World Alliance for Mercury-Free Dentistry
Alliance Mondiale pour une dentisterie sans mercure
Всемирный альянс за стоматологию без ртути
Alianza Mundial por una Odontología Sin Mercurio
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Deutsche Gesellschaft für Umwelt-ZahnMedizin

GST- Gesellschaft für Schwermetall-Toxikologie

It is now time to Phase Out Dental Amalgam Use in the European Union

26th October 2016

Dear Environment Attaches and Member State Experts,

We, the undersigned NGOs, welcome the vote of the Environment Committee of the European Parliament (ENVI) for overwhelmingly adopting Amendments 29-32 and 59-66 (A8-0313/2016): requesting the phase out of dental amalgam use by 31st December 2022, as well as the swifter prohibition of amalgam use *'for the treatment of pregnant or breastfeeding women or individuals who undergo treatment on their deciduous teeth'*, one year after the date of entry into force of the Regulation.

To that end we would now like to call on you to seriously consider and support fully this approach: it is time to end the use of this 19th-century approach to dentistry in favor of 21st-century dentistry: non-polluting, superior, and cost-effective mercury free alternatives. Six years is more than enough time for the market to adapt to the new rules. In all cases, the use of dental amalgam can continue to be allowed *'in respect of specific medical needs and only when it is strictly necessary for patient related health reasons and there is no satisfactory alternative'*.

As per our earlier communication and technical memo, we would like to underline a few points which need to be considered and which have led to this decision:

1. The European Union is the world's largest user of dental mercury.

- *The EU is the largest amalgam user:* The largest user of dental mercury in the world is the European Union at 90 tonnes per year.[1] Dental mercury pollutes (a) Europe's air via cremation, dental clinic emissions, and sludge incineration; (b) Europe's water via dental clinic releases and human waste; and (c) Europe's soil via landfills, burials, and fertilizer.

- *Separators and encapsulated amalgam do not phase down amalgam use:* The Minamata Convention requires each party to "phase down the *use* of dental amalgam."[2] Merely requiring amalgam separators and encapsulated amalgam, as per the EC proposed regulation, does not fulfill this requirement for three reasons:
  - First, implementing end-of-pipeline waste control measures and repackaging mercury in capsules does not in any way lessen the amount of amalgam in *use*. Separators do not stop dental mercury pollution because most mercury walks out of the office inside the teeth, it is mathematically impossible for amalgam separators to address even half the problem.[3]
  - Second, these measures have already been largely implemented – and, as expected, they failed to produce a reduction in amalgam use.

- Third, these measures run the risk of increasing amalgam use in the EU as many dentists will be misled to believe that separators and capsules somehow make their mercury "safe".

2. European Commission advisors – its consultant, SCHER, and SCENIHR – show the way towards phase out of mercury in dentistry

- *The EC's independent consultant urges an amalgam ban:* The EC's independent consultant BIOIS recommended to the EU to "ban the use of mercury in dentistry" because – among other reasons – it is "necessary to achieve mercury-related requirements of EU legislation on water quality."[4] BIOIS explicitly rejected policy options that only required separators because that "is not sufficient in itself to address the whole range of mercury releases from the dental amalgam life cycle (it does not address mercury releases from the natural deterioration of amalgam fillings in people's mouths, from cremation and burial, and residual emissions to urban WWTPs)."[5]

- *SCHER confirmed that amalgam poses environmental risks:* Confirming that amalgam poses environmental risks, EC environmental health committee SCHER concludes that amalgam poses "a risk for secondary poisoning"[6] because its mercury enters rivers and lakes, methylates, and contaminates fish that are then eaten by children and pregnant women.

- *SCENIHR recommends amalgam restrictions:* SCENIHR, the committee on health risks, recommends against amalgam use in young children and pregnant women. "The use of amalgam restorations is not indicated in primary teeth, in patients with mercury allergies, and persons with chronic kidney diseases with decreased renal clearance....To reduce the use of mercury-added products in line with the intentions of the Minamata Convention … it can be recommended that for the first treatment of primary teeth in children and for pregnant patients, alternative materials to amalgam should be the first choice."[7]

- *SCENIHR withdrew the claim that amalgam is safe:* Based on the most current scientific evidence, SCENIHR has stopped assuring Europeans that amalgam is safe. Instead of its 2008 opinion that amalgam is a "safe and effective" dental filling, SCENIHR now deletes the word "safe"[8] and claims that amalgam is merely "effective".[9]

