



EUROPEAN COMMISSION
DIRECTORATE-GENERAL JRC
JOINT RESEARCH CENTRE
Institute for Prospective Technological Studies (Seville)
Sustainable Production and Consumption Unit
European IPPC Bureau

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Instructions for the Information Collection Subgroup of the WBP TWG

The format, assignments and procedure of the information collection which is to be performed by the information collection (IC) subgroup is outlined in this document. Please also consult the Mandate of the IC subgroup of the WBP TWG.

Tasks and assignments

There are four different main tasks to be taken into account for information collection:

- Completing Sheet 4

The description of the processes and their options in the WBP sector are proposed by the EIPPCB to be assigned to the two industrial organisations, the European Panel Federation (EPF) and FEROPA, who will take responsibility for completing a draft of the information in Sheet 4.

- Draft versions are submitted to the EIPPCB from the contributors in the IC subgroup.
- A collected draft version will be made available by the EIPPCB to the whole TWG for a commenting period where missing information can be added.

- Completing Sheet 5

The clarification of the key environmental issues arising from each of the processes, already described in the former Sheet 4, is done by completing Sheet 5 and is an important task. This will be the guide for the issues from which we will develop BAT-conclusions.

In order not to waste time, the completion of Sheet 5 can be started without the full descriptions of all the processes in Sheet 4. Any missing information can be added along the way. The starting point will be the list of processes to be described (see Annex 1 or List A in the excel template). You are all asked to participate in the completion of sheet 5 and this task will start now.

instructions WBP subgroup.doc

Please confirm if you will contribute to the completion of Sheet 5.

- Draft versions are submitted to the EIPPCB from each IC subgroup member.
- A collected draft version will be made available by the EIPPCB to the IC subgroup and any diverging views on the character of environmental issues are solved by a consultation amongst the members of the IC subgroup.
- The draft is made available by the EIPPCB for commenting to the whole TWG.
- A comprehensive list of Environmental Issues is developed by the EIPPCB. The list is then used as a checklist when Sheet 6 is completed, so that solutions for all the environmental issues identified in Sheet 5, will also be sought out and described.

It will be necessary to have a compiled draft of Sheet 5 finished and for the IC subgroup and the TWG to agree in order to have a final list of environmental issues that eventually should be included in the collection of information on techniques (Sheet 6) to solve the identified environmental issues.

- Completing sheet 6

The description of techniques designed to find solutions for the environmental issues identified previously go in to Sheet 6. This is proposed to be a joint effort as well. Each technique should be described in terms of their efficiency, availability, applicability and cross-media effects.

The result will consist of the first draft list of possible BAT-candidate techniques. Be aware that this first draft will have to be completed with additional information as well as environmental performance data at a later stage in the data collection which will not be a part of the work of the IC subgroup.

There will be differences in techniques applied across the MSs and the collection of information is meant to reflect this in order to get a broad outlook. You are therefore all asked to participate in the completion of Sheet 6.

Please confirm if you if will contribute with a completion of sheet 6.

- Any IC subgroup member can complete Sheet 6 with techniques or a combination of techniques.
- Draft versions are submitted to the EIPPCB from each IC subgroup member.
- The EIPPCB will make a collected draft version and make the draft available for the whole TWG for commenting or adding information.

A list of environmental issues comprised of the description of the techniques (Sheet 6) is issued as mentioned as a checklist for the IC subgroup. The purpose of the checklist is to make sure that all issues are touched upon when describing the possible techniques.

Some issues and some techniques will be obvious and applied throughout the industry. In order not to waste time, you could complete Sheet 6 on techniques while completing the list of environmental issues in Sheet 5.

The collected draft version will be the first draft of possible BAT candidate techniques. This list can be amended later in the review. Only after the data collection of installation

specific data will there be a sufficient documentation and background for the evaluation of the individual techniques in terms of whether the technique should be considered BAT and what BAT-associated environmental performance levels could be given for the technique.

- Completing Sheet 7

The availability of data should also be considered by all members of the IC subgroup since the subsequent drafting of a template questionnaire for the data collection will depend on the data availability.

The availability of data will be based on both the compliance data that would reflect national regulation, but should also be linked strongly to the performance of techniques that are described in Sheet 6. It could be advantage to complete one general Sheet 6 with general information on monitoring performed at installation level and add additional information in the individual sheets for data availability for the documentation of each process/technique described. It is proposed that all members of the IC subgroup participate in the completion of Sheet 7. Since the subgroup does not cover all MSs, the sheet will have to be updated with information after the subgroup has completed their draft.

