

## **Berlin Declaration to End Amalgam Use in Europe on 1 July 2022**

**Whereas;** Europe is the largest user of dental amalgam (which is 50% mercury)<sup>i</sup> and the largest polluter of dental mercury.<sup>ii</sup>

**Whereas;** The European Union, via joint action of the European Parliament, the Council of the European Union, and the European Commission, (1) effectively bans amalgam use in children, pregnant women, and breastfeeding women as of 1/7/18, and (2) requires each Member State to submit a plan of action for a *further* phase down in use as of 1/7/19, and (3) requires the European Commission to submit a recommendation by 30/6/20 re whether to phase out amalgam in Europe on a date certain.<sup>iii</sup>

**Whereas;** This three-year plan is, effectively, a road map that can, and should, lead to the rapid demise of amalgam in Europe.

**Whereas;** Mercury is a notorious heavy metal of global concern that is known to be a potent poison of the human nervous system.<sup>iv</sup>

**Whereas;** Between 270 and 341 tonnes of dental mercury (of which the European Union consumers 90 tonnes per year<sup>v</sup>) was used around the world in 2010, accounting for about 21% of global mercury consumption,<sup>vi</sup>

**Whereas;** Dental mercury enters the environment via many unsound pathways, polluting (1) air via cremation, dental clinic emissions, and sludge incineration; (2) water via dental clinic releases and human waste; and (3) soil via landfills, burials, and fertilizer.<sup>vii</sup>

**Whereas;** The European Commission's Scientific Committee on Health and Environmental Risks ("SCHER") confirms that dental amalgam in the environment can methylate (forming the most toxic form of mercury, methylmercury), that as a result "the acceptable level in fish is exceeded" under some circumstances, and thus there is "a risk for secondary poisoning due to methylation."<sup>viii</sup>

**Whereas;** 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."<sup>ix</sup>

**Whereas;** Mercury-free dental restorative materials are available and preferred, as evidenced by the fact that mercury-free materials are used for 100% of all fillings in Sweden<sup>x</sup> and Norway<sup>xi</sup>; about 97% in Japan<sup>xii</sup>; about 90% in Netherlands<sup>xiii</sup>, Switzerland<sup>xiv</sup>, and Mongolia<sup>xv</sup>; and 80% in Singapore<sup>xvi</sup> and Vietnam<sup>xvii</sup>.

**Whereas;** Mercury-free dental restorative materials are effective according to the World Health Organization report *Future Use of Materials for Dental Restoration*, which says "recent data suggest that RBCs [resin-based composites] perform equally well" as amalgam<sup>xviii</sup> – and offer additional oral health benefits because "Adhesive resin materials allow for less tooth destruction and, as a result, a longer survival of the tooth itself. Funding agencies should take the initiative and encourage the replacement of amalgam as the material of choice for posterior teeth with adhesive systems."<sup>xix</sup>

**Whereas;** The European Commission’s Scientific Committee on Emerging and Newly Identified Health Risks (“SCENIHR”) explains that mercury-free dental fillings “have facilitated a radical change in the concepts of restorative dentistry through the introduction of more minimally invasive techniques and the associated retention of more tooth substance when treating caries.”<sup>xx</sup>

**Whereas;** In 2015, SCENIHR withdrew the claim that amalgam is safe. Similar to its earlier 2008 opinion, SCENIHR’s preliminary opinion in 2014 claimed in section 4.1 that amalgam is “a safe and effective restorative material.”<sup>xxi</sup> But after reviewing the evidence, SCENIHR explained in its response to experts’ comments, “The word ‘safe’ has been deleted in 4.1.”<sup>xxii</sup> So SCENIHR’s 2015 final opinion states that amalgam is merely “an effective restorative material.”<sup>xxiii</sup>

**Whereas;** The Minamata Convention on Mercury requires nations “to phase down the use of dental amalgam.”<sup>xxiv</sup>

**Whereas;** The European Commission’s independent consultant BIOIS has examined all the policy options and urged 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.”<sup>xxv</sup>

**Whereas;** 88% of respondents to the European Commission’s online public consultation voted to phase out amalgam use (as opposed to phasing down use).<sup>xxvi</sup>

**Wherefore,** this 21<sup>st</sup> day of November 2017, it is hereby resolved,

1. We insist that the European Union end all amalgam use on a date certain, and in any case no later than 1 July 2022.
2. We urge each Member State to act before that deadline, ending amalgam on 1 July 2020.
3. We recommend that all Non-Member States in Europe likewise end amalgam by this date.
4. We will work with civil society and governments in Africa, Asia, the Americas, and the Island States to accomplish the same goal.

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<sup>i</sup>U.S. FDA, *Final Rule for Dental Amalgam*,

<http://www.fda.gov/downloads/MedicalDevices/ProductsandMedicalProcedures/DentalProducts/DentalAmalgam/UCM174024.pdf>, p.86.