3. Amalgam is not the cheapest solution, and medical insurance schemes' costs do not necessarily need to increase

- *Experts show phasing out amalgam use will lower costs:* The EC's own impact assessment states: "The fact that Hg-free dental restorations are more expensive than dental amalgam restorations can be seen as a market failure in the sense that negative externalities associated with the use of dental amalgam (e.g. management of dental waste and effluents) are not factored in the market price of dental amalgam restorations"[10]. As one study explains, due to the high costs of dental mercury pollution, amalgam is now recognized as "more expensive than most, possibly all, other fillings when including environmental costs."[11] Another study, conducted by Concorde East/West, concluded that an amalgam filling can cost up to $87 more than a composite filling after costs to the environment and society are taken into account.[12]

- *Many national insurance schemes already cover mercury-free fillings:* Even not taking into account the national insurance scheme, in some countries – like France and Italy– the actual cost of amalgam and mercury-free fillings is the same[13], so phasing out amalgam use will not increase insurance costs there. Additionally, many national insurance schemes are already paying for mercury-free fillings. For example, the national insurance schemes in Bulgaria, Finland, and Slovenia reimburse a similar or same amount whatever filling material is used. Likewise, in Hungary, "in conventional dental offices (i.e. not private clinics), the national insurance scheme reimburses 100% of standard treatment costs, whatever the filling material used." In France, mercury-free fillings cost the same as amalgam: "National insurance scheme reimburses 70% of standard treatment costs whatever the filling used. Conventional treatment costs range between 17 and 41 EUR depending on cavity size (but regardless of the material used)." In Poland, mercury-free fillings are reimbursed for children and pregnant women. Similarly, in Estonia, fillings are free for children up to age of nineteen regardless of which filling material is used and in

Belgium, mercury-free fillings are reimbursed between 75%-100% depending on age and socioeconomic situation[14]. As a result, the dental restoration costs borne by patients is reported to be the same regardless of what filling material is used in Bulgaria, Finland, Hungary, Italy, and the UK.[15]

Furthermore, the responses to a survey questionnaire confirm previous findings that traditional health insurance schemes often contain an inherent financial incentive in favor of amalgam. Therefore, where appropriate, countries should examine how national insurance practices may be revised to help phase down amalgam use. Likewise, third-party payment systems for dental care can also be adapted so as to help phase down amalgam use[16].

4. **Civil Society support for the phase out is across the board: 88% of the participating public said yes; industry anticipates amalgam's "demise and European dentists are fully trained in alternatives and prefer using them.**

- *The European public, by a margin of 7 to 1, supports phasing out amalgam use:* The European Commission launched an online public consultation on the Minamata Convention. Fully 88% of the participating European public supported the "phase out of amalgam" over a "phase down of amalgam"[17].

- *Dental amalgam is the mercury issue that most interests Europeans:* In this public consultation, two times as many people voted on the amalgam issue compared to the number who voted on any other Minamata issue!

- *Many dentists prefer mercury-free fillings[18]:* As researchers explain, "Tooth-friendly features of [mercury-free] resin based composites make them preferable to amalgam, which … now should be considered outdated for use in operative dentistry"[19]. All dental schools have been teaching dental students how to place mercury-free fillings for years, so dentists are prepared to stop amalgam use and increasingly expect amalgam will be phased out.

- *Industry is prepared for amalgam's "demise":* At the 2013 European Dental Materials Conference, dental manufacturers devoted an entire day to "The Demise of Amalgam Use," an upbeat conference which showcased the many alternatives to amalgam – such as composite and glass ionomer – that are available, effective and affordable. Not one job will be lost!

- *Member nations are already phasing out amalgam use:* Amalgam is already down to 0% of fillings in Sweden[20], 3% in Finland[21], 5% in Denmark,[22] and less than 10% in the Netherlands.[23] Several – including Germany, the United Kingdom, Sweden, and Denmark – have restricted or warned against amalgam use in children or pregnant women. In 2012, the United Kingdom announced that it can "support a ban on the use of dental amalgam from 2016 with agreed exemptions" (essentially the narrow exemptions used in Denmark).[24]

In order to lead the world effort to stop mercury pollution, the EU must phase out its own major use of mercury: amalgam. A lengthy six-year transition will easily provide time for the profession, the industry, and the Member State governments to make any needed adjustments.

Thank you in advance for considering our recommendations.

