12.2, N° 8-13: Dissenting view to BAT 19 : EIPPCB has only accepted EURACOAL's proposal to amend the upper end of the range.	An additional line for the EURACOAL dissenting view on NOx should be added after line N° 12It should be added in line N° 12, (new), column 1: "12.1" It should be added in line N° 12 (new), column 2: "BAT 19 Table 10.3" It should be added in line N° 12 (new), column 3: "The current footnote 8 in chapter 10.2.1.3, table 10.3, doesn't reflect sufficiently the missing knowledge on long-term operation of SCR in lignite power plants" It should be added in line N° 12 (new), column 4: "EURACOAL" It should be added in line N° 12 (new), column 5: "footnote 8 should be deleted"	None of the reference lignite-fired power plants was designed with <b>SCR</b> and none operates with SCR. At present, this technology should be considered as an emerging technique for lignite-fired boilers

305	EURACOAL	12			862	<p>Table 12.2, N° 8-13: Dissenting view to BAT 19: EIPPCB does not utilize the proposal of EURACOAL for amending the upper end of the range of <b>NOx</b> in existing coal-fired PC boiler (&gt;300 MWth)</p>	<p>An additional line for the EURACOAL dissenting view on NOx should be added after line N° 11. It should be in line N° 11 (new), column 1: "11.1" It should be added in line N° 11 (new), column 2: "BAT 19 Table 10.3" It should be added in line N° 11 (new), column 3: "Existing coal-fired PC boiler (&gt;300 MWth): The higher end of the BAT-AEL range can be as high as 180 mg/Nm<sup>3</sup> in the case of existing plants already applying secondary abatement techniques for NOx reduction in the case where limitations exist for further retrofitting for technical and economic reasons." It should be added in line N° 11 (new), column 4: "EURACOAL" It should be added in line N° 11 (new), column 5: "180 mg/Nm<sup>3</sup>"</p>	<p>Only 20% of the reference power plants emit on average <b>yearly NOx</b> of less than 150 mg/Nm<sup>3</sup>. The results of the data evaluation do not justify yearly average BAT-AEL of less than 180 mg/Nm<sup>3</sup>. In fact, the emission limit of the IED is confirmed as BAT-AEL. The BAT AEL for existing coal plant &gt;300 MWth for NOx has been reduced from 180 to 150 mg/Nm<sup>3</sup> which is not achievable for primary techniques with SNCR. This BAT technology option would possibly therefore be precluded. For some power plants, it could be feasible for SNCR, in combination with other measures, to deliver 180 mg/Nm<sup>3</sup> performance, but 150 mg/Nm<sup>3</sup> is not feasible under any circumstances with SNCR.</p>
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306	EURACOAL	12			862	<p>Table 12.2, N° 13: During the final TWG meeting it was decided to handle <b>CO</b> with the identified BAT-AEL as an indicative level. This should be the general approach. Following this general decision at the beginning of the final TWG meeting, the assessment of the various techniques for reducing CO emissions were not subsequently discussed. These undiscussed levels are adopted as indicative emission levels.</p>	<p>An additional line for the EURACOAL dissenting view on CO should be added after line N° 13:It should be added in line N° 13 (new), column 1: "13.1" It should be added in line N° 13 (new), column 2: "Table CO indicative emission level" A sub comment should be added in line N° 13 (new), column 3: "The CO indicative emission level was not discussed in the Final TWG meeting. Even several reference power plants are not able to achieve these low indicative emission levels" It should be added in line N° 13 (new), column 4: "EURACOAL" It should be added in line N° 13 (new), column 5: "Remove table with CO indicative emission levels"</p>	<p>These indicative levels should have been discussed at the Final TWG meeting. Since that did not happen, their usage is questionable.</p>
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307	EURACOAL	12			864	Table 12.2, N° 17: Dissenting view to BAT 21 table 10.6, <b>HCl</b> : EIPPCB has accepted only an additional proposal for limiting the upper end of the BAT-AEL of HCl at 60 mg/m <sup>3</sup> . The proposal for plants using solid fuels with a chlorine content of more than 500 mg/kg (dry matter) is missing.	An additional line for the EURACOAL dissenting view on CO should be added after line N° 17: It should be added in line N° 17 (new), column 1: "17.1" It should be added in line N° 17 (new), column 2: "BAT 22 Table 10.7" It should be added in line N° 17 (new), column 3: "Add the following footnote to HCl BAT-AEL ranges of Table 10.6: 'In the case of FBC boilers applying the dry sorption technique for SO <sub>2</sub> reduction, the higher end of the range is 120 mg/Nm <sup>3</sup> for plants using lignite and coal with a chlorine content of more than 500 mg/kg (dry matter)'" It should be added in line N° 17 (new), column 4: "EURACOAL" It should be added in line N° 17 (new), column 5: "120 mg/Nm <sup>3</sup> "	For existing fluidised bed boilers, with a dry desulphurisation system, the proposed HCl BAT-AELs are not achievable. Retrofitting a wet flue gas cleaning step at existing FBC boilers simply to reduce HCl emissions is not proportionate. An explicit differentiation should be made between coal and lignite fluidised bed combustion boilers with dry sorption techniques. Typically there is no space for additional end-of-pipe measures for reducing HCl emissions with wet abatement techniques in existing FBC power plants using dry sorption techniques in combination with ESP or a bag filter.
