CONCLUSIONS

AP refers to Action Points listed at the end of this document

1. Introduction

1.1. Confidentiality and European Competition Law provisions. Participants were reminded on their obligation to comply with Confidentiality and Competition Law.

1.2. Tour de table. The list of participants is available in Annex 1. Due to the flight interruptions caused by the eruption of the Eyjafjallajoekull volcano in Iceland, most participants were prevented from attending the meeting in person and had to participate by conference call instead. All handouts were sent by e-mail in advance of the meeting and presentations (Annex 2) were made available by GoToMeeting.

1.3. Pending actions and approval of the minutes of the 20 January 2010 meeting. Cf. slide 5 of Annex 2. Key actions agreed at the last meeting were finalised and were followed-up during the meeting (e.g.: first tier of tests). Actions not completed will be completed before the next meeting. **AP1**

1.4. Approval of the Agenda. The Agenda (Annex 1) was approved. Time did not allow addressing items 5 and 6.2; an *ad hoc* conference call will be organised to address these.

2. Outcomes of tests performed at Outotec and ECTX

2.1. Approach to the characterisation and classification of PM Refinables:

2.1.1. PM Refinables Project Strategy. Cf. slide 10 of Annex 2. Focus is on proper hazard identification and subsequent classification.

2.1.2. Aim of chemical and mineralogical characterisation and 24h T/D pre-test. Cf. slides 11-12 of Annex 2. Aim is to support identification, sameness and classification.

2.1.3. Methods applied by Outotec Research Oy and ECTX Consult. Cf. slides 15-27 of Annex 2. These methods are both recognised by REACH and CLP authorities.

2.2. Lessons learned re sample collection: scope, timeline, information submitted with samples, etc. Cf. slide 28 of Annex 2. Time is of essence in the PM Refinables project. Samples must arrive at testing houses with a proper Certificate of Analysis in order to avoid delays or need for repetition. PSD and N-BET data should be obtained for the Refinables 1) as tested and 2) as placed on the market (**AP3**).

2.3. Results of tests performed by Outotec and ECTX per Refinable and confirmation of grouping approach. Cf. slides 29-50 of Annex 2. The summary of the discussions on characterisation (and classification) is available in Annex 3. In all cases the characterisation and T/D pre-tests revealed the expected composition and releases. Ag contained in doré is unexpectedly much less soluble than what is predicted by the Full T/D test performed on Ag powder (**AP1**). **AP2**, **AP3**, **AP4** and **AP5**

3. Classification.

Cf. slides 55-114 of Annex 2. P. Whitehead presented how the Toxicity Reference Values (TRV) were obtained through literature search to support ARCHE's classification tool; some of these TRV are only tentative or draft values and overall, they need to be updated as the data supporting such TRV is replaced by more recent and/or accurate data. H. Waeterschoot presented the tiered approach applied to classify and refine the classification of the PM Refinables (from no information (tier 0) to properly documented information (tier 2 and up)).
V. D'havé presented the refined classification of each PM Refinable (cf. slides 69-113 of Annex 2). It was noted that PMC and ARCHE name the tiers differently (need to harmonise) and that Boron is currently not included in the tool (**AP6**). TRV are compared to known cutt-off limits for HH endpoints and considered individually for ENV endpoints. In all cases the characterisation and 24h T/D pre-test resulted in a refined classification, avoiding worst case classification. Such refinement triggers the need to confirm the absence of classification or refine it further; in such cases additional T/D tests were recommended.

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AP7
It was clarified that the classification resulting from the assessment performed on the reference sample would be completed by additional classifications were needed, in order to adequately address different profiles of the same substance under REACH and CLP. **AP8** Depending on the outcome of AP7, Members will be recommended to perform 24h T/D pre-tests on their materials to confirm the absence of classification or refine the latter to a more realistic level. More information on the possibility and conditions of use of the tool by individual registrants will become available in summer 2010.

4. Annex VII and CLP information requirements.

4.1. REACH Annex VII vs CLP. Cf. slides 115-122 of Annex 2. Some similarities and differences exist between REACH and CLP. Although most of the CLP physico-chemical test endpoints are covered by REACH Annex VII (but for corrosivity to metals), these are not necessarily mandatory for intermediates < 1000 t/a under REACH. As per Article 8 of the CLP regulation, physico-chemical endpoints must be tested on time for the CLP notification in January 2011. This means that even though some tests are not required under REACH, they are mandatory under CLP and must hence be performed. In the event a substance is registered before the CLP January 2011 CLP notification deadline this notification should be finalised and included in the Registration Dossier.

