#### GOVERNMENT NOTICES • GOEWERMENTSKENNISGEWINGS

#### DEPARTMENT OF FORESTRY, FISHERIES AND THE ENVIRONMENT

NO. 2234 4 July 2022

#### NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998 (ACT NO. 107 OF 1998)

## CONSULTATION ON THE DRAFT NATIONAL REGULATIONS FOR THE MANAGEMENT OF MERCURY IN SOUTH AFRICA

I, Barbara Dallas Creecy, Minister of Forestry, Fisheries and the Environment, hereby consult on my intention to publish the draft Regulations for the Management of Mercury in South Africa, developed in terms of section 25(3), read with section 47(1) of the National Environmental Management Act, 1998 (Act No. 107 of 1998), as set out in the Schedule hereto.

The draft Regulations are intended to domesticate the Minamata Convention on Mercury (the Convention), of which South Africa is a party and ratified in 2019. The objectives of the draft Regulations are in line with the objectives of the Convention. The purpose of the draft Regulations is to eliminate the anthropogenic emissions and releases of mercury, to limit processes emitting and releasing mercury into the environment, to phase out mercury added products, to phase down dental amalgam and to regulate mercury storage facilities and trade.

Members of the public are invited to submit, within thirty (30) days of publication of this Notice in the Government *Gazette* or in the national newspaper, whichever is the later date, written representations or objections to the proposed draft Regulations to any of the following addresses:

By post to: The Director-General: Department of Forestry, Fisheries, and the Environment

Attention: Ms Noluzuko Gwayi

Private Bag X447
PRETORIA
0001

By email to: tsebego@dffe.gov.za

By hand at: Environment House, 473 Steve Biko Road, Arcadia, 0083

Any enquiries in connection with the draft Notice can be directed to Ms Noluzuko Gwayi at (012) 399 9854 or by email at NGwayi@dffe.gov.za

Comments received after the closing date shall not be considered.

BARBARA DALLAS CREECY

MINISTER OF FORESTRY, FISHERIES AND THE ENVIRONMENT

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"Minamata Convention on mercury" means the multilateral environmental agreement that South Africa is a party to, and whose objective is to protect human health and the environment from the anthropogenic emissions and releases of mercury and mercury compounds;

"mixture" means a mix or a solution composed of two or more substances;

"National Focal Point (NFP)" means an official granted responsibility by their national Department to carry out the international cooperation required, including receipt and response to notifications to import or export through the Prior Informed Procedure (PIC) in terms of these Regulations;

"new manufacturing processes" means manufacturing processes involving the use of mercury or mercury compounds that were not used in such processes prior to 1 April 2023;

"new mercury-added products" means mercury-added products that were not in the process of being manufactured, imported or exported prior to 1 April 2023;

"party" means a State or a regional economic integration organization, that has consented to be bound by the Minamata Convention and for which the Convention is in force;

"person" means a natural person and includes a juristic person;

"solidification of mercury" means the treatment of mercury with suitable metals so that it forms a solid alloy;

"these Regulations" means the draft Regulations for the Management of Mercury in South Africa, developed in terms of section 25(3) of the National Environmental Management Act, 1998 (Act No. 107 of 1998);

"trade" means the action of buying and selling goods and services and including for making financial or other forms of gain;

"the Act" means the National Environmental Management Act, 1998 (Act No. 107 of 1998); and

"value chain" means the full lifecycle of a product or process, including material sourcing, production, consumption and disposal/recycling processes.

#### 2. Purpose

- (1) The purpose of these Regulations is to regulate mercury throughout its life cycle and value chain, in order to protect the environment and human health from the anthropogenic releases of mercury and mercury compounds. In particular, the purpose of these Regulations is to—
  - (a) ensure the environmentally sound management of mercury;
  - (b) establish measures for the phase-out of mercury added products;
  - (c) regulate the manufacturing processes in which mercury is used;
  - (d) regulate trade in mercury, and
  - (e) regulate the management of mercury stocks.

- amalgam separators for the retention and collection of amalgam particles, including those contained in used water.
- (6) The dental facilities mentioned in subregulation (5) must ensure that amalgam separators in use from 1 April 2023, provide a retention level of at least 95% of amalgam particles.
- (7) Amalgam separators must be maintained in accordance with the manufacturer's instructions to ensure the highest practicable level of retention.
- (8) Dental practitioners must ensure that their amalgam waste, including amalgam residues, particles and fillings, and teeth, or parts thereof contaminated by dental amalgam, are handled and collected by an authorised hazardous waste management establishment or undertaking, in line with the Act and specific environmental management Acts.
- (9) Dental practitioners may not release amalgam waste directly or indirectly into the environment under any circumstances.
- (10) Dental associations must submit their national Phase-down Plans to the Director General within one month of their adoption and make them publicly available on the internet.