308	EURACOAL	12			864	Table 12.2, N° 18: Dissenting view to BAT 22 table 10.7, <b>dust</b> : EIPPCB takes up only one of sixteen postulations for dust BAT-AEL. The decision of the TWG is very ambitious. Since numerous coal- and lignite-fired power plants are going to have difficulties with this BAT-AEL, it is necessary to determine a more realistic range.	It should be amended in line N° 18, column 3: "Change the higher end of the yearly dust BAT-AEL range for existing lignite-fired <u>power plants</u> of ≥ 1000 MWth put into operation no later than 7 January 2014"	The newer power plants were designed to comply with emission limits of the IED (new units). Dust emissions are allowed up to 10 mg/Nm <sup>3</sup> as a monthly average. Usually this emission limit is feasible. Due to specific fuel and operational conditions and/or before maintenance, it is required to apply the higher level also on newer units. These requirements are not sufficiently taken into account in the BAT.

309	EURACOAL	12				864	Table 12.2, N° 18: Dissenting view to BAT 22 table 10.7, <b>dust</b> : EIPPCB takes up only one of sixteen postulations for dust BAT-AEL. The decision of the TWG is very ambitious. Since numerous coal- and lignite-fired power plants are going to have difficulties with this BAT-AEL, it is necessary to determine a more realistic range.	An additional line for the EURACOAL dissenting view on dust should be added after line N° 18:It should be added in line N° 18(new), column 1: "18.1". It should be added in line N° 18 (new), column 2:"BAT 22 Table 10.7" It should be added in line N° 18 (new), column 3:"Change the lower end of the yearly dust BAT-AEL range for existing power plants of $\geq 1000$ MWth". It should be added in line N° 18 (new), column 4:"EURACOAL". It should be added in line N° 18 (new), column 5: "5 mg/Nm <sup>3</sup> "	Values lower than 5 mg/Nm <sup>3</sup> could be achieved as max average by plants fitted with wet FGD in a tail-end position. Wet FGD indeed reduces dust emissions when applied in combustion plants. However, wet FGD is a technique that is applied in the context of SO <sub>2</sub> emissions reduction and not dust emissions reduction. In view of the above, in cases where other SO <sub>2</sub> removal techniques are applied (e.g. DSI, which may be applied for economic feasibility reasons in existing plants), then the lower end of the range of dust BAT AELs proposed in the revised D1 may not be achievable.
310	EURACOAL	12				864	Table 12.2, N° 18: Dissenting view to BAT 22 table 10.7, <b>dust</b> :EIPPCB takes up only one of sixteen postulations for dust BAT-AEL. The decision of the TWG is very ambitious. Since numerous coal- and lignite-fired power plants are going to have difficulties with this BAT-AEL, it is necessary to determine a more realistic range.	An additional line for the EURACOAL dissenting view on dust should be added after line N° 18:It should be added in line N° 18(new), column 1: "18.3" It should be added in line N° 18 (new), column 2: "BAT 22 Table 10.7" It should be added in line N° 18 (new), column 3: "Change the lower end of the daily dust BAT-AEL range for existing power plants of $\geq 1000$ MWth" It should be added in line N° 18 (new), column 4:"EURACOAL" It should be added in line N° 18 (new), column 5: "10 mg/Nm <sup>3</sup> "	Values lower than 5 mg/Nm <sup>3</sup> could be achieved as max daily averages by plants fitted with wet FGD (BAT 22) in a tail-end position. Best performances, lower than 10 mg/Nm <sup>3</sup> on short term basis could be achieved by plants fitted with a combination of the most advanced secondary techniques, with preliminary filter and tail-end wet FGD system (BAT 22). Wet FGD indeed reduces dust emissions when applied in combustion plants. However, wet FGD is a technique that is applied in the context of SO <sub>2</sub> emissions reduction and not dust emissions reduction. In view of the above, in cases where other SO <sub>2</sub> removal techniques are applied (e.g. DSI, which may be applied for economic feasibility reasons in existing plants), then the upper end of the range of dust BAT AELs proposed in the D1 may not be achievable.

311	EURACOAL	12				864	Table 12.2, N° 18: Dissenting view to BAT 22 table 10.7, <b>dust</b> :EIPPCB takes up only one of sixteen postulations for dust BAT-AEL. The decision of the TWG is very ambitious. Since numerous coal- and lignite-fired power plants are going to have difficulties with this BAT-AEL, it is necessary to determine a more realistic range.	An additional line for the EURACOAL dissenting view on dust should be added after line N° 18:It should be added in line N° 18(new), column 1: "18.4"It should be added in line N° 18 (new), column 2: "BAT 22 Table 10.7"It should be added in line N° 18 (new), column 3: "Change the higher end of the <b>yearly</b> dust BAT-AEL range for existing power plants of < <b>100 MWth</b> " It should be added in line N° 18 (new), column 4:"EURACOAL"It should be added in line N° 18 (new), column 5: "20 mg/Nm <sup>3</sup> "	The EIPPCB assessment and the discussion during the TWG meeting were based on data from selected reference power plants. Nearly half of units have average dust emissions of 18 mg/Nm <sup>3</sup> or higher per year. The assessment with a derivation of this upper value cannot be correct. The upper end of the range should be raised on 20 mg/Nm <sup>3</sup> as a yearly average.
312	EURACOAL	12				864	Table 12.2, N° 18: Dissenting view to BAT 22 table 10.7, <b>dust</b> :EIPPCB takes up only one of sixteen postulations for dust BAT-AEL. The decision of the TWG is very ambitious. Since numerous coal- and lignite-fired power plants are going to have difficulties with this BAT-AEL, it is necessary to determine a more realistic range.	An additional line for the EURACOAL dissenting view on dust should be added after line N° 18:It should be added in line N° 18(new), column 1: "18.5"It should be added in line N° 18 (new), column 2: "BAT 22 Table 10.7"It should be added in line N° 18 (new), column 3: "Change the lower end of the yearly dust BAT-AEL range for existing power plants of < 100 MWth" It should be added in line N° 18 (new), column 4:"EURACOAL"It should be added in line N° 18 (new), column 5: "10 mg/Nm <sup>3</sup> "	Generally small units are not equipped with a wet FGD. Even units with bag filter system show yearly averages for dust up to 18.4 mg/Nm <sup>3</sup> . That is why the lower end of the range should be raised to 10 mg/Nm <sup>3</sup> as a yearly average.

