



## **EPMF Workplan following MISA Workshop focusing on environmental endpoints (18 March 2019)**

### 1. Introduction

A second MISA workshop was held in Helsinki (ECHA premises, 7 February 2019). This workshop focused on environmental endpoints, and more specifically on

- read-across and effect of counter-ion,
- ERV and PNEC derivation,
- difficult to test substances, and
- bioaccumulation, -magnification and secondary poisoning.

Based on the discussions & learning lessons, the EPMF (European Precious Metals Federation; [www.epmf.be](http://www.epmf.be)) has identified several actions for its substances.

More details are provided on the next pages, including the concerned substances and actions, and an indicative timing for updating the dossiers.

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## 2. Workplan

Topic	Substances covered		Comments	Timeline
	Name	CAS		
<b>1. Read-Across</b>				
<b>1.1 Read-across justification and documentation (incl. potential counter-ion effect)</b>	Most silver, gold, palladium, platinum, iridium, rhodium, ruthenium and rhenium REACH dossiers (incl. metallic form and compounds) cfr. <a href="http://www.epmf.be">www.epmf.be</a> for substances lists		Read-across is used for the environmental hazard and risk assessment (i.e. ERV and PNEC derivation) in most EPMF REACH dossiers. However, it is acknowledged that read-across is either poorly and/or improperly documented. Read-Across Justification Reports (RAJR) will gradually be developed according to the RAAF standards, on a 'per metal ion'-basis. The RAJR will include an overview of major environmental data as well as information on other relevant endpoints. Special attention will be given to selection of the right scenario (scenario 5 was recommended during the MISA meeting), the assessment of potential counter-ion effects, and the inclusion of a clear hypothesis and category description.	Inclusion of newly generated and published data (identified in 2018 literature review) are being included in the relevant dossiers (Q1 2019). Once finalised, all relevant data need to be collated, analysed and included in a RAJR. Timing for dossier updating goes hand-in-hand with the review of the ERV and PNEC (cfr. timing in section 2.1).



<p><b>1.2 Inclusion Transformation/Dissolution test data</b></p>	<p>Silver Disilver oxide Gold Palladium Palladium monoxide Platinum Platinum dioxide Iridium Rhodium Dirhodium trioxide Ruthenium Ruthenium(IV) oxide Rhenium</p>	<p>7440-22-4 20667-12-3 7440-57-5 7440-05-3 1314-08-5 7440-06-4 1314-15-4 7439-88-5 7440-16-6 12036-35-0 7440-18-8 12036-10-1 7440-15-5</p>	<p>Full TDp datasets have been used for hazard assessment. Although the key conclusions of the testing is already included in each dossier, more details will be added to the dossier and in the RAJR for transparency.</p>	<p>Full TDp datasets have been generated but need to be included in the respective dossiers and the RAJR. Timing for dossier updating goes hand-in-hand with the review of the ERV and PNEC (cfr. timing in section 2.1)</p>
<p><b>1.3 Generation TDp data for organic metal salts</b></p>	<p>Palladium(II) acetate Rhodium (III) acetate Ruthenium acetate Rhodium tris(2-ethylhexanoate) <i>(list to be revised &amp; completed during internal EPMF meeting in April 2019)</i></p>	<p>3375-31-3 42204-14-8 55466-76-7 20845-92-5</p>	<p>24h TDp data will be generated for organic metal salts to check 'rapid dissolution'. Depending on the outcome of the testing, the environmental assessment will be revised appropriately.</p>	<p>Test data will be generated in Q3 2019. Timing for dossier updating goes hand-in-hand with the review of the ERV and PNEC (cfr. timing in section 2.1)</p>
<p><b>2. ERV / PNEC</b></p>				
<p><b>2.1 Update&amp;refine ERV/PNEC values</b></p>	<p>All EPMF dossiers (incl. metallic form and compounds) of Silver, Gold, Palladium, Platinum,</p>		<p>EPMF has performed a literature search in 2018 to update the environmental effects database for all its substances.</p>	<p>Inclusion of relevant/reliable data in dossier and review of hazard and risk assessment Pd and Ag dossiers: Q3 2019.</p>



