Comment number	Chapter No. / section No.		Page # (PDF version)	Comment description	Proposal for modification	Rationale	
1	3 3	3 3		283	Table 3.44 - Operational and performance data for primary converters: KGHM Glogow 2 dusts values	KGHM Glogow 2 dust values should be corrected to "3-15 mg/Nm3 (4,6 mg/Nm3 annual average)" in table 3.44.	The data should be corrected to the real operational values, as it was orginally wrongly reported by the company (typo).
2	3 3	3 4	2	292	Deletion and marked "not representative" of measured emission data from companies: dust emissions of Atlantic Copper Huelva in Table 3.45	Insert the reported dust data from Atlantic Copper (10-80 mg dust/Nm <sup>3</sup> ) in Section 3.2.2.	The reported dust data from Atlantic Copper (10-80 mg dust/Nm <sup>3</sup> ) was deleted (in text and table) and considered "not representative" without discussion. Present data as it was reported by companies in the section on "current emissions".
3	3 3	35		297	Deletion and marked "not representative" of measured emission data from companies: dust emissions of Atlantic Copper Huelva in Table 3.47	Insert the reported dust data from Atlantic Copper (5-20 mg dust/Nm <sup>3</sup> , avg 6 mg/Nm <sup>3</sup> ) in Section 3.2.2.	The reported dust data from Atlantic Copper (5-20 mg dust/Nm <sup>3</sup> , average 6 mg/Nm <sup>3</sup> ) was deleted and considered "not representative" (in the table) without discussion. Present data as it was reported by companies in the section on "current emissions".
4	3 3	36		303	Deletion of measured emission data from Aurubis Pirdorp in Table 3.51	Insert the reported dust data from Aurubis Pirdop in Section 3.2.2.	Present data as it was reported by companies in the section on "current emissions".
5	3 3	4 1		325	Incorrect presentation of measured emission data in Table 3.54	Correct the data for Metallo-Chimique and move it to Section 3.2.2: report the max value SO2 measured and reported (1471). Add a remark that current rules are such that 97% of the hourly values needs to be 1,2 times below the ELV (i.e. 1,2 * 500) and no value may exceed 2 times the ELV (i.e. 2 * 500).	Present data as it was reported by companies in the section on "current emissions".
6	3 3	4 3		338	Incorrect presentation of measured emission data in Table 3.56	Correct the data for Metallo-Chimique and move it to Section 3.2.2: report the max value SO2 measured and reported (2765). Add a remark that current rules are such that 97% of the hourly values needs to be 1,2 times below the ELV (i.e. 1,2 * 800) and no value may exceed 2 times the ELV (i.e. 2 * 800).	Present data as it was reported by companies in the section on "current emissions".
7	4 2	3 4	1	409	Cross-reference is incorrect.	Change "An emerging technique developed by Befesa, described in Section 4. <u>5</u> " to "An emerging technique developed by Befesa, described in Section 4. <b>4</b> "	There is no S 4.5 and the reference is in S 4.4.
8				-	In general, emission data from plants should be referred to the respective plant in the BREF. This has been done in the NFM BREF for the chapters copper, lead and tin but not for the other metal chapters. In these other chapters only numbers have been given for the relevant plants. There is no information to which plant the relevant emission data belongs. This is not in line with the "reference approach of BREFs" and with Art 24 [of] the IED. For example the BREFs Iron and Steel, CAK, Glass and CLM refer to specific plants.	In general, emission data has to be provided with contextual information including the name of the plant and the country. As a minimum criteria for the BREF NFM anonymized emission data on BATIS with only a number (1,2,3) for the plant has to be accompanied with a list where the numbers are referenced to the corresponding plant names and their country. A correlation of emission data with plant names and country is necessary for member states to check the data.	comparability, transparency. BAT-AELs are the reference for ELV. It must be transparent where from and how the ELV are derived from.
9	8 3			841	In the techniques to consider chapter for ferro alloys in the EIPPCB assessment from October 2012 only the Austrian plant Treibacher was actually named, all other specific data was anonymized. Treibacher was willing to be named in the document, but not as the only named plant whereas all other plants were coded. After comments the data from Treibacher has also been given with a code in the following Drafts (D3, Revised D3, Final Draft).	Plants should be treated in an equal way in the drafts of a BREF.	consistency and transparency
10	11 1			996	Additional BAT conclusion on sulphur recovery from high strength gases	Add the following general BAT conclusion on the recovery of the S content of the high strength gases: "In order to reduce the emissions of SO2 from off-gases with high SO2 content and to avoid the generation of waste from the flue gas cleaning system, BAT is to recover sulphur by producing sulphuric acid or liquid SO2. Applicability: Only applicable to plants producing copper, lead, primary zinc, silver, nickel and molybdenum."	BAT conclusion was missing on the need to recover sulphur from high strength gases.
