CHAIRPERSONS: E. BROEKAERT (UMICORE, BELGIUM) & D. CHOLAKOVA (AURUBIS, BELGIUM)
SECRETARIAT: K. *ARIJS (EPMF, BELGIUM)*

25 MARCH 2015, 09:00 – 12:00 CET
METALS CONFERENCE CENTRE – ALUMINIUM ROOM
RUE DU DUC 100 – 1150 BRUSSELS (BELGIUM)

Refinables Work Group Meeting –minutes

AP refer to Action Points listed at the end of this document.

1 Welcome and Introduction

1.1 Reminder on Confidentiality and Competition Law

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

1.2 Tour de table and apologies

The list of participants is available in Annex 1.

1.3 Approval of the agenda

The agenda is available in Annex 1. No remarks / additions; agenda approved.

1.4 Approval of the minutes of the last meeting (10 Oct 2014) including status of action points

The minutes of the last meeting were approved. A table with the status of the action points from the last meeting is available on slides 6-7 in Annex 2. Several action items are on the agenda for discussion today.

2 Substance identity (SID) of PM Refinables

2.1 Further information from ECHA

- On 6-7 October, ECHA held a workshop on SID and substance sameness (attended by Katrien Arijs), with a focus on UVCBs (cf. slides 9-13 in Annex 2). At the workshop, a 3-step sameness methodology was proposed, which requires considerations on the description of the composition to be made first. The structural depiction relies on the "80% rules" established for well-defined substances.
- In the ECHA Roadmap for the 2018 REACH registration deadline, ECHA further stated that it is developing possible solutions for a further structured approach on substance sameness for UVCBs that were discussed at the workshop. A potential review of the Guidance on Substance Identification and Naming or other types of material for addressing substance sameness is foreseen in 2015.
- The Board of Appeal case A-008-2012 was brought to the attention of the WG (cf. slide 15 in Annex 2). In this case, ECHA judged that the registration dossier contained information on more than one substance and separate registrations were needed. The application or non-application of a dust extraction step in the manufacturing process resulted in systematic differences in compositions of the resulting UVCB substances. Therefore, the composition was considered the root cause for differentiating between substances (regardless of whether they have the same hazard properties).
- It was noted that, although clear rules for UVCBs are currently still lacking in the SID guidance, it is clear that ECHA is demanding more and more information on substance characterization for UVCBs and is applying more stringent rules than currently in the guidance (e.g. ongoing discussions with Reconsile consortium regarding Karstedt concentrate).

2.2 Structural representation of PM Refinables: Example PM slags and agreement on way forward

In line with the newly proposed ECHA methodology, the PMC Secretariat has made an effort to identify structural parameters for the PM slags (cf. Annex 3 and slides 16-23 in Annex 2):

- Two approaches were used for the structural representation: the species and elements representation. The elements representation is most in line with how the composition was reported

in the Registration Dossiers of the Refinables, so it is recommended to use this.

- If the main (elemental) constituents are defined in line with the ECHA SID guidance (i.e. typical conc. for main constituents should be ≥ 10%), we can show presence of the same main constituents across companies for both types of slags (with the exception of 2 slags, for which composition needs to be double checked). However, when using this approach, we cannot prove sameness up to 80%, but we can justify this based on the presence of a lot of 'minor' constituents in the Refinables (present in small concentrations).

Comments/concerns raised by members:

- There was concern that using the ">10% and <80%" rules from the ECHA SID guidance is not going to be flexible enough for our needs and we may have to further split the slags (and other Refinables) to achieve satisfactory substance sameness.
- Currently, we are not aware of other consortia having submitted dossiers according to the newly proposed ECHA methodology.
- The Cu UVCB dossiers contain quite detailed information on speciation. The consortium did the analysis on its own merits. **AP1**
- There was quite some discussion about the variability of speciation for the PM Refinables. The fact that speciation for the same substance is sometimes different, may be challenged by ECHA.
- It was noted that we have limited analysis on speciation for the PM Refinables, both at consortium level and at individual registrant level (related to the difficulty of selecting a representative sample). At the 3 Feb PM Refinables Sameness Expert Group meeting, it was agreed that for now, we should justify the SID of the Refinables with the speciation information currently available (based on (limited) available analysis / know-how) and not invest in further analysis until challenged by ECHA. Therefore, speciation analysis has been added to the draft 2016 Refinables budget.
- It was noted that the Doré slag number 7 may be a Cu slag. **AP2**
- There was some concern on whether ECHA will accept the elemental approach. However, we currently see no other approach to identify structural parameters for the PM Refinables.
- It was noted that speciation data were previously collected for hazard purposes, but we now need them for SID purposes.

