## **Appendix 2.1 - Reporting of PM emissions**

<u>Table A2.1: Inclusion/exclusion of the condensable component from PM,,10,, and PM,,2.5,, emission factors</u> (NOTE: NFR categories with no reported activity or PM emissions (notation keys 'NO' or 'NA' in the NFR tables) are excluded here!)

NFR code	Source / sector name		condensable component	EF reference and/or comments	
		included	excluded		
NFR 1 - Ene	ergy		•		
1.A.1.a	Public electricity and heat production			x	
1.A.1.b	Petroleum refining			х	
1.A.1.c	Manufacture of solid fuels and other energy industries			x	
1.A.2.a	Stationary combustion in manufacturing industries and construction: Iron and steel			Х	
1.A.2.b	Stationary combustion manufacturing industrie construction: Non-ferrous	s and		?	no indication
1.A.2.c	Stationary combustion in manufacturing industries and construction: Chemicals				
1.A.2.d	Stationary combustion in manufacturing industries and construction: Pulp, Paper and Print				
1.A.2.e	Stationary combustion in manufacturing industries and construction: Food processing, beverages and tobacco			X	
1.A.2.f	Stationary combustion in manufacturing industries and construction: Nonmetallic minerals				
1.A.2.g vii	Mobile combustion in manufacturing industries and construction (please specify in the IIR)	orange	x^^1^^		country-specific EF likely to include condensables
1.A.2.g viii	Stationary combustion in manufacturing industries and construction: Other (please specify in the IIR)			х	
1.A.3.a i(i)	International aviation LTC	) (civil)		?	country-specific EF without clear indication

1.A.3.a ii(i)	Domestic aviation LTO (	civil)		?	country-specific EF without clear indication
1.A.3.b i	Road transport: Passenger cars	orange	x^^1^^		country-specific EF likely to include condensables
1.A.3.b ii	Road transport: Light duty vehicles	orange	x^^1^^		country-specific EF likely to include condensables
1.A.3.b iii	Road transport: Heavy duty vehicles and buses	orange	x^^1^^		country-specific EF likely to include condensables
1.A.3.b iv	Road transport: Mopeds & motorcycles	orange	x^^1^^		country-specific EF likely to include condensables
1.A.3.b v	Road transport: Gasoline eva	poration	NA		
1.A.3.b vi	Road transport: Automobile tyre and brake wear			x	
1.A.3.b vii	Road transport: Automobile road abrasion			х	
1.A.3.c	Railways	orange	x^^1^^		country-specific EF likely to include condensables
1.A.3.d i(ii)	International inland waterways		IE	included in NFR 1.A.3.d ii	
1.A.3.d ii	National navigation (shipping)		x^^1^^		country-specific EF likely to include condensables
1.A.3.e i	Pipeline transport			х	
1.A.4.a i	Commercial/Institutional: Stationary			x	
1.A.4.a ii	Commercial/Institutional: Mobile	orange	x^^1^^		country-specific EF likely to include condensables
1.A.4.b i	Residential: Stationary			х	
1.A.4.b ii	Residential: Household and gardening (mobile)			?	country-specific EF without clear indication
1.A.4.c i	Agriculture/Forestry/Fishing: Stationary			X	
1.A.4.c ii	Agriculture/Forestry/Fishing: Off-road vehicles and other machinery	orange	x^^1^^		country-specific EF likely to include condensables

1.A.4.c iii	Agriculture/Forestry/Fishing: National fishing			?	country-specific EF without clear indication
1.A.5.a	Other stationary (including military)			х	
1.A.5.b	Other, Mobile (including military, land based and recreational boats)	orange	x^^1^^		country-specific EF likely to include condensables
1.B.1.a	Fugitive emission from solid fuels: Coal mining and handling			Х	
1.B.1.b	Fugitive emission from solid fuels: Solid fuel transformation			X	
1.B.2.c	Venting and flaring (oil, gas, combined oil and gas)			?	EMEP GB 2016 EF without any indication
NFR 2 - IPPI	J				
2.A.1	Cement production			?	country-specific EF without any indication
2.A.2	Lime production			?	country-specific EF without any indication
2.A.3	Glass production			?	country-specific EF without any indication
2.A.5.a	Quarrying and mining of minerals other than coal			?	EMEP GB 2016 EF without any indication
2.A.5.b	Construction and demolition			?	EMEP GB 2016 EF without any indication
2.A.5.c	Storage, handling and transport of mineral products		IE	included in NFR 2.L	
2.A.6	Other mineral products (please specify in the IIR)			?	country-specific EF without any indication
2.B.3	Adipic acid production		NE	no EF in EMEP GB 2019	
2.B.5	Carbide production			?	country-specific EF without any indication
2.B.7	Soda ash production			?	country-specific EF without any indication
2.B.10.a	Chemical industry: Other (please specify in the IIR)			?	carbon black: country-specific EF without any indication