Please confirm that you will contribute to the completion of sheet 7.

- Completed drafts should be submitted to the EIPPCB.
- The EIPPCB will make a collected draft version and make the draft available for the whole TWG for the addition of information.
- The IC subgroup will on the basis of the results make suggestions for data to be collected through a data collection template questionnaire.
- The EIPPCB will draft the template for the data collection.

Tentative time schedule

All contributions from the subgroup will be available for a commenting period for the whole TWG. Taking this into account the schedule in table 1 is proposed. Please do not hesitate to submit before the deadline!

1 February 2012	1 March 2012	1 April 2012	1 May 2012	1 June 2012
Period of submitting sheet 4 to EIPPCB Deadline 28 February		Comments TWG		
Drafting by EIPPCB.				
Period of submitting sheet 5 to EIPPCB Deadline 6 March		Comments TWG		
Drafting by EIPPCB.				
Period of submitting sheet 6 to EIPPCB Deadline 23 April			Comments TWG	
		Drafting by EIPPCB		
Period of submitting sheet 7 to EIPPCB Deadline 23 April			Comments TWG	
Preparation of template for the data collection				
		Drafting by EIPPCB. Finish template for the data collection.		

Table 1 Time schedule for the information collection.

Structure of template

The template is an excel workbook with 8 individual sheets.

Sheet 1: Front page

The sheet is used to identify the contributor.

Sheet 2: Intro sheet

The sheet gives an overview of the information to be gathered and contains the lists that follow that will be used throughout the information collection.

- LIST A – a list of the processes for the information collection to be used in Question 1.1(Sheet 4). This list is the agreed upon list of processes developed after the kick-off meeting and posted onto BATIS in December 2011. This list is also shown in Annex I to this document.
- LIST B – a list of Environmental issues to be used in Question 1.2 (Sheet 5). This list is reproduced in Annex II to this document.
- LIST C – a list of the different types of manufactured product to be referred to in Question 1.1 (Sheet 4) and throughout the sheets when there will be a need for distinction between manufactured products. This list is also shown in Annex III to this document.
- LIST D – is a list of Cross Media Effects that will have to be taken into account when considering cross media effects in Question 2.2.3 (Sheet 6) and in Question 2.3.1(Sheet 6). This list is also shown in Annex IV to this document.
- LIST E – is a non-prescriptive and non-exhaustive list of monitoring parameters to be used in Question 2.4 (Sheet 7). If other parameters are used and reported please specify in the Question 2.4. This list is also shown in Annex V to this document.

Sheet 3: Glossary with explanations of some terms used in the template

The explanations of the terms that will be used in the WBP BREF documents could be refined at a later point in the review process. General definitions and terms will be part of Draft 1 of the WBP BREF and would be subject to commenting at that point.

Sheet 4: Info 1.1. Production processes

This sheet collects the technical description and details on an individual production process step. A separate sheet should be prepared on each individual process mentioned in List A in Sheet 2 (see Annex I). The abatement measures should not be described here, although operation of abatement systems is mentioned as part of the activities on a WBP installation. The description of abatement systems and techniques will be covered in sheet 6.

The information will be used in the technical part of Chapter 2 in the WBP BREF and will contribute to the overall understanding of production processes and the differences between process options that could be relevant in terms of environmental impacts.

Figure 1 illustrates that more than one technical description for the same process could be anticipated. A simple example could be dry and wet-debarking. The two options give the same final production result, but could give rise to different environmental issues. All options are described in the same sheet.