11	12			1091	In the concluding remarks it is stated that no TWG members volunteered to improve the data situation on refractory metals and the restructuring of the Techniques to consider in the determination of BAT section. This statement is only partly true.	Modify statement as follows: This was not the case for the production of mercury, refractory metals and alkali and alkaline earth metals, due to both the fact that there are very few plants in operation in the EU-28 <del>and that</del> no TWG members volunteered to improve the data situation and the restructuring of the 'Techniques to- consider in the determination of BAT' sections.	In the Review process Austria provided two studies on the production of refractory metals in its country together with emission data and additional information on the processes. Also Germany and Eurometaux provided information. No sub group was set up.
12	12			1092	Correction in the LVIC-AAF BREF adopted in 2007	Modify the paragraph as follows: During the final TWG meeting, it was acknowledged that in Table 4.24 "Conversion rates and SO2 emission levels associated with BAT" in the LVIC-AAF BREF (adopted in 2007), in the row "Other double contact/double absorption plants", the upper end of the BAT-AEL range for SO2 emissions from the production of sulphuric acid from non-ferrous metals production in a double contact/double absorption plant needs to be corrected. This value should be 770 mg/Nm3 (as a daily average) instead of 680 mg/Nm3 (as a daily average).	This proposal for modification is made for consistency. There is currently no specific row in Table 4.24 of the LVOC-AAF BREF for SO2 emissions from the production of sulphuric acid from non-ferrous metals production; instead, it is covered by the 'other double contact/double absorption plants' (i.e. other than those producing H2SO4 via direct sulphur burning, i.e. non-ferrous metals production, spent acid from TiO2 production, and roasting of metal sulphates and pyrite acid are covered by this 'other' entry) row. The 770 mg/Nm <sup>3</sup> level was derived on the basis of data provided by NFM plants and should not pre-empt the review of the LVIC-AAF BREF, which will be subject to its own data collection and analysis exercise, where the resulting BAT AEL will need to take such data into account, in due course.
13	12			1095	In the BREF NFM (2001) BAT-AELs for NOx emissions have been given in the relevant metal chapters but these are not included in the Final Draft of the revised BREF. Austria disagrees with not setting NOX-BAT AELs in the Final Draft. NOx emissions have already been gathered during the Review process and are available on BATIS. (see data on BATIS for the chapters copper, aluminium, lead, ferro-allovs)	Add a bullet point in the concluding remarks as follows: "Gather data on NOx emissions to air in loads and in concentrations and other relevant contextual information, such as the applicability of the techniques from non-ferrous metal production <b>in order to consider setting, during the next review of the NFM BREF</b> , sound BAT-AELs. The emissions data should be collected with the relevant reference conditions including the oxygen content in the flue-gas."	NOx is regulated in the NEC Directive and is a relevant pollutant in NFM production. There is a relevant Technique to consider chapter in 3.3.4.1.3.
14	12			1095	When measuring emissions to air in non-ferrous metals production the oxygen content has to be measured and reported too. This is done in Austria according to permits and also according to the Austrian ordinance on non-ferrous metals and refractory metals industry. ELV are related to a given O2-content. Emissions have to be reported together with the oxygen content and the reference conditions, otherwise emission parameters are not comparable. The BAT-AELs have to be linked to a given oxygen content, otherwise these values are not comparable.	when asking for emissions in the next review process also the oxygen content has to be asked for (see 1st point in chapter 12 recommendations for future work).	comparability
15	12			1095	Recommendation for future work, The bullet n°3 could be completed.	It may be valuable to collect specific data and information, <b>including the emission's oxygen content</b> , raw materials used, production and specific loads <b>and flow rates</b> (mass of pollutant released per mass of product manufactured or mass of raw material used <b>and emission flow rate per mass of product manufactured or mass of raw material used</b> ) in order to evaluate the performance of the process-integrated techniques.	Facilitate evaluation of performance of the process-integrated techniques.
16	12			1096	A new bullet can be introduced.	Add a bullet point in the concluding remarks as follows: Gather information on the market availability of low-sulphur coke (less than 1.5 %) and specific data on the percentage of sulphur content in the anodes used by the primary aluminium industries.	