The PM Refinables WG agreed that we continue the structural representation exercise with the other Refinables on elemental basis. AP3-7

2.3 Process descriptions of PM refining

2.3.1 Decision tree: Discussion and approval

The PM Refinables decision tree was updated following the 3 Feb PM Refinables Sameness Expert Group meeting: cf. Annex 4. Comments:

- It was noted that further differentiation between Ag and Au electrolytes/slimes may still be needed depending on the outcome of the structural representation exercise.
- The PM Refinables WG agreed to add the PM Refinables Fe bullion PGM rich and Cu bullion PGM rich, as these cannot be considered alloys but should be considered UVCBs. **AP8**

The PM Refinables WG agreed with the presented PM Refinables decision tree, which will be further updated following the outcome of the structural representation exercise. AP9

2.3.2 Definitions: Discussion and approval

A document with definitions for all PM refining processes mentioned in the BREF was kindly

prepared by Christoph Roehlich. This document was updated following the 3 Feb PM Refinables Sameness Expert Group meeting: cf. Annex 5. Comments:

- For completeness, it was agreed to include drying under pyro-metallurgical processes (and state that the output material is identical to the input material and does not need to be registered).
- The PM Refinables WG agreed this is a very useful document.

The PM Refinables WG agreed with the presented PM Refinables process definitions, which will be further updated following the outcome of the structural representation exercise. AP9

3 Status of environmental exposure assessment of PM Refinables

An update of the environmental exposure assessment for the Refinables was presented by WCA (cf. slides 36-42 in Annex 2).

- For the dossier upgrades submitted in April 2014, the environmental exposure was assessed on the basis of the individual constituents posing the greatest risk or the 'driving constituents'. The driving constituents are those classified as hazardous to the environment (with available PNEC and monitoring data). Ag, As, Cd, Cu, Ni, Pb and Zn were considered in 2014 registration upgrades, but Se, Te, Co, Sn and the PGMs (Pd, Pt, Rh & Ru) were added based on criteria for selection of driving constituents.
- In order to collect monitoring data on the driving constituents, an environmental exposure questionnaire was circulated in 2014. In addition to collecting data on the newly added constituents, we would like to update all the environmental exposure data (previous monitoring data were collected in 2011 and probably measured in 2009 or 2010), and update the data for production/use tonnages.
- Only 5 sites sent the completed questionnaire.
- It is noted that we only need data from those sites where a CSR is needed (> 10 t/a).
- The WG was asked to consider adding additional constituents to their monitoring programme if not all driving constituents are currently being monitored. The additional cost is < 10 € per extra metal.
- It is noted that a date is mentioned on the site-specific risk assessment.

AP12-15

4 Update on activities Eurométaux related to inorganic UVCBs

4.1 Combined toxicity

It is noted that a presentation at the next Eurométaux risk assessment meeting of 13-14 April will be given with an update on combined toxicity.

4.2 Man via the environment assessment

This item is on hold by the Eurométaux intermediates Task Force. It was decided to wait for ECHA's feedback before making any efforts.

4.3 Assessment entity concept and relevance for PM Refinables

The assessment entity concept was presented by EBRC (slides presented already at EM workshop on Assessment entity and available from Violaine Verougstraete, verougstraete@eurometaux.be, Eurométaux upon request). Highlights:

- The assessment entity concept was introduced by ECHA to overcome the issue of IUCLID not always being suitable for reporting data requirements (e.g. transformation products, different forms covered in same dossier (bulk + nano)). This concept may also be suitable for the PM Refinables, as a lot of manual CSR edits are needed when updating the dossier.

- An assessment entity is a (group of) constituents. E.g. 2 groups of constituents for assessment purposes. For the Refinables, there would be one assessment entity per constituent driving the assessment.
- If a constituent is only relevant for the human health assessment, there would be no need to fill the environmental endpoints.
- The approach is currently under development and input can be provided until end of April 2015.
- We may want to introduce the approach for the PM Refinables but it will not become mandatory.
- It is currently unclear how much updating the dossiers will need when we want to introduce this concept in the dossiers.
- ECHA is currently looking for a pilot case.
- Benefits of the concept are more straightforward to differentiate between nano and bulk forms in a dossier (e.g. for Ag), as only a few workplaces may be relevant for nano forms. It may be useful to consider for the Ag dossier update after evaluation.
- Timing: the concept will be introduced together with IUCLID 6, i.e. Q1/Q2 2016.
- **The PM Refinables WG agreed the assessment entity concept may be useful for other PM substances, but not so much for the PM Refinables.**

5 Workplan and budget

- At an internal planning meeting, the PMC Secretariat has worked on a first draft 2016 workplan / budget for all PMC projects. This workplan / budget will be refined over the next months, but gives a first indication of the current expectations for 2016.
- The draft 2016 PM Refinables workplan / budget is presented on slides 46-47 in Annex 2. A total budget of 415.000 € is suggested. It was noted that the costs for the validation testing (235.000 €) are already in the reserves and would thus not be invoiced to members.
- The PMC Secretariat also made an estimate of the human resources that will be required per project, and 0,3 is expected for 2016 for the PM Refinables.
- Overall, **the PM Refinables WG agrees this first estimate is realistic.**

