

## Appendix 2.1 - Reporting of PM emissions

Table A2.1: Documentation entries of the Central System Emissions database for the condensable fraction of PM<sub>2.5</sub>

NFR categories with no reported activity or PM emissions (notation keys 'NO' or 'NA' in the NFR tables) are excluded here.)

The condensable fraction of particulate matter (PM<sub>2.5</sub>) is documented for all source groups in the emissions database ("Central Emissions System") of the German Environmental Agency. A documentation entry has been created for each source group, indicating the following options for condensable particulate matter (PM<sub>2.5</sub>):

- The documentation for the condensable fraction for PM<sub>2.5</sub> is not available (documentation N/A)
- Yes (measured/determined) – The condensable fraction for PM<sub>2.5</sub> was measured or determined
- NA (no condensable PM<sub>2.5</sub> is generated in the process) – Therefore not applicable (NA)
- No (but potentially possible)
- Unknown – The condensable fraction for PM<sub>2.5</sub> is unknown

Below is an excerpt from the current Central System Emissions, showing the aforementioned documentation entries for each source group.

Source group		Documentation not available	Yes (measured/determined)	Not Applicable (no condensable PM <sub>2.5</sub> are generated in the process)	No (potentially possible)	Unknown	Number of document entries
<b>NFR 1 Energy</b>							
1 A 1 a	Public electricity and heat production	-	-	-	147	-	147
1 A 1 b	Petroleum refining	-	-	-	31	-	31
1 A 1 c	Manufacture of solid fuels and other energy industries	-	-	-	49	-	49
1 A 2 a	Stationary combustion in manufacturing industries and construction: Iron and steel	-	-	-	22	-	22
1 A 2 b	Stationary combustion in manufacturing industries and construction: Non-ferrous metals	-	-	-	-	-	-
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	-	-	-	-	-	-
1 A 2 f	Stationary combustion in manufacturing industries and construction: Non-metallic minerals	-	-	-	-	-	-

1 A 2 g vii	Mobile combustion in manufacturing industries and construction (please specify in the IIR)	-	4	-	-	-	4
1 A 2 g viii	Stationary combustion in manufacturing industries and construction: Other (please specify in the IIR)	-	-	-	102	-	102
1 A 3 a	Domestic Aviation	-	-	-	-	4	4
1 A 3 b	Road Transport	-	469	18	-	-	487
1 A 3 c	Railways	-	11	-	1	-	12
1 A 3 d	Domestic Navigation	-	5	-	1	-	6
1 A 3 e	Other Transportation	-	-	-	3	-	3
1 A 4 a i	Commercial/Institutional: Stationary	-	-	-	28	-	28
1 A 4 a ii	Commercial/Institutional: Mobile	-	3	-	-	-	3
1 A 4 b i	Residential: Stationary	-	-	-	14	-	14
1 A 4 b ii	Residential: Household and gardening (mobile)	-	-	-	4	4	8
1 A 4 c i	Agriculture/Forestry/Fishing: Stationary	-	-	-	15	-	15
1 A 4 c ii	Agriculture/Forestry/Fishing: Off-road vehicles and other machinery	-	6	-	-	-	6
1 A 4 c iii	Agriculture/Forestry/Fishing: National fishing	-	-	-	-	3	3
1 A 5 a	Other stationary (including military)	-	-	-	10	-	10
1 A 5 b	Other, Mobile (including military, land based and recreational boats)	-	-	-	9	-	9
1 B 1 a	Fugitive emission from solid fuels: Coal mining and handling	-	-	1	-	-	1
1 B 1 b	Fugitive emission from solid fuels: Solid fuel transformation	-	-	6	2	-	8
1 B 2 c	Venting and flaring (oil, gas, combined oil and gas)	-	-	-	1	-	1
1 D 1 a	Civil Aviation (international)	-	-	-	-	4	4
1 D 1 b	Maritime Navigation (international)	-	-	-	-	2	2
11 B	Forest Fires	-	-	-	-	1	1
<b>NFR 2 - IPPU</b>							
2 A 1	Cement production	-	-	-	1	-	1
2 A 2	Lime production	-	-	-	-	2	2
2 A 3	Glass production	-	6	-	-	-	6
2 A 4 A	Ceramics	-	-	-	-	15	15
2 A 5 a	Quarrying and mining of minerals other than coal	-	-	4	-	-	4
2 A 5 b	Construction and demolition	-	-	5	-	-	5
2 B 5	Carbide production	-	-	-	-	1	1
2 B 8	Petrochemical and Carbon Black Production	-	-	-	-	1	1
2 B 10	Other	-	-	-	-	1	1
2 C 1	Iron and steel production	-	-	-	-	7	7
2 C 2	Ferroalloys production	-	-	-	-	1	1
2 C 3 a	By-Product Emissions	-	-	-	-	2	2

2 C 4	Magnesium production	-	-	-	-	-	-
2 C 5	Lead production	-	-	-	-	2	2
2 C 6	Zinc production	-	-	-	-	2	2
2 C 7	Other	-	-	-	-	3	3
2 D 3 b	Road paving with asphalt	-	-	-	-	1	1
2 G 1	Electric Equipment	-	-	-	-	-	-
2 G 2	SF <sub>6</sub> and PFCs from Other Product Use	-	-	-	-	-	-
2 G 3	N <sub>2</sub> O from Product Uses	-	-	-	-	-	-
2 G 4	Other	-	3	-	-	1	4
2 H 1	Pulp and paper industry	-	-	-	2	-	2
2 H 2	Food and beverages industry	-	-	-	-	2	2
2 I	Wood processing	-	-	1	-	-	1
2 L	Other production, consumption, storage, transportation or handling of bulk products (please specify in the IIR)	-	-	1	-	89	90
<b>NFR 3 - Agriculture</b>							
3 B	Manure Management	-	-	20	-	-	20
3 D	Agricultural Soils	-	-	1	-	-	1
<b>NFR 5 - Waste</b>							
5 A	Biological treatment of waste - Solid waste disposal on land	-	-	1	-	-	1
5 C	Waste Incineration	-	-	-	1	1	2
5 E	Other waste (please specify in the IIR)	-	-	-	-	6	6
<b>SUM</b>		-	<b>507</b>	<b>58</b>	<b>443</b>	<b>155</b>	<b>1,163</b>