	Rhodium(III), Ruthenium, Rhenium, Iridium (cfr. <a href="http://www.epmf.be">www.epmf.be</a> )		For palladium, additional ecotox data have become available (algae tox (OECD201), daphnia reproduction (OECD211) and ASRIT (OECD209)). In addition, the ecotox dataset for silver has been reviewed and additional ecotox data (higher plant test (OECD221), algae test (OECD201) and rotifer test) have been generated to strengthen the SSD. The newly identified published data will be reviewed and included in the environmental hazard- and risk assessment (on a 'per metal ion'-basis). The ERV and PNEC values will be revised (where needed), and the hazard- and risk assessments will be updated accordingly.	<p>Inclusion of relevant/reliable data in dossier and review of hazard and risk assessment:</p> <ul style="list-style-type: none"> <li>- Pt dossiers: Q4 2019</li> <li>- Rh/Ru dossiers: Q1 2020</li> <li>- Ir/Re dossiers: Q2 2020</li> </ul> <p>Note that this work goes hand-in hand with topics covered elsewhere in this workplan.</p> <p><b><i>For efficiency reasons, a single update per substance (reflecting all updates) is aimed for.</i></b></p>
<b>2.2 Review sediment &amp; soil risk assessments</b>	Potassium dicyanoaurate All EPMF dossiers (metal + compounds) of Gold, Palladium, Platinum, Rhodium, Ruthenium, Rhenium, Iridium (cfr. <a href="http://www.epmf.be">www.epmf.be</a> )	13967-50-5	<p>The equilibrium-partitioning concept has been used in many EPMF REACH dossiers for the sediment and soil compartment, as no (reliable) test data for those compartments were identified.</p> <p>It was concluded during the MISA workshop that this methodology was acceptable in cases where the identified risk was 'well below' 1.</p>	<p>Timing for inclusion of existing data and review of PNEC is similar to topic 2.1.</p> <p>The need for additional sediment or soil testing can be identified after the work of topic 2.1 is finalised (i.e. the RCR values are known). Estimated timing for testing plus inclusion</p>



			<p>Literature has been reviewed for availability of sediment and soil data in 2018. Reliable data (where available) will be included in the dossier and the PNEC for sediment and soil will be revised where appropriate.</p> <p>If no additional soil or sediment data are identified, the risk assessments for these compartments will be checked and further testing will be initiated where appropriate.</p>	of test data in the dossier (if needed) is 2020-2021.
<b>Update AnnexIII to AnnexVII dossiers</b>	Dicarbonylpentane-2,4-dionato-O,O')rhodium	14874-82-9	<p>Dossiers are currently registered as Annex III exempted dossiers. EPMF takes a proactive approach to generate a minimum dataset for these substances (where no data are available yet), and resubmit as regular Annex VII dossiers.</p> <p>For some environmental endpoints, experimental data are missing (algae tox and acute aquatic invertebrate tox) and testing will be performed.</p>	<p>Experimental testing approved for 2019 (no timing available yet).</p> <p>Data will be included in the dossiers and the hazard assessment will be updated &lt;end 2019</p>
	Tris(triphenylphosphine) rhodium (I) chloride	14694-95-2		
	Carbonyl(pentane-2,4-dionato-O,O')(triphenylphosphine)rhodium	2547096-6		
	Diammonium hexachloroiridate	16940-92-4		
	Tris(nitrato-O)nitrosyl ruthenium	34513-98-9		
<b>3. Bioaccumulation &amp; Secondary poisoning</b>				
<b>Derive BAF/BCF value for platinum</b>	Hexachloroplatinic acid	16941-12-1 16919-58-7	The assessment of the bioaccumulation/ - concentration potential can be triggered	Tier1: Literature review Q1 2020



	Diammonium hexachloroplatinate Dipotassium hexachloroplatinate	16921-30-5	via human health classifications like STOT-RE1 or Repro cat1 or 2 (i.e. obligation to consider relevance of secondary poisoning assessment). There is a need to determine the bioaccumulation/bioconcentration potential of platinum. As a first tier, the availability of reliable data in published literature needs to be checked (considering the need for exposure at NOEC/EC10 level + recommendation to focus on fish data). If no reliable data are identified, experimental testing will be required	Tier2: Experimental testing (if needed): 2020  Tier3: Incorporation of data in dossier can be performed in the Q after Tier1 or 2
<b>4. Difficult to test substances</b>				
<i>No action identified</i>				