

2021 Report from the United States of America in connection with Decision MC-3/2 of the Conference of the Parties

Information on Dental Amalgam March 2021

Article 4, paragraph 3, of the Minamata Convention on Mercury (the Convention) requires each Party to take measures for the mercury-added products listed in Part II of Annex A in accordance with the provisions therein. Part II of Annex A currently includes the following mercury-added product: dental amalgam. According to Part II of Annex A, measures taken by Parties to phase down the use of dental amalgam shall take into account the domestic circumstances of the Party and relevant international guidance. Each Party is required to take a minimum of two of the measures listed in Annex A, Part II.

In its June 2013 submission on “Measures to Implement the Minamata Convention on Mercury Pursuant to Article 30, paragraph 4, of the Minamata Convention on Mercury,” the United States indicated that it would implement at least two measures listed in part II of Annex A under the Public Health Service Act, 42 U.S.C. § 241(a), and the Clean Water Act. In particular, the United States implemented the following measures listed in Part II of Annex A:

- (i) Setting national objectives aiming at dental caries prevention and health promotion, thereby minimizing the need for dental restoration;
- (iv) Promoting research and development of quality mercury-free materials for dental restoration;
- (v) Encouraging representative professional organizations and dental schools to educate and train dental professionals and students on the use of mercury-free dental restoration alternatives and on promoting best management practices; and
- (ix) Promoting the use of best environmental practices in dental facilities to reduce releases of mercury and mercury compounds to water and land.

In addition to the above, the United States further implemented Annex A, Part II, (ix) through the U.S. Environmental Protection Agency’s Memorandum of Understanding with the American Dental Association and the National Association of Clean Water Agencies to promote the use of amalgam separators and other measures to capture amalgam waste and reduce its release to water. (<http://water.epa.gov/scitech/wastetech/guide/dental/index.cfm>.)

Decision MC-3/2 (adopted by the third Conference of the Parties to the Minamata Convention on Mercury) encourages Parties to take more than the two required measures in accordance with Annex A, Part II, of the Convention to phase down the use of dental amalgam. In this same decision, the Secretariat is asked to request information from Parties on the implementation of such additional measures, and to prepare a document containing such information for consideration by the Conference of the Parties at its fourth meeting. In accordance with the Secretariat’s subsequent request for such information, below please find a submission from the United States regarding the aforementioned additional measures, in support of paragraphs 1, 2, and 5 of Decision MC-3/2.

- In September of 2020, the U.S. Food and Drug Administration (FDA) issued updated “Recommendations for Certain High-Risk Groups Regarding Mercury-Containing Dental Amalgam” that called for non-mercury restorations (fillings), such as composite resins and glass ionomer cements, to be used, when possible and appropriate, in people who may be at higher risk for adverse health effects from mercury exposure.

Key among the FDA’s findings were the uncertainties about the acceptable reference exposure levels for mercury vapor (gas), the potential for mercury to convert to other mercury compounds in the body, and whether the degree of accumulation of mercury from dental amalgam results in negative (adverse) health outcomes. Although the majority of evidence suggests exposure to mercury from dental amalgam does not lead to negative health effects in the general population, little to no information is known about the effect this exposure may have on members of the specific groups who may be at greater risk to potential negative health effects of mercury exposure. For further information regarding these specific groups and more information about the recommendation, please find FDA’s Safety Communication [here](#) and its press announcement [here](#).

- In June of 2017, the Environmental Protection Agency (EPA) promulgated technology-based pretreatment standards to reduce discharges of mercury from dental offices into publicly owned treatment works (POTWs). (Dental offices discharge mercury present in amalgam used for fillings. Amalgam separators are a practical, affordable, and readily available technology for capturing mercury and other metals before they are discharged into sewers that drain to POTWs. Once captured by a separator, mercury can be recycled.) The Dental Office Category regulation, codified at 40 CFR Part 441, requires dental offices to comply with requirements based on practices recommended by the American Dental Association, including the use of amalgam separators. EPA expects compliance with this final rule will annually reduce the discharge of mercury by 5.1 tons as well as 5.3 tons of other metals found in waste dental amalgam to POTWs.

Decision MC-3/2 also calls for the Secretariat to request information from Parties related to Paragraph 7 of Article 4. The United States does not have any information to submit related to Paragraph 7 at this time.