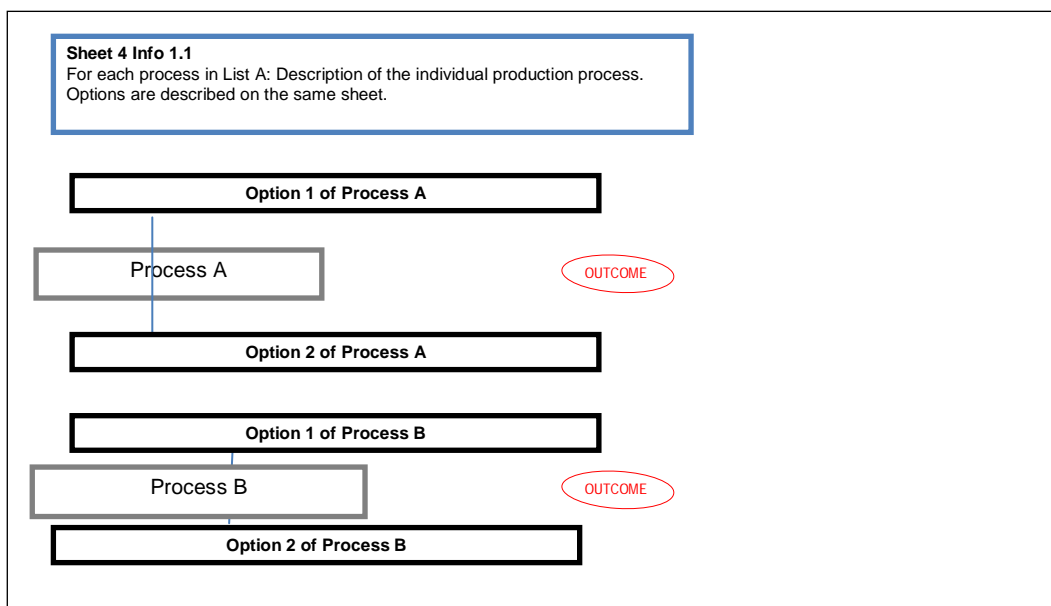


Figure 1 Illustration of the different outcomes from the process descriptions

The description of the processes and their options are proposed by the EIPPCB to be assigned to the two industrial organisations, the European Panel Federation and FEROPA that will take responsibility for providing and filling in the information in Sheet 4.

Sheet 5: Info 1.2. Related environmental issues

This sheet gives an overview of the environmental issues that could arise from any industrial process. The task is to indicate what environmental issues could arise from a certain option of a production process already described in Sheet 4.

Please indicate all issues, and do not anticipate whether the environmental issue will be less important or not a key issue. The information on the significance of the environmental issue is asked for in the Question 1.2.3 in the Sheet 5 and this rationale will be a part of the information, which any decision will be based on.

If the information on significance is not given, it will be difficult to make transparent decisions on including or excluding processes or environmental issues.

As illustrated in Figure 2, the outcome of Sheet 5 will be one sheet for every option of the process described in Sheet 4.

The sheet 5 is drafted for each option of processes. It is the starting point for describing the BAT candidate techniques for solving environmental issues arising from the processes. We should not hesitate in developing drafts of this sheet which can be developed further in the information collection. There will be obvious environmental issues from each of the processes and others can be amended at a later point if necessary.

The concentrated outcome should reflect a completely revised version of Table 3.1 presented in the background paper for the kick-off meeting and shown here in Annex VI.