313	EURACOAL	12				864	Table 12.2, N° 18: Dissenting view to BAT 22 table 10.7, <b>dust</b> :EIPPCB takes up only one of sixteen postulations for dust BAT-AEL. The decision of the TWG is very ambitious. Since numerous coal- and lignite-fired power plants are going to have difficulties with this BAT-AEL, it is necessary to determine a more realistic range.	An additional line for the EURACOAL dissenting view on dust should be added after line N° 18:It should be added in line N° 18(new), column 1: "18.6" It should be added in line N° 18 (new), column 2: "BAT 22 Table 10.7" It should be added in line N°18 (new), column 3: "Change the lower end of the daily dust BAT-AEL range for existing power plants of < 100 MWth" It should be added in line N° 18 (new), column 4:"EURACOAL" It should be added in line N° 18 (new), column 5: "15 mg/Nm <sup>3</sup> "	Generally, small units are not equipped with a wet FGD. Only 20% of the reference power plants (3 units) achieve dust emissions of less than 4 mg/Nm <sup>3</sup> as a yearly average. Even in units with a bag filter system, dust emissions fluctuate by around 50% of the annual average value. That is why the lower end of the range should be raised to 15 mg/Nm <sup>3</sup> as a daily average.
314	EURACOAL	12				864	Table 12.2, N° 18: Dissenting view to BAT 22 table 10.7, <b>dust</b> :EIPPCB takes up only one of sixteen postulations for dust BAT-AEL. The decision of the TWG is very ambitious. Since numerous coal- and lignite-fired power plants are going to have difficulties with this BAT-AEL, it is necessary to determine a more realistic range.	An additional line for the EURACOAL dissenting view on dust should be added after line N° 18:It should be added in line N° 18(new), column 1: "18.7" It should be added in line N° 18 (new), column 2: "BAT 22 Table 10.7" It should be added in line N° 18 (new), column 3: "Change the higher end of the yearly dust BAT-AEL range for existing power plants of <b>100-300 MWth</b> " It should be added in line N° 18 (new), column 4:"EURACOAL" It should be added in line N° 18 (new), column 5: "20 mg/Nm <sup>3</sup> "	The EIPPCB assessment and the discussion during the TWG meeting were based on data from selected reference power plants. Nearly half of the units have average dust emissions of 20 mg/Nm <sup>3</sup> or higher per year. The assessment with a derivation of this upper value cannot be correct. The upper end of the range should be raised to 20 mg/Nm <sup>3</sup> as a yearly average.

315	EURACOAL	12				864	Table 12.2, N° 18: Dissenting view to BAT 22 table 10.7, <b>dust</b> :EIPPCB takes up only one of sixteen postulations for dust BAT-AEL. The decision of the TWG is very ambitious. Since numerous coal- and lignite-fired power plants are going to have difficulties with this BAT-AEL, it is necessary to determine a more realistic range.	An additional line for the EURACOAL dissenting view on dust should be added after line N° 18:It should be added in line N° 18(new), column 1: "18.8"It should be added in line N° 18 (new), column 2: "BAT 22 Table 10.7"It should be added in line N° 18 (new), column 3: "Change the lower end of the yearly dust BAT-AEL range for existing power plants of 100-300 MWth" It should be added in line N° 18 (new), column 4:"EURACOAL"It should be added in line N° 18 (new), column 5: "10 mg/Nm <sup>3</sup> "	Generally small units are not equipped with a wet FGD. Even units with a bag filter system show yearly averages for dust of up to 22 mg/Nm <sup>3</sup> . That is why the lower end of the range should be raised to 10 mg/Nm <sup>3</sup> as a yearly average.
316	EURACOAL	12				864	Table 12.2, N° 18: Dissenting view to BAT 22 table 10.7, <b>dust</b> :EIPPCB takes up only one of sixteen postulations for dust BAT-AEL. The decision of the TWG is very ambitious. Since numerous coal- and lignite-fired power plants are going to have difficulties with this BAT-AEL, it is necessary to determine a more realistic range.	An additional line for the EURACOAL dissenting view on dust should be added after line N° 18:It should be added in line N° 18(new), column 1: "18.9"It should be added in line N° 18 (new), column 2: "BAT 22 Table 10.7"It should be added in line N° 18 (new), column 3: "Change the lower end of the daily dust BAT-AEL range for existing power plants of 100-300 MWth" It should be added in line N° 18 (new), column 4:"EURACOAL"It should be added in line N° 18 (new), column 5: "15 mg/Nm <sup>3</sup> "	Generally, small units are not equipped with a wet FGD. Only 20% of the reference power plants (4 units) achieve dust emissions of less than 4 mg/Nm <sup>3</sup> as a yearly average. Even in units with a bag filter system, dust emissions fluctuate by around 50% of the annual average value. That is why the lower end of the range should be raised to 15 mg/Nm <sup>3</sup> as a daily average.

