

Table 1. Phase 1 Refinables project: identification and speciation work - 21 Jan 2010

Group	Name	EC and CAS numbers	Phase 1: ID/sp work - Chemical and mineralogical characterisation: ICP, and XRD and optical microscopy + spectrometry, excluding Au and PGE (performed by Outotec)										Comment
			N° of samples	Name	Description of sample(s)	Sample providers	Sample quantities	Reserve sample storage	Sample preparation	Sample submission	Test start - end	Sample storage	
1	Doré	273-793-6; 69029-47-6	1	Impure	Impure doré containing Ag, Cd, Pb, Ni	Aurubis?	TBA	TBA	Collect from molten form; obtain < 3 mm granulates; COMPLETE	TBC	End Feb - End Mar	TBC kg of the same batch should be stored in-house for a minimum of two years	Speciation work to run in parallel with T/D work (cf. Table 4a)
2	Matte, PM refining	308-506-6; 98072-52-7	2	Fresh	Fresh matte containing Ni, As, Cr, Co	Umicore	TBA	TBA	Granulated < 3 mm COMPLETE	TBC	End Feb - End Mar	TBC kg of the same batch should be stored in-house for a minimum of two years	Speciation work to run in parallel with T/D work (cf. Table 4a)
				Aged	Aged matte containing Ni, As, Cr, Co	Umicore							
3	Slags, PM refining	308-515-5; 98072-60-7	3	Borate-type	Borate-type slag containing Cu, As, Pb, Ni, Zn	Umicore	TBA	TBA	Collect from molten form; obtain < 3 mm granulates; COMPLETE	TBC	End Feb - End Mar	TBC kg of the same batch should be stored in-house for a minimum of two years	Speciation work to run in parallel with T/D work (cf. Table 4a)
				Phosphate-type	Phosphate-type slag containing Cu, As, Pb, Ni, Zn	Britannia Refined Metals	TBA	TBA					
				Silicate-type	Silicate-type slag containing Cu, As, Pb, Ni, Zn	Umicore	TBA	TBA					
4	Slimes and sludges, PM refining	308-516-0; 98072-61-8	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No speciation work will be performed. Instead, classification scenarios indicated key classifiers and associated boundaries will be provided to Members. Each Member is then responsible for determining (a) the most likely classification scenario corresponding for their material(s) and (b) the need to refine this classification with a T/D 24 h screening test
5.1	Matte leaching residue	310-050-8; 102110-49-6	0	N/A	N/A	NA	N/A	N/A	N/A	N/A	N/A	N/A	Speciation work already performed by Outotec on a sample provided by Norilsk Nickel. Action on other Members manufacturing and/or importing this material: confirm sameness of species contained in NN's sample
5.2	Speiss leaching residue	309-643-4; 100656-54-0	1	Speiss leaching residue	Speiss leaching residue containing Ni, Pb, As	Umicore	TBA	TBA	Granulated < 3 mm COMPLETE	TBC	End Feb - End Mar	TBC kg of the same batch should be stored in-house for a minimum of two years	Speciation work to run after results of speciation work have been received; if no sulphate forms are present a T/D work will be conducted (cf. Table 4a)
6.1	Ag electrolyte	New (from 308-516-0; 98072-61-8)	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Action on other Members manufacturing and/or importing this material: confirm species and amount of Pb contained in Ag electrolyte
6.2	Au electrolyte	New (from 308-516-0; 98072-61-8)	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Action on other Members manufacturing and/or importing this material: confirm species and amount of Pb contained in Au electrolyte
7	Flue dust, PM refining	308-496-3; 98072-44-7	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No speciation work will be performed. Instead, classification scenarios indicated key classifiers and associated boundaries will be provided to Members. Each Member is then responsible for determining (a) the most likely classification scenario corresponding for their material(s) and (b) the need to refine this classification with a T/D 24 h screening test
8	Residues cementation and reduction, PM refining	310-051-3; 102110-50-9	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No speciation work will be performed. Instead, classification scenarios indicated key classifiers and associated boundaries will be provided to Members. Each Member is then responsible for determining (a) the most likely classification scenario corresponding for their material(s) and (b) the need to refine this classification with a T/D 24 h screening test
9.1	Materials for reclaim, PM with or without support	New (from 308-526-5; 98072-70-9)	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No speciation work will be performed. Instead, classification scenarios indicated key classifiers and associated boundaries will be provided to Members. Each Member is then responsible for determining (a) the most likely classification scenario corresponding for their material(s) and (b) the need to refine this classification with a T/D 24 h screening test
9.2	Materials for reclaim, PM on bricks, crucibles, trays, etc.	New (from 308-526-5; 98072-70-9)	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No speciation work will be performed. Instead, classification scenarios indicated key classifiers and associated boundaries will be provided to Members. Each Member is then responsible for determining (a) the most likely classification scenario corresponding for their material(s) and (b) the need to refine this classification with a T/D 24 h screening test
9.3	Materials for reclaim, PM production by-products	New (from 308-526-5; 98072-70-9)	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No speciation work will be performed. Instead, classification scenarios indicated key classifiers and associated boundaries will be provided to Members. Each Member is then responsible for determining (a) the most likely classification scenario corresponding for their material(s) and (b) the need to refine this classification with a T/D 24 h screening test
10	Lead bullion, precious metal rich	New (from 308-011-5; 97808-88-3)	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Pb Consortium will be contacted to share experiences, views and recommendations on speciation work. In the event speciation or other analytical/testing work has already been performed, data-sharing will be promoted.
TOTAL			7										

If limited test house capacity:
 Priority 1 for testing
 Priority 2 for testing
 Priority 3 for testing