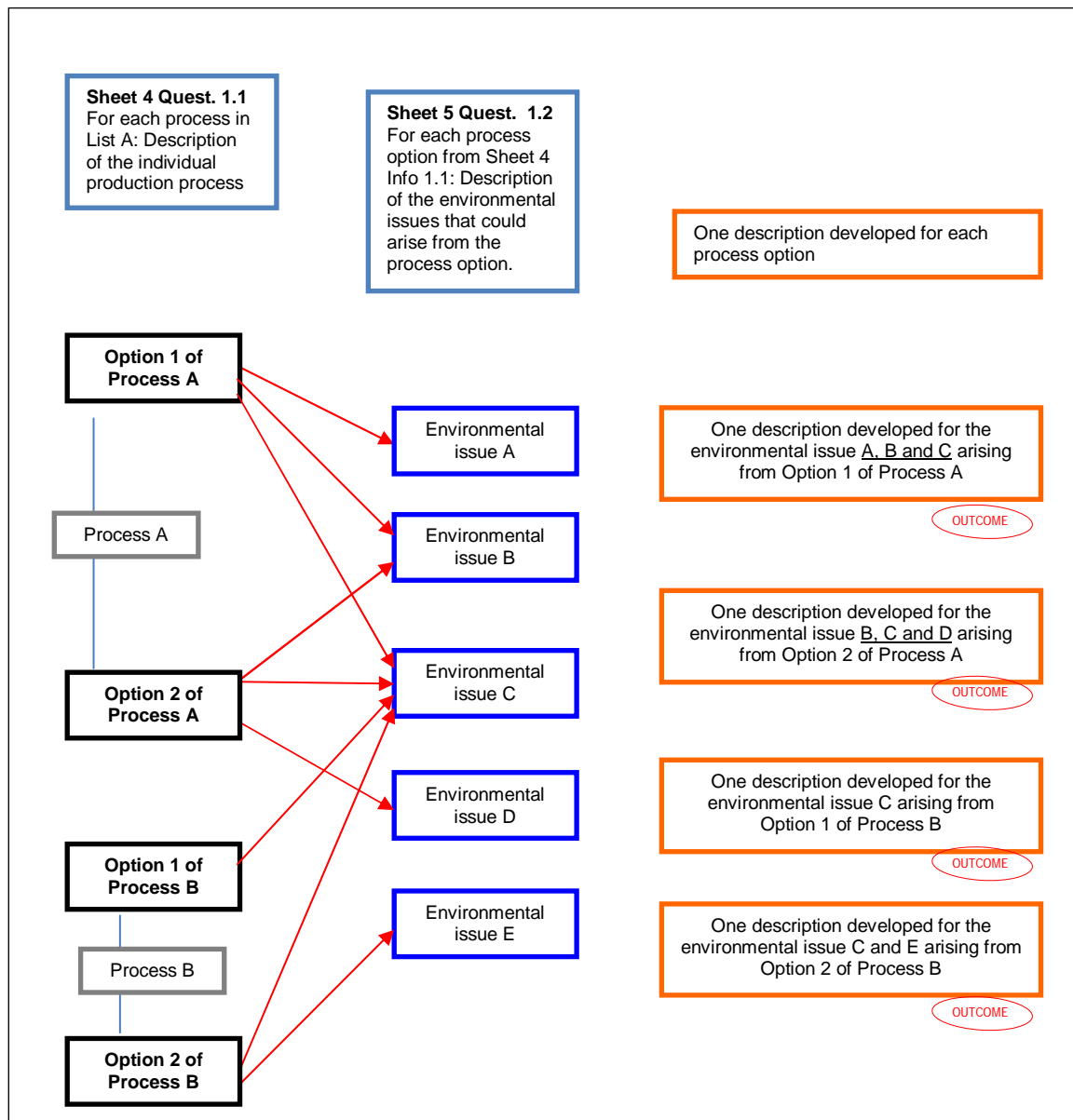


Figure 2 Illustration of the outcome of filling in information in sheet

Sheet 6: Question 2.1 – 2.3. Description of techniques to solve environmental issues

All techniques that can be applied to solve a distinct environmental issue from as distinct process should be described in Sheet 6. This will consist of the first draft list of possible BAT candidate techniques.

In Question 2.1.1 an indication of the technique applied is requested. Please deliver a short indicative and descriptive note so the technique is identifiable. A full technical description of a commonly know technique is not needed. The focus in the descriptions will be on defining other-than-normal operating conditions (in Question 2.1.1.1) and the applicability of the technique in terms the type of processes within the sector to which the technique cannot be applied (in Question 2.2.1-2.2.3) (Consider installation size, the age of the installation, installation capacity, upper or lower limits of pollution load, the type or quality of product produced or the type of raw material used. Also generic

economic constraints could be mentioned and if climatic or local conditions play a role in the applicability). Cross-media effects such as negative performance on other environmental indicators should be taken into account in order to balance the trade-offs that may have to be made in determining the best environmental option (in Question 2.2.4).

In the Sheet 6 a template can be found that can be used for providing a simple flowchart which shows the point of application and technical connections of the technique. The purpose is not to describe a specific site layout from an example installation but this could of course be necessary if the technique or the combination of techniques is very sitespecific.

There may be a certain overlap in the descriptions submitted from the different members of the IC subgroup but this will not be a major obstacle. The evaluation, redaction and proofreading of the contributions will be done by the EIPPCB, so it is better to have repetitive information than to miss the information in the end.

Sheet 7: Info 2.4-2.5. Availability of data

This sheet collects information on the availability of data. Data should be understood in a broad sense and should not be restricted to compliance data. The availability of compliance data will depend highly on the MS national legislation and guidance when issuing the permit. The purpose is not to make a list of the differences between MS.

The purpose at this stage is first of all to get information on what data are generally available and which are relevant when an environmental issue is documented. This includes not only the monitoring of emissions but also consumption data and other performancerelated data.