317	EURACOAL	12			864	Table 12.2, N° 18: Dissenting view to BAT 22 table 10.7, <b>dust</b> :EIPPCB takes up only one of sixteen postulations for dust BAT-AEL. The decision of the TWG is very ambitious. Since numerous coal- and lignite-fired power plants are going to have difficulties with this BAT-AEL, it is necessary to determine a more realistic range.	An additional line for the EURACOAL dissenting view on dust should be added after line N° 18:It should be added in line N° 18(new), column 1: "18.10"It should be added in line N° 18 (new), column 2: "BAT 22 Table 10.7"It should be added in line N° 18 (new), column 3: "Footnote 4 : (4) The higher end of the BAT-AEL range is <u>1512</u> mg/Nm <sup>3</sup> for plants put into operation no later than 7 January 2014"It should be added in line N° 18 (new), column 4:"EURACOAL"It should be added in line N° 18 (new), column 5: "15 mg/Nm <sup>3</sup> "	Values lower than 5 mg/Nm <sup>3</sup> could be achieved as max daily averages by plants fitted with wet FGD (BAT 22) in a tail-end position. Best performances, lower than 10 mg/Nm <sup>3</sup> on a short-term basis, could be achieved by plants fitted with a combination of the most advanced secondary techniques, with preliminary filter and tail-end wet FGD system (BAT 22). Wet FGD indeed reduces dust emissions when applied in combustion plants. However, wet FGD is a technique that is applied in the context of SO <sub>2</sub> emissions reduction and not dust emissions reduction. In view of the above, in cases where other SO <sub>2</sub> removal techniques are applied (e.g. DSI, which may be applied for economic feasibility reasons in existing plants), then the upper end of the range of dust BAT AELs proposed in the D1 may not be achievable.
318	EURACOAL	12			864	Table 12.2, N° 18: Dissenting view to BAT 22 table 10.7, <b>dust</b> :EIPPCB takes up only one of sixteen postulations for dust BAT-AEL. The decision of the TWG is very ambitious. Since numerous coal- and lignite-fired power plants are going to have difficulties with this BAT-AEL, it is necessary to determine a more realistic range.	An additional line for the EURACOAL dissenting view on dust should be added after line N° 18:It should be added in line N° 18(new), column 1: "18.11"It should be added in line N° 18 (new), column 2: "BAT 22 Table 10.7"It should be added in line N° 18 (new), column 3: "Change the lower end of the yearly dust BAT-AEL range for existing power plants of <b>300-1000 MWth</b> " It should be added in line N° 18 (new), column 4:"EURACOAL"It should be added in line N° 18 (new), column 5: "10 mg/Nm <sup>3</sup> "	Values lower than 5 mg/Nm <sup>3</sup> could be achieved as max averages by plants fitted with wet FGD in a tail-end position. Wet FGD indeed reduces dust emissions when applied in combustion plants. However, wet FGD is a technique that is applied in the context of SO <sub>2</sub> emissions reduction and not dust emissions reduction. In view of the above, in cases where other SO <sub>2</sub> removal techniques are applied (e.g. DSI, which may be applied for economic feasibility reasons in existing plants), then the lower end of the range of dust BAT AELs proposed in the revised D1 may not be achievable.

319	EURACOAL	12				864	Table 12.2, N° 18: Dissenting view to BAT 22 table 10.7, <b>dust</b> :EIPPCB takes up only one of sixteen postulations for dust BAT-AEL. The decision of the TWG is very ambitious. Since numerous coal- and lignite-fired power plants are going to have difficulties with this BAT-AEL, it is necessary to determine a more realistic range.	An additional line for the EURACOAL dissenting view on dust should be added after line N° 18:It should be added in line N° 18(new), column 1: "18.12"it should be added in line N° 18 (new), column 2: "BAT 22 Table 10.7"it should be added in line N° 18 (new), column 3: "Change the lower end of the daily dust BAT-AEL range for existing power plants of 300-1000 MWth" It should be added in line N° 18 (new), column 4:"EURACOAL"it should be added in line N° 18 (new), column 5: "15 mg/Nm <sup>3</sup> "	Values lower than 5 mg/Nm <sup>3</sup> could be achieved as max daily averages by plants fitted with wet FGD (BAT 22) in a tail-end position. Best performances, lower than 10 mg/Nm <sup>3</sup> on short-term basis, could be achieved by plants fitted with a combination of the most advanced secondary techniques, with preliminary filter and tail-end wet FGD system (BAT 22). Wet FGD indeed reduces dust emissions when applied in combustion plants. However, wet FGD is a technique that is applied in the context of SO <sub>2</sub> emissions reduction and not dust emissions reduction. In view of the above, in cases where other SO <sub>2</sub> removal techniques are applied (e.g. DSI, which may be applied for economic feasibility reasons in existing plants), then the upper end of the range of dust BAT AELs proposed in the D1 may not be achievable.