6 AOB, next meetings/calls and closing remarks

6.1 ECHA CMR review

- ECHA is prioritising CMR substances for risk management: they cross-checked if registrants / notifiers have used the correct harmonised classifications, and also reviewed other registered / notified CMR substances with a classification more stringent than the harmonised one or with no harmonised classification. More than 1000 CMR substances have been flagged that may undergo further regulatory action.
- Several PM Refinables are among the flagged substances. These are classified as CMR substances due to their Ni and Pb content. For some PM Refinables we have more stringent classification than the harmonised Ni/Pb classification because we used the self-classification that was in MeClas. Since the Refinables are only used as intermediates, we believe that they will not be prioritised for CLH and identification as SVHC.

6.2 Authorisation & recycling

- A Risk Management Support Program is ongoing at Eurométaux level (A&R platform) to assess the potential vulnerability of the metal recycling sector for Authorisation under REACH. PMC has not been involved so far although recycling is a core business of the PM sector in Europe.
- It is noted that there are quite a lot of potential SVHC substances among the PM Refinables. Most

impurities are however already present in the primary feed. The authorisation issue will depend on the discussion whether a primary feed is an intermediate or not but also this will depend on the "function" of the impurities which are SVHC.

- Umicore volunteered to be part of the project and analyse the PM recycling streams to identify potential impacts. Euométaux will launch a business case based on the different cases collected in the non-ferrous metals industry, and do an impact assessment.
- It is noted that not all Refinables uses can be considered intermediate uses (e.g. slags that go to road fill). We should highlight where we may have an issue with the PM Refinables and intermediate status at Eurométaux level.
- The final aim of the exercise is to discuss the cases with the Commission, demonstrate the impact of Authorisation on Circular Economy and ensure that impact can be mitigated as much as possible without changing the Regulation.

6.3 AOB

There was some discussion on whether we want to raise to ECHA what issues we have with SID if there is an opportunity to meet with them (e.g. through a meeting of Eurométaux with ECHA). The PM Refinables WG agreed to assess this if an opportunity arises, but for now keep low profile and not create this opportunity. We have to balance the workload related to PM Refinables since human resources will be needed on other critical dossiers (e.g. Ag evaluation).

It was suggested to organise a call to review/finalise the internal document on the Refinables SID approach in June. An invitation will be sent in due time. AP10-11
The next PM Refinables WG meeting will be held 15 October 2015, 13:00 - 16:00 CET at the Metals Conference Centre in Brussels.

Annexes

1. Agenda & list of participants
2. Slides presented at the meeting
3. Structural representation of the PM slags
4. SID decision tree:
   4.1. Part 1: Hydro-metallurgical processes
   4.2. Part 2: Pyro-metallurgical processes
   4.3. Part 3: Sources
5. Process definitions hydro-, electro- and pyro-metallurgical processes and reclaiming

Actions

Table 1. Actions agreed at the 25 March PM Refinables Work Group meeting in Brussels

	What?	Who?	When?
Substance identity (SID)			
1.	Check what ECI did regarding speciation of their UVCBs	PMC Sec	Q2 2015
2.	Check if Doré slag number 7 is a Cu slag	PMC Sec with registrant	By end Apr 2015
3.	Send updated composition information PM slags and PM slimes & sludges as requested in e-mail from PMC Secretariat 16-17 March	Ref WG	By 15 Apr 2015

4.	Review structural representation PM slags based on additional information provided under AP3	PMC Sec	By end Apr 2015
5.	Check composition data gaps other Refinables and identify need for additional composition data collection	PMC Sec	By end Apr 2015
6.	Additional composition data collection	PMC Sec	Apr-May 2015
7.	Identify parameters allowing a structural representation of other Refinables	PMC Sec	By end Jun 2015
8.	Check which companies will need to register Fe bullion PGM rich and Cu bullion PGM rich	PMC Sec	Apr-May 2015
9.	Update the PM Refinables decision tree / process definitions document following the outcome of the structural representation exercise	PMC Sec	By mid-Jun 2015
10.	Draft internal document Refinables SID approach	PMC Sec	By mid-Jun 2015
11.	Organise PM Ref WG call to review/finalise the internal document on the Refinables SID approach	PMC Sec	Jun 2015
Environmental exposure assessment			
12.	Add additional constituents to their monitoring programme if not all driving constituents are currently being monitored	PM Ref WG	ASAP
13.	Return environmental exposure questionnaire with <u>all</u> available emissions data on the driving constituents present in the PM Refinables at their site	PM Ref WG	By end Sep 2015
14.	Compilation of emission data from questionnaires for all driving constituents to update the environmental risk assessment	WCA	By end 2015
15.	Follow up access to exposure modelling parameter values and sign data-sharing agreements for all driving constituents	PMC Sec	By end 2015