In order to have a firmer and agreed upon basis for the next step which is the data collection, it will be useful if the information provided in this template were detailed and covered the methods of sampling, sampling time, frequency of sampling, standard analytical methods applied, how results are reported as averages and the standard reference conditions used, but still in a generic manner.

List E list a range of different parameters that are used in one or more MSs today when monitoring air or water emissions. Other parameters and other expressions of environmental performance could be used as well.

At this point it should be made clear that averaged data is not anticipated to be submitted in the next step which is the data collection without knowing the exact background for the averaged result. This means that if a yearly average value is given as the value for compliance, this will not be sufficient. It will be necessary to know the values behind the yearly average in order to compare data. The data collection will have to focus on installation-specific data together with contextual information to support the data.

Further clarification needed

In case of doubts or difficulties in using or completing the template, please do not hesitate to contact Kristine R. Stubdrup, European IPPC Bureau, JRC IPTS at e-mail: kristine.stubdrup@ec.europa.eu, Tel: +34 954 488 492.

Annex I - List of processes to be described in the Information collection

The list is not exhaustive and the presence of a process should not be taken as an indication of the view of the EIPPCB on the merits of its inclusion in the final WBP BREF. This will be clarified before the draft of the WBP BREF is released.

Wood storage, transport and preparation	Comment
Receipt and storage of raw wood material	
Storage of wood particles/flakes/fibres before and after drying	Distinguish in descriptions between types of virgin wood, waste wood/recycled wood and others
Internal transport of wood materials in general	Include also raw materials
Debarking of logs	
Cleaning of wood waste/recycled wood raw materials prior to chipping	
Chipping of wood and disintegration to flakes or wood particles	
Cleaning and softening of wood particles prior to digestion	Defibration. Only for fibreboards (wet and dry process)
Digestion and Refining	Defibration. Only for fibreboards (wet and dry process)
Drying and panel preparation	
Drying of wood particles and flakes – direct heated dryers	Also including a combination of indirect and direct dryers
Drying of wood particles and flakes – indirect heated dryers	
Drying of fibres – direct, indirect or a combination of both	
Screening and cleaning of wood particles and flakes	
Panel production	
Mixing of glues and additives in glue kitchen	
Application of glues and additives	Also includes the application of glue to fibreboards before drying of fibres
Mat forming	
Dewatering of the mat	In case of hardboard and softboard, mechanical dewatering of the mat is relevant
Pre-pressing	
Pressing and/or drying	In case of softboard, only drying is relevant, in case of hardboard drying/pressing is relevant
Cooling	
Finishing	
Sanding	
Cutting to smaller formats	
Storage of finished product	
Other activities covered	
Process integrated energy producing plants.	Combustion/co-incineration/incineration as applicable
Pre-treatments of fuels	
Coating – divided into individual process steps if necessary.	
Operation of abatement systems	Covered under techniques - sheet 6. Do not include in sheet 4.

Annex II - List of environmental issues to be considered in the Information collection

	Comments
Conveyed emissions to air	
Odour emissions	
Fugitive emissions to air	Fugitive emissions are restricted to emission from leaks
Diffuse emissions to air	All non-channelled emissions
Generation of waste water	If a process or operation of abatement equipment at the WBP installation could give rise to the generation of waste water, it should be described. Do not take into account at this point the reuse of the waste water or the treatment of the waste water before discharge, since this will be solutions for the prevention or abatement of contamination arising from the waste water. The solutions will be described under Question 2.1 (sheet 6).
Contamination of storm water	If a process could give rise to the contamination of rainwater/storm water/run-off water. Could be more important from log yard storage and log yard operations.
Waste water discharge to surface waters	The channelled discharge of treated or untreated waste water. If rainwater is collected and discharged it is considered channelled and part of the waste water
Noise & vibrations	
Consumption of chemicals and raw material	
Energy consumption	
Water consumption	
Waste/ residues generation	
Emissions to land	Emissions to land means emissions that could lead to soil and groundwater contamination

Annex III – Type of manufactured product to be referenced to in the Information collection

	Comments
OSB (Oriented Strand Board)	EN 300:2006
PB (Particle Board)	prEN 309:2004 (EN 309:2005) and EN 312:2010. Including flax board.
Dry process Fibreboard - MDF (Medium Density Fibreboard), including HDF (High Density Fibreboard) and LDF (Low Density Fibreboard)	EN 316:2009 and EN 622-5:2006 (MDF)
Other dry process fibre boards -	EN 316:2009
SB (Soft board - wet process)	EN 316:2009
Other product not included above.	Please indicate the common name of the product and refer to a EN standard if possible.
HB (Hard board - wet process - not included in the scope)	EN 316:2009

Annex IV – List of Cross-media issues that should at least be considered.

