

ANNEX 4

GLOSSARY FOR INDUSTRIAL PROCESSES AND PRODUCT USE SECTOR

[Parts shaded in grey – the unchanged text from the *2006 IPCC Guidelines*]

[Bracketed text – characterization of guidance as new, updated, and/or elaborated]

ANNEX 4 GLOSSARY FOR INDUSTRIAL PROCESSES AND PRODUCT USE SECTOR

This annex provides definitions and abbreviations for terms used in this volume on Industrial Processes and Product Use (IPPU) Sector. This annex should be used in conjunction with the general ‘Glossary’ in Volume 1 of these Guidelines which provides definitions for terms used not only in this volume but also in the other volumes.

Glossary

[New Glossary]

ANODE EFFECT (HIGH VOLTAGE & LOW VOLTAGE ANODE EFFECT)

In primary aluminium and rare earth metals production (by fluoride electrolysis), an anode effect is a process upset condition where an insufficient amount of metal oxide (alumina in aluminium production, rare earth oxides in rare earth metal production) is dissolved in the electrolyte, resulting in the emission of PFC gases. This often causes voltage on industrial cells to be elevated above the normal operating range; however, PFC gases can also be generated in the absence of elevated voltage. A high voltage anode effect (HVAE) is an anode effect where the voltage exceeds the specific voltage threshold defined at the facility (e.g. >8 volts for aluminium production). A low voltage anode effect (LVAE) is an anode effect (and emission of PFC gases) in cases where the cell voltage doesn’t exceed the voltage threshold (e.g. <8 volts for aluminium production).

RARE EARTH

Rare earth elements or rare earth metals (REM) are a group of 17 chemically similar metallic elements in the periodic table, i.e.: scandium (Sc), yttrium (Y) and the lanthanides – lanthanum (La), cerium (Ce), praseodymium (Pr), neodymium (Nd), promethium (Pm), samarium (Sm), europium (Eu), gadolinium (Gd), terbium (Tb), dysprosium (Dy), holmium (Ho), erbium (Er), thulium (Tm), ytterbium (Yb) and lutetium (Lu). ‘Rare earths’ typically refers to the rare earth oxide.

Second-order Draft

Abbreviation

34		
35		
36	AGO	Australian Greenhouse Gas Office
37	APME	Association of Plastics Manufacturers Europe
38	AWACS	Airborne Warning and Control System
39	BAT	Best Available Techniques
40	BFC	Blast Furnace Gas
41	BOF	Basic Oxygen Furnace (steelmaking)
42	BREF	Best Available Techniques Reference Documents (under European Integrated
43		Pollution Prevention and Control Bureau.) http://eippcb.jrc.es/pages/FActivities.htm
44	C4 +	By-product hydrocarbons containing more four or more carbon atoms (e.g., butanes,
45		pentanes, hexanes, heptanes)
46	CaCO ₃	Calcium carbonate
47	CaO	High calcium lime
48	Ca(OH) ₂	Slaked high-calcium lime
49	Ca(OH) ₂ •Mg(OH) ₂	Slaked dolomitic lime
50	CaO•MgO	Dolomitic lime
51	CKD	Cement Kiln Dust
52	CIGRE	International Council on Large Electric Systems
53	COG	Coke Oven Gas
54	DOE	United States Department of Energy
55	DRE	Destruction or Removal Efficiency
56	DRI	Direct Reduced Iron
57	EAF	Electric Arc Furnace (steelmaking)
58	EDC	Ethylene Dichloride
59	EG	Ethylene Glycol
60	EO	Ethylene Oxide
61	FEPC	The (Japanese) Federation of Electric Power Companies
62	FGD	Flue Gas Desulphurisation
63	FgH-ISI	Fraunhofer-Institut für Systemtechnik und Innovationsforschung
64	GCB	Gas Circuit Breakers
65	GIL	Gas Insulated Lines
66	GIS	Gas Insulated Switchgear and Substations
67	GIT	Gas Insulated power Transformers
68	HBI	Hot Briquetted Iron
69	HMA	Hot Mix Asphalt
70	HV (Switchgear)	High Voltage (Switchgear) for rated operating voltages above 52 000 Volts
71	HVAE	High Voltage Anode Effect
72	IEC	International Electro-technical Commission
73	ITs	Instrument Transformers
74	JEMA	The Japan Electrical Manufacturer's Association

75	LKD	Lime Kiln Dust
76	LVAE	Low Voltage Anode Effect
77	LVOC	Large Volume Organic Chemical
78	LVIC	Large Volume Inorganic Chemical
79	MgCO ₃	Magnesium carbonate
80	MV (Switchgear)	Medium Voltage (Switchgear) for rated operating voltages above 1 000 Volts and up
81		to 52 000 Volts
82	OHF	Open Hearth Furnace (steelmaking)
83	PC	Portland cement
84	PECVD	Plasma Enhanced Chemical Vapor Deposition
85	PFC	Perfluorocarbon gases
86	RDE	Recovery and Destruction Efficiency
87	RE	Rare Earth
88	REO	Rare Earth Oxide
89	TFT	Thin-Film Transistor
90	VCM	Vinyl Chloride Monomer
91		