320	EURACOAL	12				864	Table 12.2, N° 22: Dissenting view to BAT 23 table 10.8, <b>mercury</b> :EURACOAL's dissenting view is missing on the lower end of the BAT-AEL for existing coal-fired power plants < 300 MWth	An additional line for the EURACOAL dissenting view on mercury should be added after line N° 22:It should be added in line N° 22 (new), column 1: "22.1"it should be added in line N° 22 (new) in column 2 an additional line:"BAT 23 table 10.8"it should be added in line N° 22 (new) in column 3 an additional line:"Increase the lower end of the mercury BAT-AEL range for existing coal-fired power plants of < 300 MWth" It should be added in line N° 22 (new), column 4:"EURACOAL"it should be added in line N° 22 (new), column 5: "4 µg/Nm <sup>3</sup> "	The EIPPCB assessment of the mentioned EURACOAL split view is not correct. There are enough appropriate technical arguments to support the submitted split view. Therefore this split view should be reported in the 'Concluding remarks and recommendations for future work' section of the BREF.The level of mercury emissions depends on a lot of parameters, such as coal quality, combustion conditions and installed flue gas treatment. EIPPCB was able to examine the measurement results of only a small number of power plants. In addition, the data are mainly from periodic measurements or are estimated. The present data do not actually allow BAT-AELs to be derived for coal power plants. According to our experience, the best designed units emit between 4 and 20 µg/Nm <sup>3</sup> (existing coal-fired power plants < 300 MWth)

321	EURACOAL	12				864	Table 12.2, N° 22:Dissenting view to BAT 23 table 10.8, mercury:EURACOAL's dissenting view is missing on the upper end of the BAT-AEL for existing coal-fired power plants < 300 MWth	An additional line for the EURACOAL dissenting view on mercury should be added after line N° 22:It should be added in line N° 22 (new), column 1: "22.2" It should be added in line N° 22 (new) in column 2 an additional line:"BAT 23 table 10.8" It should be added in line N° 22 (new) in column 3 an additional line:"Increase the higher end of the mercury BAT-AEL range for existing coal-fired power plants of < 300 MWth""EURACOAL" It should be added in line N° 22 (new), column 5: "20 µg/Nm <sup>3</sup> "	The EIPPCB assessment of the mentioned EURACOAL split view is not correct. There are enough appropriate technical arguments to support the submitted split view. Therefore this split view should be reported in the 'Concluding remarks and recommendations for future work' section of the BREF.The level of mercury emissions depends on a lot of parameters, such as coal quality, combustion conditions and installed flue gas treatment. EIPPCB was able to examine the measurement results of only a small number of power plants. In addition, the data are mainly from periodic measurements or are estimated. The present data do not actually allow BAT-AELs to be derived for coal power plants. According to our experience, the best designed units emit between 4 and 20 µg/Nm <sup>3</sup> (existing coal-fired power plants < 300 MWth)
322	EURACOAL	12				864	Table 12.2, N° 22:Dissenting view to BAT 23 table 10.8, mercury:EURACOAL's dissenting view is missing on the lower end of the BAT-AEL for existing coal-fired power plants ≥ 300 MWth	An additional line for the EURACOAL dissenting view on mercury should be added after line N° 22:It should be added in line N° 22 (new), column 1: "22.3" It should be added in line N° 22 (new), column 2: "BAT 23 Table 10.8" It should be added in line N° 22 (new), column 3: "Increase the lower end of the mercury BAT-AEL range for existing coal-fired power plants of ≥ 300 MWth" It should be added in line N° 22 (new), column 4:"EURACOAL" It should be added in line N° 22 (new), column 5: "3 µg/Nm <sup>3</sup> "	The EIPPCB assessment of the mentioned EURACOAL split view is not correct. There are enough appropriate technical arguments to support the submitted split view. Therefore this split view should be reported in the 'Concluding remarks and recommendations for future work' section of the BREF.The level of mercury emissions depends on a lot of parameters, such as coal quality, combustion conditions and installed flue gas treatment. EIPPCB was able to examine the measurement results of only a small number of power plants. In addition, the data are mainly from periodic measurements or are estimated. The present data do not actually allow BAT-AELs to be derived for coal power plants. According to our experience, the best designed units emit between 3 and 20 µg/Nm <sup>3</sup> (existing coal-fired power plants ≥ 300 MWth)

323	EURACOAL	12				864	Table 12.2, N° 22: Dissenting view to BAT 23 table 10.8, mercury:EURACOAL's dissenting view is missing on the upper end of the BAT-AEL for existing coal-fired power plants ≥ 300 MWth	An additional line for the EURACOAL dissenting view on mercury should be added after line N° 22:It should be added in line N° 22 (new), column 1: "22.4" It should be added in line N° 22 (new), column 2: "BAT 23 Table 10.8" It should be added in line N° 22 (new), column 3: "Increase the higher end of the mercury BAT-AEL range for existing coal-fired power plants of ≥ 300 MWth" It should be added in line N° 22 (new), column 4: "EURACOAL" It should be added in line N° 22 (new), column 5: "20 µg/Nm <sup>3</sup> "	The EIPPCB assessment of the mentioned EURACOAL split view is not correct. There are enough appropriate technical arguments to support the submitted split view. Therefore this split view should be reported in the 'Concluding remarks and recommendations for future work' section of the BREF. The level of mercury emissions depends on a lot of parameters, such as coal quality, combustion conditions and installed flue gas treatment. EIPPCB was able to examine the measurement results of only a small number of power plants. In addition, the data are mainly from periodic measurements or are estimated. The present data do not actually allow BAT-AELs to be derived for coal power plants. According to our experience, the best designed units emit between 3 and 20 µg/Nm <sup>3</sup> (existing coal-fired power plants ≥ 300 MWth)