For further information on Cross-media issues and effects the reference document on Economics and Cross-media Effects can be consulted.

http://eippcb.jrc.ec.europa.eu/reference/BREF/ecm_bref_0706.pdf

	Comments
Rise or fall in consumption and nature of raw materials and water	
Rise or fall in generation of residues/waste	Consider the change in distribution between inert waste, non-hazardous waste and hazardous waste.
Rise or fall in the ability to reuse or recycle residues/waste	
Rise in the emissions to another media	Consider if applying the technique could mean a rise in the emissions to another media instead.
Rise or fall in the consumption of persistent/toxic/bio accumulative components (including metals)	
Rise or fall in energy consumption in general and rise or fall in the contribution to climate change	
Rise or fall in the oxygen depletion potential in water	
Rise or fall in the potential or direct risks of eutrophication of waters resulting from emissions to air or water	
Rise or fall of particulate matter in ambient air (including micro particles and metals)	
Rise or fall in stratospheric ozone depletion potential	
Rise or fall in photochemical ozone creation potential	
Rise or fall in acidification resulting from emissions to air	

Annex V – List of monitoring parameters currently applied that is to be referred to in the Information collection.

The list does not intent to anticipate the best or most appropriate monitoring parameter. Any modification, addition or different parameter can be added when describing monitoring parameters in the availability of environmental performance data.

Air
TSP
PM10
PM2,5
PM1,0
Opacity
Odour (determined by EN 13725/(VDI 3882:1997 or by other method)
NMVOC (non-methane volatile organic compounds)
Condensable VOC (excluding particulate matter. Given as C with FID)
TOC (covering what is captured by FID)
HCHO (Formaldehyde)
Sum of Phenol and Cresols
Polychlorinated Dibenzodioxins and Furans (PCDD/F)
Benzene
Polycyclic aromatic hydrocarbons (PAH)
Organic acids (covering at least formic acid, acetic acid and propionic acid)
Heavy metals - indicate metal
<i>The following parameters could be relevant for only combustion/co-incineration/waste incineration plants and directly heated dryers.</i>
HF
HCL
Ammonia
CO
NO _x (The mixture of NO and NO ₂ expressed as NO ₂)
SO _x (The mixture of SO ₂ and SO ₃ expressed as SO ₂)
CO ₂
<i>Other parameters</i>
Water
pH
COD
TOC
BOD5
Suspended Solids (SS)
Ammonia-N
TKN (total Kjeldahl nitrogen)
TNb
Orthophosphate
Phosphate
THC (total hydro carbons)
Sum of phenols (phenol and cresols)
Polycyclic aromatic hydrocarbons (PAH)
Total Ni
Total Cr
Total Pb
Other metals
<i>Other parameters</i>

Annex VI – Draft table of processes in the production of WBP and the main environmental impacts/issues – from Background paper from the kick-off meeting

This table is copied from the background paper for the kick-off meeting in November 2011. The intention of this table is to illustrate the potential issues arising from the different processes in general terms. The rationale behind each of the raised environmental issues in the information collection using the template will be collected as well and amended in the BREF document. With Sheet 5 of the template in the information collection, this table will be updated and refined with verified information and correct terms. Be aware that the information that the table below shows is outdated at this point and should not be taken as the EIPPCB proposal for environmental issues in the WBP sector.

	Emissions anticipated yes/no main pollutant added if feasible				Marked grey if included in manufacture			
	Air	Water	Noise	Waste/residue generation	PB	FB dry	FB wet	OSB
Wood preparation								
Receipt of raw wood material <i>Logs - chips/sawdust - recycled wood</i>	Yes Wood dust	?	Yes	Wood residues				
Storage of raw wood material	Yes Wood dust	Yes COD	No	Wood residues				
Storage of chipped wood/wood flakes/fibres before and after drying. <i>Wet storage closed bins/silos</i>	Yes. Wood dust	Yes COD	No	Wood residues				
Internal transport of wood materials in general: <i>Conveyor - Mechanical or pneumatic - open or closed systems</i>	Yes Wood dust	?	Yes	Wood residues				
Debarking of logs <i>Drum debarking - Ring debarking</i>	Yes Wood dust	?	Yes	Bark and wood residues				
Washing of wood;	Yes	Yes COD	?	Waste water, wood residues				
Cleaning of recycled raw materials prior to chipping	Yes Dust	?	Yes	Plastics, glass, stones, metals				

