



MINUTES

Refinables WG Meeting

Chair: Michiel Ceulemans (Umicore, Belgium)
15 March 2018, 10:00 – 12:00 CET



1. Welcome and Introduction

1.1. Reminder on Confidentiality and Competition Law

Participants are reminded on their obligation to comply with confidentiality and competition laws. All participants to the meeting are acting as moderators in this respect.

1.2. Tour de table and apologies

The list of participants is available in Annex 1.

1.3. Approval of the agenda

The draft agenda is approved as distributed and is available in Annex 1.

1.4. Approval of the minutes

The minutes of the WG meeting on the October 19, 2017 are approved.

1.5. Status of actions

The status of actions that were agreed are presented on slides 7 of the meeting's slide deck (Annex 2). Discussion on substance ID between ECHA and Eurometaux o are still ongoing and input will be given by us when needed. **[A1]** Update of the classification is foreseen in Q2 2018 for the batch of dossiers that will be update first. Other actions were finalised.

2. Substance Identity (SID) of PM Refinables

2.1. Iron Bullion

This refinables remains in the scope of the PMC consortium. During the discussion it was made clear that this is not a new substance and is a split from the 'Doré' dossier.

2.2. Slimes and Sludges

Three different options to split the slimes and sludges were identified during the WG teleconference and all the advantages and disadvantages were discussed during the WG meeting. It was decided to keep the 'Residues, PM leaching and dissolution', 'Precipitates, PM refining' and 'Matte leaching residue' as three separate dossiers. Mainly, as this is in accordance with our decision tree and with refinable dossiers that have been submitted in the past.



Option 1: Keep separate dossiers

- 4.3 Residues PM Leaching & Dissolution
- 4.4 Precipitates, PM refining
- 5.1 Matte leaching residue

2.3. Solutions from PM leaching and dissolution

During the WG meeting there was the request from Aurubis to add solutions from PM leaching and dissolutions to the list of refinables. Currently, these materials are covered under the silver and gold electrolyte dossiers, based on their similar composition with electrolytes. In previous discussions liquid intermediates were not included in the scope as these are often non-isolated and could be considered as mixtures (Ref. Minutes Sameness Expert Group meeting, 3 Feb 2015).

As liquid solutions from silver and gold refining could be isolated intermediates, it is proposed to add these liquids as new intermediates to the decision tree as output of the Leaching and Dissolution process. Two different dossiers for Liquid solutions from PM leaching and dissolutions, to reflect the liquid solutions that are respectively covered by the silver electrolyte and gold electrolyte dossier, are proposed to be added (Solutions based on nitric acid and solutions based on hydrochloric acid). For completeness these dossiers will be added to the refinable's list, this to allow other members to indicate their need for these refinables. Aurubis will take the lead for drafting substance identity profiles for these substances. **[A2]**

However, it should be noted that having two separate dossiers for Liquid solutions and only one dossier for Residue from PM Leaching and Dissolutions could trigger questions from ECHA. A formal decision will be made during the next WG meeting. Find below the complete list of identified refinables.

2.1. Refinables portfolio

Currently 20 different refinables are identified within the PMC consortium (including the Solutions from PM leaching and residues), based on the different processes that take place in the refining industry. Find below the complete list of identified refinables.



Name	Tonnage band	Lead Registrant
1.1 Gold Doré	???	TBD
1.2 Silver Doré	>1000 t/a	TBD
2 Matte, PM	100-1000 t/a	Glencore Nikkelverk AS
3.1 Slags, PM refining	>1000 t/a	TBD
3.2 Slags, production of PM containing materials other than doré	>1000 t/a	Umicore
4.1 Slimes , Ag electrolysis	100-1000 t/a	TBD
4.2 Slimes , Au electrolysis	100-1000 t/a	TBD
4.3 Residues from PM leaching and dissolution	> 1000 t/a	TBD
4.4 Precipitates from PM refining	100-1000 t/a	TBD
5.1 Matte leaching residue	>1000 t/a	Umicore
6.1 Ag electrolyte - SCC	>1000 t/a	KGHM
6.2 Au electrolyte - SCC	100-1000 t/a	Aurubis
6.3 Nitric acid solutions from PM leaching and dissolution*	???	Aurubis
6.4 Hydrochloric acid solutions from PM leaching and dissolution*	???	Aurubis
7 Flue dust, PM refining	100-1000 t/a	Johnson Matthey
8 Residues cementation and reduction, PM refining	100-1000 t/a	Hereaus
9.1 Materials for reclaim, PM with or without support	100-1000 t/a	Johnson Matthey
9.2 Materials for reclaim, PM in bricks, crucibles, trays, ...	100-1000 t/a	Johnson Matthey
9.3 Materials for reclaim, PM production by-products	100-1000 t/a	Johnson Matthey
10.2 Iron bullion, PGM rich	???	TBD

*Provisional naming, to be confirmed/adjusted by the LR.