324	EURACOAL	12				865	Table 12.2, N° 27: Dissenting view to BAT 23 table 10.9, mercury (line 27):EURACOAL's dissenting view is missing on the lower end of the BAT-AEL for existing lignite-fired power plants < 300 MWth	An additional line for the EURACOAL dissenting view on mercury should be added after line N° 27:It should be added in line N° 27 (new), column 1: "27.1" It should be added in line N° 27 (new), column 2: "BAT 23 Table 10.9" It should be added in line N° 27 (new), column 3: "Increase the lower end of the mercury BAT-AEL range for existing lignite-fired power plants of < 300 MWth" It should be added in line N° 27 (new), column 4: "EURACOAL" It should be added in line N° 27 (new), column 5: "4 µg/Nm <sup>3</sup> "	The EIPPCB assessment of the EURACOAL split view related to an increase of the lower end is not correct. There are enough appropriate technical arguments to support the submitted split view. Therefore this split view should be reported in the 'Concluding remarks and recommendations for future work' section of the BREF. The level of mercury emissions depends on a lot of parameters, such as lignite quality, combustion conditions and installed flue gas treatment. EIPPCB was able to examine the measurement results of only a small number of power plants. In addition, the data are mainly from periodic measurements or are estimated. The present data do not actually allow BAT-AELs to be derived for lignite-fired power plants. According to our experience, the best designed units emit between 4 and 20 µg/Nm <sup>3</sup> (existing lignite-fired power plants < 300 MWth)

325	EURACOAL	12				865	<p>Table 12.2, N° 29: Dissenting view to BAT 23 table 10.9, mercury (line 29):EURACOAL's dissenting view is missing on the lower end of the BAT-AEL for existing lignite-fired power plants <math>\geq 300</math> MWth</p>	<p>An additional line for the EURACOAL dissenting view on mercury should be added after line N° 29:It should be added in line N° 29 (new), column 1: "29.1" It should be added in line N° 29 (new), column 2: "BAT 23 Table 10.9" It should be added in line N° 29 (new), column 3: "Increase the lower end of the mercury BAT-AEL range for existing lignite-fired power plants of <math>\geq 300</math> MWth" It should be added in line N° 29 (new), column 4: "EURACOAL" It should be added in line N° 29 (new), column 5: "3 <math>\mu\text{g}/\text{Nm}^3</math>"</p>	<p>The EIPPCB assessment of the EURACOAL split view related to an increase of the lower end is not correct. There are enough appropriate technical arguments to support the submitted split view. Therefore this split view should be reported in the 'Concluding remarks and recommendations for future work' section of the BREF. The level of mercury emissions depends on a lot of parameters, such as lignite quality, combustion conditions and installed flue gas treatment. EIPPCB was able to examine the measurement results of only a small number of power plants. In addition, the data are mainly from periodic measurements or are estimated. The present data do not actually allow BAT-AELs to be derived for coal power plants. According to our experience, the best designed units emit between 3 and 20 <math>\mu\text{g}/\text{Nm}^3</math> (existing lignite-fired power plants <math>\geq 300</math> MWth). Prof. Kather has examined the EIPPCB assessment for lignite-fired power plants (<math>\geq 300</math> MWth). He has criticized the fact that only the best performing lignite-fired power plants with PC boilers are considered. Using only this data, taken from a limited number of mainly high-performing power plants, the Kather report shows that the BAT-AELs for lignite-fired power plants are incorrectly derived by the EIPPCB, being too strict. Consequently, the EIPPCB analysis cannot be used as the basis for any BAT-AELs or any resulting permit decisions.</p>
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326	EURACOAL	12				865	Table 12.2, N° 30: Dissenting view to BAT 23 table 10.9, mercury (line 30):EURACOAL's dissenting view is missing on the lower end of the BAT-AEL for new lignite-fired power plants < 300 MWth	An additional line for the EURACOAL dissenting view on mercury should be added after line N° 30:It should be added in line N° 30 (new), column 1: "30.1" It should be added in line N° 30 (new), column 2: "BAT 23 Table 10.9" It should be added in line N° 30 (new), column 3: "Increase the lower end of the mercury BAT-AEL range for new lignite-fired power plants of < 300 MWth" It should be added in line N° 30 (new), column 4: "EURACOAL" It should be added in line N° 30 (new), column 5: "4 µg/Nm <sup>3</sup> "	The EIPPCB assessment of the EURACOAL split view related to an increase of the lower end is not correct. There are enough appropriate technical arguments to support the submitted split view. Therefore this split view should be reported in the 'Concluding remarks and recommendations for future work' section of the BREF. The level of mercury emissions depends on a lot of parameters, such as lignite quality, combustion conditions and installed flue gas treatment. EIPPCB was able to examine the measurement results of only a small number of power plants. In addition, the data are mainly from periodic measurements or are estimated. The present data do not actually allow BAT-AELs to be derived for lignite-fired power plants. According to our experience, the best designed units emit between 4 and 20 µg/Nm <sup>3</sup> (new lignite-fired power plants < 300 MWth). The current knowledge does not allow stricter BAT-AEL ranges to be determined.
327	EURACOAL	12				865	Table 12.2, N° 30: Dissenting view to BAT 23 table 10.9, mercury:EURACOAL's dissenting view is missing on the upper end of the BAT-AEL for new lignite-fired power plants < 300 MWth	An additional line for the EURACOAL dissenting view on mercury should be added after line N° 30:It should be added in line N° 30 (new), column 1: "30.2" It should be added in line N° 30 (new), column 2: "BAT 23 Table 10.9" It should be added in line N° 30 (new), column 3: "Increase the higher end of the mercury BAT-AEL range for new lignite-fired power plants of < 300 MWth" It should be added in line N° 30 (new), column 4: "EURACOAL" It should be added in line N° 30 (new), column 5: "20 µg/Nm <sup>3</sup> "	The EIPPCB assessment of the EURACOAL split view related to an increase of the lower end is not correct. There are enough appropriate technical arguments to support the submitted split view. Therefore this split view should be reported in the 'Concluding remarks and recommendations for future work' section of the BREF. The level of mercury emissions depends on a lot of parameters, such as lignite quality, combustion conditions and installed flue gas treatment. EIPPCB was able to examine the measurement results of only a small number of power plants. In addition, the data are mainly from periodic measurements or are estimated. The present data do not actually allow BAT-AELs to be derived for lignite-fired power plants. According to our experience, the best designed units emit between 4 and 20 µg/Nm <sup>3</sup> (new lignite-fired power plants < 300 MWth). The current knowledge does not allow stricter BAT-AEL ranges to be determined.