4.2. Likely derogations (not applicable, not feasible, or read-across from constituents). Cf. slides 123-126 of Annex 2. Several physico-chemical endpoints were considered against each PM refinable to evaluate the relevance of the test and derive an Annex VII phys-chem+CLP testing strategy (Annex 4). **AP9** Where a test is waived, the proper ECHA guidance waiving statement or PMC expert justification must be provided. **AP10** Annexes 5 and 6 provide decision trees to be considered before engaging into a full testing programme (for vapour pressure and self-ignition based on melting point; and granulometry based on common particle size, respectively).
As regards environmental endpoints, these are likely to be waived on the basis of T/D results. It is not yet sure whether human health endpoints can be waived on the basis of the absence or confirmed CMR/Sensitising/Irritating classification. Moreover, the obligation of replacing the Ames test by a Micronucleus test when testing metals' genotoxicity needs to be confirmed **AP11**
Overall, unless properly justified, it was agreed that the PMC testing strategy should not deviate from the approach taken by other consortia to ensure consistency. **AP12**
Annex III derogations are unfortunately not applicable to the PM Refinables as all of these will be registered in a tonnage band superior to 10 t/a.

4.3. Suitability of LR's reference samples. Cf. slide 127 of Annex 2. In cases where several samples exist a note has been added to Annex 4. The most pragmatic approach (where other parameters cannot be considered due to time constraints) is to test the Lead Registrant sample only unless a more appropriate or additional sample can be provided by another PMC Member. Considering the UVCB nature of PM refinables, sufficient flexibility should be allowed in defining their identity and composition; the tested sample should be reasonably representative of the material but cannot be expected to be an absolute typical/usual profile.

4.4. Collection of samples and commissioning of tests to Harlan - logistics. Cf. slide 128 of Annex 2. As per AP9 CB will circulate a sample request to each concerned sample provider. A timeslot has already been secured (by contract) with Harlan, the testing programme is aimed at starting in May 2010.
As regards the PGM rich Pb bullion, if data has been generated by the Pb Consortium for their Pb bullion, this is likely to be of use to prepare the PGM rich Pb bullion. **AP13**

5. PM Refiners project plan & strategy. Cf. slides 129-152 of Annex 2. Time did not allow to cover item 5 of the Agenda. **AP14**

6. Next meetings, AOB and concluding remarks

6.1. Next meeting: 6, 7 or 8 July are proposed as tentative dates for the next meeting. The exact date will be confirmed as soon as the testing houses have confirmed the date of release of their first reports.

6.2. Substance Identification: minimum characterisation work to be performed by each registrant to confirm identity and sameness. Cf. slides 155-170 of Annex 2.This question has been addressed by several consortia and picked-up as a common issue by Eurométaux, who is drafting a recommendation for all Members (**AP15**).

Table 1. Proposed way forward to complete PM Refinables IUCLID 5.2 files with elemental / chemical (and mineralogical) characterisation, classification and PSD (Granulometry) data

	Lead Registrant (LR)	Other registrants
Elemental composition	MANDATORY Section 1.2 Substance composition: - one section for each profile identified by PM Refiners WG – use agreed profile name - indicate typical concentration as average or median concentration of LR's substance - indicate min/max concentration as per ranges agreed by PM Refiners WG – classification boundaries	MANDATORY Section 1.2 Substance composition - one section per profile actually manufactured or imported by registrant (pick from list registered by LR) - indicate typical concentration as average or median concentration of registrant - indicate min/max concentration as per ranges agreed by PM Refiners WG – classification boundaries
Elemental / chemical and mineralogical composition	VOLUNTARY Section 1.4 Analytical information - attach the reports of the elemental / chemical and mineralogical characterisation	VOLUNTARY Section 1.4 Analytical information - attach the elemental / chemical (and mineralogical) characterisation report(s)
Classification	MANDATORY Section 2. Classification and Labelling - one section per classification profile identified by PM Refiners WG – use agreed profile name as in 1.2 - no need to specify classification boundaries; these are established per profile in 1.2 with the min/max concentrations of each element MANDATORY Indicate relevant classification in SDS and any other document aiming at communicating with downstream users, customers, etc.	LEAVE EMPTY IN IUCLID 5.2 – may be considered as an opt-out from the joint submission, trigger additional costs and evaluation of the file. MANDATORY Indicate relevant classification in SDS and any other document aiming at communicating with downstream users, customers, etc.
PSD+N-BET analysis	MANDATORY Section 4.5 Particle size distribution (Granulometry): add one endpoint study record for each particle size distribution measured within PM Refiners WG for each PM Refinable Sample providers must measure PSD and N-BET on both the samples they provided for the testing programme and the material as it is manufactured or imported on the EEA market	VOLUNTARY Section 1.4 Analytical information: attach the PSD report(s) performed on the registrant's samples

It was agreed that the minimum analysis required for PM Refinables for:
(a) Lead Registrants are: ICP or XRF + mineralogical characterisation + PSD + N-BET,
(b) Other registrants are: ICP or XRF + PSD
(for granulometry/PSD please refer to Annex 6).

The proposed way forward to use/include the above data in IUCLID 5.2 is described in Table 1 above.

6.3. Safety Data Sheets: how to produce consistent yet company-specific SDS for PM Refinables? Cf. slides 171-173 of Annex 2. In most cases no SDS (as such) existed for PM Refinables before REACH. Although a full CSA or Guidance on Safe Use is not required for intermediates under REACH, it was proposed for PMC to prepare a reference SDS template for each PM Refinable (as a complement to each ID Card). Whereas some PMC Members work with *ad hoc* software systems, others prepare their SDS in a less automated manner. Moreover, the exact wording used by one company may be different from the wording used by another company. Overall, the aim of the SDS is to properly identify and describe the hazards and associated safety measures for each material. In line with this, the PMC SDS should be prepared and used as reference sources of safety information for each PM Refinable in PMC discussions (the use made of these SDS outside

the PMC is subject to each Members' responsibility and liability). Once all existing "SDS" have been received from Members (**AP16**), WCA will draft template SDS for each PM Refinable and propose it to the PM Refiners WG for approval.