2.2. General remarks SIP

In the elemental composition of the SIP often chloride, sulfur and oxygen is mentioned. These elements are typically not measured by all the companies, leading to large ranges that don't reflect reality and make it harder to describe the total elemental composition. It was decided to keep these elements in the profiles and not to indicate these as a decisive criteria.

2.3. Assigning Lead Registrants

During the WG meeting it became apparent that for some of the dossiers the new tonnage band declarations should be awaited before assigning the new LR.

2.4. Next steps

New tonnage band declarations will be requested for the current list of refinables dossiers and lead registrants will be assigned to all. **[A3] [A4]**

Following set of dossiers will be the first to be updated:

Name	Tonnage band	Lead Registrant
1.1 Gold Doré	???	TBD
1.2 Silver Doré	>1000 t/a	TBD
2 Matte, PM	100-1000 t/a	Glencore Nikkelverk AS
3.1 Slags, PM refining	>1000 t/a	TBD
3.2 Slags, production of PM containing materials other than doré	>1000 t/a	Umicore
7 Flue dust, PM refining	100-1000 t/a	Johnson Matthey

For these dossiers the SIP profiles will be finalised together with the ID cards and classifications will be update afterwards. **[A5]** Proposals will be collected from consultants for updating the dossier and performing the exposure assessments. **[A6]**

3. Implementation circular economy package

To increase visibility and awareness of the importance of the refining industry in the circular economy a publication will be drafted. The focus should be on the opportunities the refining sector brings/could bring to society, to give a positive message. Here we could also share ideas and current obstacles for bringing these opportunities into reality. The messages of this publication will be of interest for the whole PMC and will be discussed with France Capon to involve the whole consortium. **[A7]** Some consultants



were proposed during the WG meeting (WCA, DHI & RPA) to assign this publication to and this will be further discussed within PMC. **[A8]**

Post meeting note: EHS – Interface Chemical, Product & Waste Session (29 March 2018)

The EU public consultation regarding the interface between the chemical, product and waste legislation will start end March 2018 – beginning April 2018. It is believed that this consultation round will be a tick-box exercise with very limited possibilities to elaborate. Eurometaux discussed during the meeting the different challenges and options that are raised in the EU communication document (COM(2018)32).

4. Budget

Rough budget estimates were made for the update of the refinable dossiers. More accurate figures will be known when the scope of the refinable dossiers has been finalised and when more accurate figures of the consultancy costs are known.

Consultancy fees dossier updates and RA	€45 000	Per dossier (non-SCC)
Consultancy fees dossier updates	€5 000	Per dossier (SCC)
T/D testing & Phys-Chem	€26 000	Per additional dossier

Main tasks in 2019:

- Additional Phys-Chem and T/D testing for splitted dossiers
- Update of CSR including combined toxicity
- Self-ignition testing for balsams to replace waiver
- Update of the dossiers based on the outcome of the MISA discussion on UVCB

The budget projections of 2019 can be found on slide 21.

5. AOB, next meetings/calls and closing remarks

- PMC General Assembly will be held from 5 to 6 June 2018 in Liege.
- Next Refinables Work Group Meetings will be held 9-11 October 2018, Brussels



6. List of actions

Table 1. Actions agreed on at the Refinables WG meeting of 15 March '18

[A]	WHAT	WHO	WHEN
1	Follow-up ECHA / Eurométaux discussions on iUVCB SID and give input when needed	PMC	Q1-Q4 2018
2	Drafting of SIPs for the Solutions from PM leaching and dissolution	Aurubis	Q2 2018
3	Renewal of the tonnage band declarations according the updated list of refinables dossiers.	All	Q2 2018
4	Assignment of Lead Registrants.	PMC	Q2 2018
5	Update SIP, SID and classification	All	Q2 2018
6	Contact consultants for updating of the dossiers	PMC	Q2 2018
7	Discuss broader interest on the circular economy and the refining industry within PMC.	PMC	Q2 2018
8	Assign a main author for the circular economy publication.	PMC	Q2 2018

7. List of Annexes

1. Approved Agenda and List of participants
2. Slides presented during the meeting