#### **CHAPTER 4**

#### MERCURY SUPPLY SOURCES AND TRADE

#### 5. Export restrictions

- (1) No person may—
  - (a) export mercury or mercury compounds or the mixtures of mercury listed in Annexure 1 to these Regulations; except for its disposal, environmentally sound interim storage, research or laboratory analysis use.
  - (b) export, for the purpose of reclaiming mercury, mercury compounds or mixtures of mercury not listed in Annexure 1, to these Regulations,
- (2) The Prior Informed Consent Procedure in Annexure 4 to these Regulations must be implemented for the export of mercury, mercury added products or mercury waste through the South African Focal Point of the Minamata Convention on mercury.

- possible approval of the Minister that the manufacturing process provides significant environmental and health benefits above the associated risks, and that there are no other technically and economically feasible mercury-free alternatives available providing such benefits.
- (6) No person may use mercury and mercury compounds in the manufacturing processes listed in Part I of Annexure 2 to these Regulations.
- (7) The use of mercury and mercury compounds in the manufacturing processes listed in Part II of Annexure 2 to these Regulations, may only be allowed by submitting an application to the satisfaction and possible approval of the Minister.

#### **CHAPTER 6**

#### STORAGE OF MERCURY, MERCURY COMPOUNDS AND MIXTURES OF MERCURY

#### 8. Environmentally sound interim storage of mercury stocks

- (1) This regulation applies to the interim storage of mercury and mercury compounds for not more than 3 months.
- (2) Persons must take measures to ensure that the interim storage of mercury and mercury compounds is undertaken in an environmentally sound manner.
- (3) Prior to being permanently disposed of, mercury waste must undergo conversion and, where intended to be disposed of in above-ground facilities, conversion and solidification.
- (4) Mercury waste that underwent conversion and, if applicable, solidification may only be permanently disposed of in the following permanent storage facilities licensed for disposal of hazardous waste:
  - (a) salt mines that are adapted for the permanent storage of mercury waste that underwent conversion, or deep underground hard rock formations providing a level of safety and confinement equivalent to or higher than that of such salt mines; or
  - (b) above-ground facilities dedicated to and equipped for the permanent storage of mercury waste that underwent conversion and solidification and that provide a level of safety and confinement equivalent to or higher than that of the facilities referred to in paragraph (a).
- (5) Operators of permanent storage facilities must ensure that mercury waste that underwent conversion and if applicable, solidification, is stored separately from other waste and in disposal batches in a storage chamber that is sealed.
- (6) Operators of facilities undertaking the temporary storage of mercury waste must establish a register containing the following:
  - (a) for each shipment of mercury waste received:
    - (i) the origin and amount of that waste; and

#### 10. Reporting

- (1) A person referred to in regulation 9(1), must before 31 March of every year, submit through an e-mail (DG@dffe.gov.za), an annual report to the Director-General, from an external independent auditor commissioned at own expense to audit at least the following:
  - (a) The correctness of the information supplied on the registration form;
  - (b) In the case of identified products, progress made in terms of the Mercury Phase-out Plan provided in terms of these Regulations;
  - (c) In the case of dental amalgam, progress made in terms of the Mercury Phase-down Plan, and the provisions set out in Part II of Annexure 1 to these Regulations;
  - (d) The person's extent of compliance with these Regulations and other relevant legislation;
  - (e) In the case of the transport of mercury, the amount of mercury transported through the country; and
  - (f) In the case of a research project, how much mercury or mercury added products were used in the research project and the outcome of that research.
- (2) A person or Association undertaking activities referred to in Part II of Annexure 1 to these regulations, must, before 31 March of every year, submit to the Director-General, through an e-mail (DG@dffe.gov.za), an annual report on the implementation of any additional measures taken related to the phase-down of the use of dental amalgam.

#### **CHAPTER 8**

#### MERCURY PHASE-OUT, PHASE-DOWN, AND MANAGEMENT PLANS

#### 11. Mercury Phase-out Plan

- (1) A person or an Association contemplated in regulations 4, 5 and 6 of these Regulations must submit, through an e-mail (DG@dffe.gov.za), a Mercury Phase-out Plan to the Minister for approval within one year of the commencement of these Regulations.
- (2) An Association may submit a joint Mercury Phase-out Plan for the purposes of complying with these Regulations.
- (3) A Mercury Phase-out Plan must at least contain the following information:
  - (a) proposed alternatives to the use of mercury or mercury added products in the manufacture of the identified products;
  - (b) where such alternatives do not exist, reasons why such alternatives do not exist and the steps that will be taken to develop such alternatives; and
  - (c) the time periods within which the manufacturer intends replacing the use of mercury with alternatives to mercury or mercury containing materials.
- (4) The Minister may require a person, who has submitted a Mercury Phase-out Plan, to provide additional information and to submit a revised Mercury Phase-out Plan within a time period indicated by the Minister, or to furnish the Minister with a written independent review of the

In the event that the date for the submission of a Mercury Phase-down Plan, revised Mercury Phase-down Plan or an independent review of the Mercury Phase-down Plan has passed, and such a plan has not been submitted, the Minister may exercise his or her power in terms of this regulation on the basis of other information at his or her disposal.