328	EURACOAL	12				865	Table 12.2, N° 30: Dissenting view to BAT 23 table 10.9, mercury:EURACOAL's dissenting view is missing on the lower end of the BAT-AEL for new lignite-fired power plants ≥ 300 MWth	An additional line for the EURACOAL dissenting view on mercury should be added after line N° 30:It should be added in line N° 30 (new), column 1: "30.3" It should be added in line N° 30 (new), column 2: "BAT 23 Table 10.9" It should be added in line N° 30 (new), column 3: "Increase the lower end of the mercury BAT-AEL range for new lignite-fired power plants of ≥ 300 MWth" It should be added in line N° 30 (new), column 4: "EURACOAL" It should be added in line N° 30 (new), column 5: "3 µg/Nm <sup>3</sup> "	The EIPPCB assessment of the EURACOAL split view related to an increase of the lower end is not correct. There are enough appropriate technical arguments to support the submitted split view. Therefore this split view should be reported in the 'Concluding remarks and recommendations for future work' section of the BREF. The level of mercury emissions depends on a lot of parameters, such as lignite quality, combustion conditions and installed flue gas treatment. EIPPCB was able to examine the measurement results of only a small number of power plants. In addition, the data are mainly from periodic measurements or are estimated. The present data do not actually allow BAT-AELs to be derived for lignite-fired power plants. According to our experience, the best designed units emit between 3 and 20 µg/Nm <sup>3</sup> (new lignite-fired power plants ≥ 300 MWth). The current knowledge does not allow stricter BAT-AEL ranges to be determined.
329	EURACOAL	12				865	Table 12.2, N° 30: Dissenting view to BAT 23 table 10.9, mercury:EURACOAL's dissenting view is missing on the upper end of the BAT-AEL for new lignite-fired power plants ≥ 300 MWth	An additional line for the EURACOAL dissenting view on mercury should be added after line N° 30:It should be added in line N° 30 (new), column 1: "30.4" It should be added in line N° 30 (new), column 2: "BAT 23 Table 10.9" It should be added in line N° 30 (new), column 3: "Increase the higher end of the mercury BAT-AEL range for new lignite-fired power plants of ≥ 300 MWth" It should be added in line N° 30 (new), column 4: "EURACOAL" It should be added in line N° 30 (new), column 5: "20 µg/Nm <sup>3</sup> "	The EIPPCB assessment of the EURACOAL split view related to an increase of the lower end is not correct. There are enough appropriate technical arguments to support the submitted split view. Therefore this split view should be reported in the 'Concluding remarks and recommendations for future work' section of the BREF. The level of mercury emissions depends on a lot of parameters, such as lignite quality, combustion conditions and installed flue gas treatment. EIPPCB was able to examine the measurement results of only a small number of power plants. In addition, the data are mainly from periodic measurements or are estimated. The present data do not actually allow BAT-AELs to be derived for coal power plants. According to our experience, the best designed units emit between 3 and 20 µg/Nm <sup>3</sup> (new lignite-fired power plants ≥ 300 MWth). The current knowledge does not allow stricter BAT-AEL ranges to be determined.

330	EURACOAL	12				864	Table 12.2: There are not enough appropriate technical arguments to support the submitted split view line N°22.	Table 12.2: Delete line N°22 split view of CAN Europe	In section 11.15 of the document “Review of the best available techniques (BAT) Reference document for large combustion plants (LCP BREF) - Assessment of split view rationales” [2], CAN Europe explains a BAT-AEL of < 1 µg/Nm <sup>3</sup> for Hg emissions with the following argument:“Collected data show several existing coal and lignite power plants achieving yearly averages below 1 µg/Nm <sup>3</sup> (see Coal and/or lignite combustion – mercury emissions document, tables 1 and 2, plants 211V, 1005V, 77V, 156V, 462V, 267V, 268V, 662V, 224V, 286V, 689, 81V, 685V, 547V, 379V, 253V, 18-2V).”In this list of plants there is only one lignite-fired plant – 18-2V. This plant is equipped with a bubbling FBC and therefore has an inherent Hg capture mechanism due to the high carbon content in the bed material. Additionally, the plant is equipped with a bag filter, which is much more favourable for Hg capture than an ESP. But none of the lignite-fired plants with PC boiler of the LCP BREF review is equipped with this filter technology. Plant 18-2V is therefore a technology which is not at all representative for the assessment of Hg emission values of lignite-fired plants with PC boilers. In summary, it can be stated that the use of plant no. 18-2V as an argument for a BAT-AEL of < 1 µg/Nm <sup>3</sup> for lignite-fired plants with PC boiler is not valid.(see also expert opinion of Prof. Kather, Hamburg University of Technology, Aug. 2016).
331	EURELECTRIC	12				861	Table 12.2 does not include all split views expressed.	Include split views 9.1, 10.2, 11.4.1, 11.5.1, 11.9, 11.17.1, 11.17.3, 12.4.4 and 12.6 in the list of dissenting views expressed in due course.	The split views 9.1, 10.2, 11.4.1, 11.5.1, 11.9, 11.17.1, 11.17.3, 12.4.4 and 12.6 were expressed in due course by industry and each view was complemented with a comprehensive rationale. These split views should be recorded in table 12.2 aiming at listing all dissenting views expressed.