Annex VI – Draft table of processes in the production of WBP and the main environmental impacts/issues – from Background paper from the kick-off meeting

	Emissions anticipated yes/no main pollutant added if feasible		Noise	Waste/residue generation	Marked grey if included in manufacture			
	Air	Water			PB	FB dry	FB wet	OSB
Chipping of wood; <i>Hammer mills (dry wood) - Knife ring flakers (wet wood)</i>	Yes Wood dust	?	Yes	Wood residues				
Comminution to flakes <i>Drum flakers - Vertical disc flakers</i>	Yes Wood dust	?	Yes	Wood residues				
Screening and cleaning of wood chips and flakes	Yes Wood dust	No	Yes	Waste/residues as plastics, glass, stones, metals				
Softening of fibres prior to defibration <i>Steam cooking</i>	?	Yes	No					
Defibration/refining <i>Counter rotating plates - Pressurized refiner</i>	Yes Wood dust	Yes COD	Yes	Wood fibres and residues				
Drying and panel preparation								
Drying of Chips/wood flakes/fibres; Overall distinction: direct fired dryers, indirect fired Dryers <i>Rotary drum dryers - rotary bundle dryers - tubular dryers (indirect heated) - flash dryers (fibres) - single pass dryers (particle board) - three pass dryers (particle board) - flash tube pre-dryer - jet tube dryer - hybrid dryers.</i>	Yes VOCs, dust, aldehydes, odour, direct dryers also emissions from combustion	No	Yes					
Mixing of glues and additives in glue kitchen	?	Yes	No	Resin residue				
Application of glues and additives, before or after drying	Yes Dust, VOCs, aldehydes	Yes	?					
Panel Production								

Annex VI – Draft table of processes in the production of WBP and the main environmental impacts/issues – from Background paper from the kick-off meeting

	Emissions anticipated yes/no main pollutant added if feasible		Noise	Waste/residue generation	Marked grey if included in manufacture			
	Air	Water			PB	FB dry	FB wet	OSB
Mat forming <i>Continuously moving screen (OSB) - High pressure nozzle</i>	Yes Dust, VOCs, aldehydes	?	?	Wood residues				
Pre-pressing	Yes VOCs, dust, aldehydes	?	Yes					
Pressing <i>Continuous press - Calendar press, discontinuously – multi daylight press</i>	Yes Steam, VOCs, dust, aldehydes Odour	?	Yes					
Cutting	Yes Dust	No	Yes	Wood residues				
Cooling <i>Board carousel – Conveyor</i>	Yes. VOCs, aldehydes	No	?					
Finishing								
Sanding	Yes Wood dust	No	Yes	Wood residues				
Cutting in smaller sections	Yes Wood dust	No	Yes	Wood residues				
Storage of finished product	No	No	No					
Coating								
Coating (which can be subdivided according to coating applied)	?	?	?	Wood residues				
Auxiliary activities								
Pre-treatment of fuels <i>Chipping, screening and drying of bark and wood residues - Shredding, chipping, grinding, sieving,</i>	Yes Dust	?	Yes	Residues: wood, sand, plastics, glass, stones, metals				

Annex VI – Draft table of processes in the production of WBP and the main environmental impacts/issues – from Background paper from the kick-off meeting

	Emissions anticipated yes/no main pollutant added if feasible				Marked grey if included in manufacture			
	Air	Water	Noise	Waste/residue generation	PB	FB dry	FB wet	OSB
<i>screening, cleaning of waste wood/recycled wood and wood waste from production - Stabilising, dewatering and drying of sludge.</i>								
Combustion	Yes Combustion parameters depending on fuel: dust, fly ash, CO, CO2, NOx, SOx, NH3, HCL, PCDD/F, VOCs, PAH, heavy metals	(yes)	Yes	Slag and flyash				
Effluent treatment	? VOC, aerosols	Yes	?	Sludge, scrubber solutions				
Cells in blue : Potential significant impact Yes: Potential impact No: No expected impact ?: Not anticipated, but shall be assessed								