<sup>ii</sup>United Nations Environment Programme/Arctic Monitoring and Assessment Programme, *Technical Report Background Report to the Global Atmospheric Mercury Assessment* (2013), <https://oarchive.arctic-council.org/handle/11374/732>, p. 103

<sup>iii</sup>European Parliament legislative resolution (14 March 2017), <http://www.europarl.europa.eu/sides/getDoc.do?pubRef=-//EP//NONSGML+TA+P8-TA-2017-0066+0+DOC+PDF+V0//EN>

<sup>iv</sup>UNEP, <http://www.unep.org/chemicalsandwaste/Mercury/tabid/434/Default.aspx>

<sup>v</sup>UNEP/AMAP, *Technical Background Report to the Global Atmospheric Mercury Assessment* (2013), <https://oarchive.arctic-council.org/handle/11374/732>, p.103.

<sup>vi</sup>UNEP/AMAP, *Technical Background Report to the Global Atmospheric Mercury Assessment* (2013), <https://oarchive.arctic-council.org/handle/11374/732>, p.103.

<sup>vii</sup>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](http://www.zeromercury.org/index.php?option=com_phocadownload&view=file&id=158%3Athe-real-cost-of-dental-mercury&Itemid=70)

<sup>viii</sup>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](http://ec.europa.eu/health/scientific_committees/environmental_risks/docs/scher_o_165.pdf), page 4

<sup>ix</sup>Lars D. Hylander& Michael E. Goodsite, *Environmental Costs of Mercury Pollution*, SCIENCE OF THE TOTAL ENVIRONMENT 368 (2006) 352-370.

<sup>x</sup>World Health Organization, *Future Use of Materials for Dental Restoration* (2011), [http://www.who.int/oral\\_health/publications/dental\\_material\\_2011.pdf](http://www.who.int/oral_health/publications/dental_material_2011.pdf), p.21

<sup>xi</sup>World Health Organization, *Future Use of Materials for Dental Restoration* (2011), [http://www.who.int/oral\\_health/publications/dental\\_material\\_2011.pdf](http://www.who.int/oral_health/publications/dental_material_2011.pdf), p.21

<sup>xii</sup>Bio Intelligence Service/European Commission, *Review of the Community Strategy Concerning Mercury* (p.213-14), 4 October 2010,

[http://ec.europa.eu/environment/chemicals/mercury/pdf/review\\_mercury\\_strategy2010.pdf](http://ec.europa.eu/environment/chemicals/mercury/pdf/review_mercury_strategy2010.pdf)

<sup>xiii</sup>World Health Organization, *Future Use of Materials for Dental Restoration* (2011), [http://www.who.int/oral\\_health/publications/dental\\_material\\_2011.pdf](http://www.who.int/oral_health/publications/dental_material_2011.pdf), p.21

<sup>xiv</sup>Letter, Federal Office for the Environment to Francesca Romana Orlando (8 August 2011), <http://www.toxicteeth.org/SVIZZERA.pdf>.

<sup>xv</sup>World Health Organization, *Future Use of Materials for Dental Restoration* (2011), [http://www.who.int/oral\\_health/publications/dental\\_material\\_2011.pdf](http://www.who.int/oral_health/publications/dental_material_2011.pdf), p.23

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- <sup>xxvi</sup> World Health Organization, *Future Use of Materials for Dental Restoration* (2011), [http://www.who.int/oral\\_health/publications/dental\\_material\\_2011.pdf](http://www.who.int/oral_health/publications/dental_material_2011.pdf), p.23
- <sup>xxvii</sup> World Health Organization, *Future Use of Materials for Dental Restoration* (2011), [http://www.who.int/oral\\_health/publications/dental\\_material\\_2011.pdf](http://www.who.int/oral_health/publications/dental_material_2011.pdf), p.23
- <sup>xxviii</sup> World Health Organization, *Future Use of Materials for Dental Restoration* (2011), [http://www.who.int/oral\\_health/publications/dental\\_material\\_2011.pdf](http://www.who.int/oral_health/publications/dental_material_2011.pdf), p.11
- <sup>xix</sup> World Health Organization, *Future Use of Materials for Dental Restoration* (2011), [http://www.who.int/oral\\_health/publications/dental\\_material\\_2011.pdf](http://www.who.int/oral_health/publications/dental_material_2011.pdf), p.16
- <sup>xx</sup> 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](http://ec.europa.eu/health/scientific_committees/emerging/docs/scenihr_o_046.pdf), p.69
- <sup>xxi</sup> European Commission Scientific Committee on Emerging and Newly Identified Health Risks (SCENIHR), *Preliminary opinion on the safety of dental amalgam and alternative dental restoration materials for patients and users* (26 August 2014), p.66
- <sup>xxii</sup> 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](http://ec.europa.eu/health/scientific_committees/emerging/docs/followup_cons_dental_en.pdf), p.97
- <sup>xxiii</sup> 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](http://ec.europa.eu/health/scientific_committees/emerging/docs/scenihr_o_046.pdf), p.71
- <sup>xxiv</sup> Minamata Convention (2013)
- <sup>xxv</sup> 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](http://ec.europa.eu/environment/chemicals/mercury/pdf/final_report_110712.pdf) page 20
- <sup>xxvi</sup> <https://ec.europa.eu/eusurvey/publication/MinamataConvention>