2.B.10.a	Chemical industry: Other (please specify in the IIR)		?	fertilizer production: country-specific EF without any indication
2.B.10.b	Storage, handling and transport of chemical products (please specify in the IIR)	IE	included in NFR 2.L	
2.C.1	Iron and steel production		?	country-specific EF without any indication
2.C.2	Ferroalloys production		?	country-specific EF without any indication
2.C.3	Aluminium production		?	country-specific EF without any indication
2.C.4	Magnesium production	NE	no primary magnesium production; emission for secondary magnesium production allocated in 1.A.2.b	
2.C.5	Lead production		?	country-specific EF without any indication
2.C.6	Zinc production		?	country-specific EF without any indication
2.C.7.a	Copper production		?	country-specific EF without any indication
2.C.7.c	Other metal production (please specify in the IIR)		?	no indication
2.C.7.d	Storage, handling and transport of metal products (please specify in the IIR)	IE	included in NFR 2.L	
2.D.3.b	Road paving with asphalt		?	country-specific EF without any indication
2.G	Other product use: Tobacco		?	country-specific EF without any indication
2.G	Other product use: Fireworks		?	EMEP GB 2019 EF without any indication
2.G	Other product use: Charcoal		?	EF from 1.A.4 EMEP GB 2019 EF without any indication

2.H.1	Pulp and paper industry			?	country-specific EF without any indication
2.H.2	Food and beverages industry			?	EMEP GB 2016 EF without any indication
2.1	Wood processing			?	country-specific EF without any indication
2.J	Production of POPs		NE		
2.L	Other production, consumpt storage, transportation or hand bulk products (please specify in	dling of	?	country-specific EF without any indication	
NFR 3 - Agriculture					
3.B.1.a	Manure management - Dairy	cattle		?	EMEP GB 2016 EF without any indication
3.B.1.b	Manure management - Non-dairy cattle			?	EMEP GB 2016 EF without any indication
3.B.2	Manure management - Sheep			?	EMEP GB 2016 EF without any indication
3.B.3	Manure management - Swine			?	EMEP GB 2016 EF without any indication
3.B.4.a	Manure management - Buffalo		ΙE	EMEP GB 2016 EF without any indication	
3.B.4.d	Manure management - Goats			?	EMEP GB 2016 EF without any indication
3.B.4.e	Manure management - Horses			?	EMEP GB 2016 EF without any indication
3.B.4.f	Manure management - Mules and asses		IE	EMEP GB 2016 EF without any indication	
3.B.4.g i	Manure management - Laying hens			?	EMEP GB 2016 EF without any indication
3.B.4.g ii	Manure management - Broilers			?	EMEP GB 2016 EF without any indication
3.B.4.g iii	Manure management - Turkeys			?	EMEP GB 2016 EF without any indication
3.B.4.g iv	Manure management - Other poultry			?	EMEP GB 2016 EF without any indication

				EMED CD 2016	
3.B.4.h	Manure management - Other animals (please specify in the IIR)		NE	EMEP GB 2016 EF without any indication	
3.D.c	Farm-level agricultural operations including storage, handling and transport of agricultural products			?	EMEP GB 2016 EF without any indication
NFR 5 - Waste					
5.A	Biological Treatment of Waste - Solid Waste Disposal on Land			?	EMEP-GB 2019: EF without any indication
5.C.1.b v	Cremation		?	country-specific EF without any indication	
5.E.2	Other Waste: Building and Car Fires			?	EMEP GB 2016 EF without any indication
MEMO ITEMS - NOT TO BE INCLUDED IN					
NATIONAL TOTALS					
1.A.3.a i(ii)	International aviation cruise (civil)			?	country-specific EF without clear indication
1.A.3.a ii(ii)	Domestic aviation cruise (civil)			?	country-specific EF without clear indication
1.A.3.d i(i)	International maritime navigation			?	country-specific EF without clear indication
1.A.5.c	Multilateral operations		NE		
11.B	Forest fires			?	EMEP GB 2016 EF without any indication

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