332	EURELECTRIC	12				861	In split view 9.1 (see assessment of split view rationales) EURELECTRIC, supported by EL, proposes to increase the lower and upper ends of the Hg BAT-AEL range for Hg emissions to water to 0.5–10 µg/l. This split view was rejected by the EIPCCB and hence not included in table 12.2 of Chapter 12.	Include split view 9.1 in table 12.2 calling for an increase of the lower and upper ends of the Hg BAT-AEL range for Hg emissions to water to 0.5–10 µg/l (referring to BAT 11).	The dissenting view was presented in due course and a valid corresponding rational was provided.

333	EURELECTRIC	12				862	Dissenting view to BAT 19 (lines 8-13): EIPPCB does not record the dissenting views of PL, UK, Eurelectric and Euracoal calling for increasing the upper end of the range of NOx in existing coal-fired PC boiler (>300 MWth) or inserting a footnote on this matter.	It should be added a sub comment in line 11, column 3: "Existing coal-fired PC boiler (>300 MWth): The higher end of the BAT-AEL range can be as high as 180 mg/Nm <sup>3</sup> in the case of existing plants already applying secondary abatement techniques for NOx reduction in the case where limitations exist for further retrofitting for technical and economic reasons. "It should be added a sub comment in line 11, column 4: "EURACOAL, Eurelectric". It should be added a sub comment in line 12, column 5: "180 mg/Nm <sup>3</sup> "	Only 20% of the reference power plant emit on average <b>yearly NOx</b> of less than 150 mg/Nm <sup>3</sup> . The results of the data evaluation do not justify yearly average BAT-AEL of less than 180 mg/Nm <sup>3</sup> . The BAT AEL for existing coal plant >300 MW for NOx from D1 has been reduced from 180 to 150 mg/Nm <sup>3</sup> which is not achievable for primary techniques with SNCR. This technology option will be possible precluded. For some power plants, it could be feasible for SNCR, in combination with other measures, to deliver 180 mg/Nm <sup>3</sup> performance, but 150 mg/Nm <sup>3</sup> is generally not achievable with the use of SNCR. See split view expression and rationales from Eurelectric and Euracoal (Assessment of Split view rationale: split view 11.5.1, 22/06/2016)
334	EURELECTRIC	12				865	Dissenting view to BAT 23 table 10.9, mercury (line 27): Line 27 records only a part of the dissenting view of Eurelectric. It is missing the dissenting view concerning the <u>lower</u> end of the BAT-AEL for existing lignite-fired power plants < 300 MWth	It should be added in line 27 (new), column 1: "27.1" It should be added in line 27 (new), column 2: "BAT 23 Table 10.9" It should be added in line 27 (new), column 3: "Increase the lower end of the mercury BAT-AEL range for existing lignite-fired power plants of < 300 MWth" It should be added in line 27 (new), column 4: "EURELECTRIC, EURACOAL" It should be added in line 27 (new), column 5: "4 µg/Nm <sup>3</sup> "	See split view expression and rationales from Eurelectric and Euracoal (Assessment of Split view rationale: split view 11.18.1, 22/06/2016)

335	EURELECTRIC	12				865	Dissenting view to BAT 23 table 10.9, mercury (line 29): Line 29 records only a part of the dissenting view of Eurelectric. It is missing the dissenting view concerning the <u>lower</u> end of the BAT-AEL for existing lignite-fired power plants ≥ 300 MWth	It should be added in line 29 (new), column 1: "29.1" It should be added in line 29 (new), column 2: "BAT 23 Table 10.9" It should be added in line 29 (new), column 3: "Increase the lower end of the mercury BAT-AEL range for existing lignite-fired power plants of ≥ 300 MWth" It should be added in line 29 (new), column 4: "EURELECTRIC, EURACOAL" It should be added in line 29 (new), column 5: "3 µg/Nm³"	See split view expression and rationales from Eurelectric and Euracoal (Assessment of Split view rationale: split view 11.18.3, 22/06/2016)
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336	Euroheat & Power	101	2	2	3	775 781 795	<p>Applying these BAT-AELs to new plants running &lt;500 h/year violates the instructions of the BREF guidance document 2012/119/EU, which under the section 3.3 Individual BAT conclusions with associated environmental performance levels states that "An environmental performance level associated with BAT will be included where there is a sound basis for doing so. This will be done based on the information exchanged by the TWG [...]." The BAT-AELs defined for NOx can only be achieved with the use of SCR or SNCR. The information exchanged by the TWG shows that neither SCR nor SNCR is applicable to plants running &lt;500 h/year, as evident by the applicability of techniques defined under BAT 32. Since it is too late to derive new BAT-AELs specifically for new plants running &lt;500h/year, we propose that footnote 2 and 3 also apply to new plants so that the demands of 2012/119/EU is met .</p>	<p>Apply footnotes: 2 and 6 in table 10.11 also to new plants.2 and 3 in table 10.16 also to new plants.3 och 5 in table 10:28 also to new plants.</p>	<p>Applying these BAT-AELs to new plants running &lt;500 h/year violates the instructions of the BREF guidance document 2012/119/EU, which under the section 3.3 Individual BAT conclusions with associated environmental performance levels states that "An environmental performance level associated with BAT will be included where there is a sound basis for doing so. This will be done based on the information exchanged by the TWG [...]." The BAT-AELs defined for NOx can only be achieved with the use of SCR or SNCR. The information exchanged by the TWG shows that neither SCR nor SNCR is applicable to plants running &lt;500 h/year, as evident by the applicability of techniques defined under BAT 28, 32 and 46. Since it is too late to derive new BAT-AELs specifically for new plants running &lt;500h/year, we propose that footnote 2 and 6 in table 10.11, footnote 2 and 3 in table 10.16 and footnote 3 och 5 in table 10:28 also apply to new plants so that the demands of 2012/119/EU is met .</p>
010		3	1	2					
		4	1	2					