Yours sincerely,

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[1]AMAP/UNEP, *Technical Report for the Global Mercury Assessment* (2013), http://www.amap.no/documents/doc/technical-background-report-for-the-global-mercury-assessment-2013/848, p.103

[2]*Minamata Convention* (2013) (emphasis added)

[3]Concorde East West, *The Real Cost of Dental Mercury* (March 2012), http://www.zeromercury.org/index.php?option=com_phocadownload&view=file&id=158%3Athe-real-cost-of-dental-mercury&Itemid=70

[4] BIO Intelligence Service (2012), *Study on the potential for reducing mercury pollution from dental amalgam and batteries*, Final report prepared for the European Commission-DG ENV, http://ec.europa.eu/environment/chemicals/mercury/pdf/final_report_110712.pdfpage 20

[5] BIO Intelligence Service (2012), *Study on the potential for reducing mercury pollution from dental amalgam and batteries*, Final report prepared for the European Commission-DG ENV, http://ec.europa.eu/environment/chemicals/mercury/pdf/final_report_110712.pdf page 19

[6] SCHER, *Opinion on Environmental Risks and Indirect Health Effects of Mercury from Dental Amalgam* (2014), http://ec.europa.eu/health/scientific_committees/environmental_risks/docs/scher_o_165.pdf, page 4

[7] European Commission Scientific Committee on Emerging and Newly Identified Health Risks (SCENIHR), *Final opinion on the safety of dental amalgam and alternative dental restoration materials for patients and users* (29 April 2015), http://ec.europa.eu/health/scientific_committees/emerging/docs/scenihr_o_046.pdf, p.75

[8] European Commission, *Results of the public consultation on SCENIHR's preliminary opinion on the safety of dental amalgam and alternative dental restoration materials for patients and users*, http://ec.europa.eu/health/scientific_committees/emerging/docs/followup_cons_dental_en.pdf, p.97 ("The word "safe" has been deleted in 4.1.")

[9] European Commission Scientific Committee on Emerging and Newly Identified Health Risks (SCENIHR), *Final opinion on the safety of dental amalgam and alternative dental restoration materials for patients and users* (29 April 2015),

http://ec.europa.eu/health/scientific_committees/emerging/docs/scenihr_o_046.pdf, p.71 ("The SCENIHR recognises that dental amalgam, for the general population, is an effective restorative material.")
[10] http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52016SC0017&from=EN , p. 146
[11] Lars D. Hylander& Michael E. Goodsite, *Environmental Costs of Mercury Pollution*, SCIENCE OF THE TOTAL ENVIRONMENT 368 (2006) 352-370.
[12]Concorde East/West, *The Real Cost of Dental Mercury* (March 2012), http://www.zeromercury.org/index.php?option=com_phocadownload&view=file&id=158%3Athe-real-cost-of-dental-mercury&Itemid=70, pp.3-4
[13] BIO Intelligence Service (2012), *Study on the potential for reducing mercury pollution from dental amalgam and batteries*, Final report prepared for the European Commission-DG ENV, http://ec.europa.eu/environment/chemicals/mercury/pdf/final_report_110712.pdf page 197.
[14] BIO Intelligence Service (2012), *Study on the potential for reducing mercury pollution from dental amalgam and batteries*, Final report prepared for the European Commission-DG ENV, http://ec.europa.eu/environment/chemicals/mercury/pdf/final_report_110712.pdf page 198-99.
[15] BIO Intelligence Service (2012), *Study on the potential for reducing mercury pollution from dental amalgam and batteries*, Final report prepared for the European Commission-DG ENV, http://ec.europa.eu/environment/chemicals/mercury/pdf/final_report_110712.pdf page 196.
[16] Lessons from countries phasing down dental amalgam use , p. 22 http://www.unep.org/chemicalsandwaste/Portals/9/Mercury/Dental%20Amalgam/Dental.Amalgam.10mar2016.pages.WEB.pdf
[17]https://ec.europa.eu/eusurvey/publication/MinamataConvention
[18] Letter singed in June 2016 by 87 German dentists, Letter signed in October 2016 by 29 dentists from FR, SWE, IT, UK, FIN, DK, D,
[19] Christopher D. Lynch, Kevin B. Frazier, Robert J. McConnell, Igor R. Blum and Nairn H.F. Wilson, *Minimally invasive management of dental caries: Contemporary teaching of posterior resin-based composite placement in U.S. and Canadian dental schools*, J AM DENTAASSOC 2011; 142; 612-620, http://jada.ada.org/content/142/6/612.abstract
[20] World Health Organization, *Future Use of Materials for Dental Restoration* (2011), http://www.who.int/oral_health/publications/dental_material_2011.pdf, p.21
[21] BIO Intelligence Service (2012), *Study on the potential for reducing mercury pollution from dental amalgam and batteries*, Final report prepared for the European Commission-DG ENV, http://ec.europa.eu/environment/chemicals/mercury/pdf/Final_report_11.07.12.pdf, p.190
[22] Ibid.
[23] World Health Organization, *Future Use of Materials for Dental Restoration* (2011), http://www.who.int/oral_health/publications/dental_material_2011.pdf,p.21
[24] Letter, Department of Health to British Dental Association (23 May 2012).