Certain products containing mercury will be banned from 2020, according to a new international treaty signed by governments in Minamata in Japan last week. The regulations apply to the production and trade of batteries, cosmetics and fluorescence lamps containing the toxic material, among other products. Amalgam dental fillings are not affected by the ban. However, the treaty agreed on a number of provisions on the phasing down of the controversial dental material. The Convention, which was proceeded by five inter-governmental negotiation rounds and set in place for adoption at a meeting in Geneva in January, was signed by 87 countries.

Governments now have three years to develop and implement national strategies to reduce or eliminate the production and industrial use of the toxic metal. Mercury emission from large-scale industrial plants, the main source of mercury pollution worldwide, will also be controlled.

Dental associations reacted positively to the decision, which will permit the use of amalgam as a restorative dental material for the years to come. Dr Stuart Johnston from the British Dental Association, who took part in the negotiations on behalf of the FDI World Dental Federation, commented: “We are delighted that the Minamata Convention allows the dental profession continued access to a key restorative material. Dental amalgam is safe and effective: it has been in use for over 150 years and no studies have demonstrated any harm to human health.”

He said that despite amalgam not being banned by the treaty, however, the dental profession is committed to phasing down the use of the material through the prevention of dental diseases, the development of alternative materials and effective amalgam management. Guidelines in this respect for professionals, health officials and the public are currently being compiled and will be released by the organisation soon. The initial steps have already been taken with a pilot project launched recently by the FDI in partnership with the United Nations Environment Pro- gramme in East Africa that aims to train professionals in the country on managing and recycling amalgam waste more effectively.

Amalgam remains one of the most widely used restorative materials worldwide. Particularly in developing countries, it is often the only affordable means of treating dental caries, despite the availability of other methods, such asatraumatic restorative treatment. Unfortunately, it is also a significant source of mercury pollution. Recent national tests conducted in Pakistan, for example, found that levels in urban dental hospitals and practices were up to 20 times higher than acceptable levels, which was considered largely due to poor amalgam management.

According to estimates by the United Nations Environment Pro- gramme, between 300 and 400 metric tons of mercury is used in dental fillings every year worldwide, a tenth of the world’s annual consumption.