6.4. **Strictly controlled conditions.** Cf. slides 174-178 of Annex 2. H. Waeterschoot updated the participants on the current status of the adjusted ECHA guidance on intermediates (including strictly controlled conditions). The obligation of strict control should ideally be applicable where no hazard information exists on a material, in accordance with the precautionary principle. Where hazard is known, adequate control should be considered instead. Members are recommended to properly document the information they have on their intermediates and which make them eligible for "light" registration (i.e. they are chemically transformed into another substance and there are manufactured and handled under conditions which minimise exposure) and make an inquiry with their relevant Competent Authority if they have any serious doubt on the status of their intermediate.

6.5. **Borates on SVHC list.** Ilse Schoeters (Rio Tinto) updated participants on the latest discussions on borates. Tetraborate is classified as Reprotox 1B in the existing system and has because of this classification, been suggested as a candidate substance for the list of Substances of Very High Concern (SVHC). The European Borate industry has always showed disagreement with the existing classification and is therefore opposing the proposal of placing tetraborate on the SVHC list as well. Comments on this proposal were due by 22 March (Member States have two additional weeks to comment – possibility of submitting comments through national authorities). Borax is used in the refinement of precious metal containing streams and as such PMC Members were invited to reinstate the importance and irreplaceability of this material. Should the proposal be supported (to be confirmed in June 2010), the manufacture and use of tetraborate may be subject to authorisation and/or restrictions impacting precious metals refining processes.

Annexes

1. Agenda and list of participants
2. Slides presented at the meeting
3. Summary of discussions on characterisation and classification of PM Refinables
3.1. Summary table reflecting classification refinement of PM Refinables and further testing needs
4. CLP testing programme
5. ITS based on melting point and boiling point results (as per ECHA guidance)
6. ITS for granulometry (as per ECHA guidance)

Table 2. Actions agreed at 20-21 April 2010 PM Refiners WG meeting

	What?	Who?	By when?	Status on 10 May 2010
1.	• Finalise PM Refiners ID Cards • Finalise REACH/Waste paper • Investigate difference of dissolution rate of Ag in doré and Ag powder	CB + KR	Summer 2010	
2.	To provide elemental analysis and further characterisation data if available (e.g.: borate slags)	Sample providers	15 May 2010	
3.	To measure particle size distribution and N-BET for their samples (powders < 1 mm diameter after preparation) and provide this information to CB	Sample providers	15 May 2010	
4.	Provide elemental analysis and expected species (based on input material and process) of Au slime and non-CMR slime to CB	Aurubis and Heraeus	15 May 2010	
5.	Contact Pb Consortium to determine existing/generated data set and agree on eventual data-sharing conditions	CB + HW	W/c 26 Apr 2010	
6.	Harmonise names of classification tiers, include B to tool	CB+ARCHE	ASAP	Done
7.	Send missing characterisation and 24h T/D pre-test values to ARCHE for further refininement and launch tier 2 testing programme as per Annex 3 and 3.1 recommendations	CB	15 May 2010	Done
8.	Derive classification clusters based on occurrence of typical profiles amongst PMC Members (preceded by approved quote)	ARCHE	Summer 2010	Quote received
9.	Launch CLP testing programme as per Annex 4 recommendations	CB + WCA	15 May 2010	
10.	Provide waiving statements or need for PMC expert judgement (based on ECHA guidance waiving statement and testing protocol relevant for the endpoint) for each waived endpoint to CB	WCA	15 May 2010	
11.	• Inquire whether human health tests (a) can be waived on the basis of a confirmed or the absence of a CMR/Sensitising/Irritating classification based on the constituents, (b) can be waived on the basis of a confirmed or the absence of a classification + bio-accessibility tests, or (c) cannot be waived • Clarify justification for replacement of AMES test by Micronucleus test	CB + HW + WCA	15 May 2010	
12.	Confirm testing approach with other consortia and obtain testing/waiving recommendations from other experts (e.g.: Outotec, Harlan, etc.) to reality-check PMC's approach	CB + HW + WCA	15 May 2010	
13.	Contact Pb Consortium and inquire about type of information available/tests performed on Pb bullion for potential read-across use to PGM rich Pb bullion	CB	W/c 26 Apr 2010	Done
14.	Organise *ad hoc* PM Refiners WG conference call to address items not discussed at 20-21 April meeting (descriptions, cost-sharing, identification, etc.)	CB	10 May 2010, 10 am CET	Done
15.	Circulate Eurométaux recommendation on minimum substance identification requirements to all PMC Members	CB	As soon as it becomes available	
16.	Send all existing SDS, transport, and similar documents for each PM Refinable to CB	All Members	15 May 2010	