#### 13. Mercury Management Plan

- (1) A person or an Association contemplated in regulations 7 and 8 of these Regulations, must submit, through registered mail, a Mercury Management Plan to the Minister for approval within one year of the commencement of these Regulations.
- (2) An Association may submit a joint Mercury Management Plan for the purposes of complying with these Regulations.
- (3) A Mercury Management Plan must at least contain the following information:
  - (a) Proposed alternatives to the use of mercury or mercury added products in the manufacture of the identified products;
  - (b) Where alternatives as envisage in paragraph (a) do not exist, reasons why such alternatives do not exist and the steps that will be taken to develop such alternatives; and
  - (c) the time periods within which the manufacturer intends replacing the use of mercury with alternatives to mercury or mercury containing materials.
- (4) The Minister may require a person who has submitted a Mercury Management Plan to provide additional information and to submit a revised Mercury Management Plan within a time period indicated by the Minister, or to furnish the Minister with a written review of the Mercury Management Plan by an independent expert within a time period indicated by the Minister.
- (5) The Minister may, on written application by a person, who is required to submit a Mercury Management Plan, grant an extension in respect of the period within which the plan must be submitted, on good cause shown, with or without conditions attached to such an extension.
- (6) After considering any Mercury Management Plan that has been submitted in terms of these regulations, the Minister may—
  - (a) accept the plan and set conditions for the implementation of such a plan; or
  - (b) reject the plan with reasons provided.
- (7) In the event that the date for the submission of a Mercury Management Plan, revised Mercury Management Plan or an independent review of the Mercury Management Plan has passed, and such a plan has not been submitted, the Minister may exercise his or her power in terms of this regulation on the basis of other information at his or her disposal.

#### **ANNEXURE 1**

Mercury-added products (MAPs)

- 1. The following products are excluded from this Annexure:
  - (a) Products essential for civil protection and military uses;
  - (b) Products for research, calibration of instrumentation, for use as reference standard;
  - Where no feasible mercury-free alternative for replacement is available, switches and relays, cold cathode fluorescent lamps and external electrode fluorescent lamps (CCFL and EEFL) for electronic displays, and measuring devices;
  - (d) Products used in traditional or religious practices; and
  - (e) Vaccines containing thiomersal as preservatives.
- 2. Part I: Mercury-added products subject to a phase-out:

Mercury-added products (MAPs)	Date after which the manufacture, import or export of the product shall not be allowed (phase-out date)
Batteries, except for button zinc silver oxide batteries with a mercury content < 2% and button zinc air batteries with a mercury content < 2%	1 April 2023
Switches and relays, except very high accuracy capacitance and loss measurement bridges and high frequency radio frequency switches and relays in monitoring and control instruments with a maximum mercury content of 20 mg per bridge, switch or relay	1 April 2023
Compact fluorescent lamps (CFLs) for general lighting purposes that are ≤ 30 watts with a mercury content exceeding 5 mg per lamp burner	1 April 2023
Linear fluorescent lamps (LFLs) for general lighting purposes: (a) Triband phosphor < 60 watts with a mercury content exceeding 5 mg per lamp; (b) Halophosphate phosphor ≤ 40 watts with a mercury content exceeding 10 mg per lamp	1 April 2023
High pressure mercury vapour lamps (HPMV) for general lighting purposes	1 April 2023
Mercury in cold cathode fluorescent lamps and external electrode fluorescent lamps (CCFL and EEFL) for electronic displays: (a) short length (≤ 500 mm) with mercury content exceeding 3.5 mg per lamp (b) medium length (> 500 mm and ≤ 1 500 mm) with mercury content exceeding 5 mg per lamp (c) long length (> 1 500 mm) with mercury content exceeding 13 mg per lamp	1 April 2023
Cosmetics (with mercury content above 1ppm), including skin lightening soaps and creams, and not including eye area cosmetics where mercury is used as a preservative and no effective and safe substitute preservatives are available 1/	1 April 2023
Pesticides, biocides and topical antiseptics	1 April 2023
The following non-electronic measuring devices except non-electronic measuring devices installed in large-scale equipment or those used for high precision measurement, where no suitable mercury-free alternative is available:  (a) barometers;	1 April 2023

#### **ANNEXURE 2**

Manufacturing processes in which mercury or mercury compounds are used

### 1. Part I: Processes subject to a mercury-management plan:

Manufacturing processes using mercury or mercury compounds	Phase-out date
Chlor-alkali production	1 April 2025
Acetaldehyde production in which mercury or mercury compounds are used as a catalyst	1 April 2023

#### 2. Part II: Processes subject to a mercury-management plan:

Mercury using process	Provisions
Vinyl chloride monomer production	Measures to be taken shall include but not be limited to: (i) Reduce the use of mercury in terms of per unit production by 50 per cent by the year 2023 against 2021 use; (ii) Promoting measures to reduce the reliance on mercury from primary mining; (iii) Taking measures to reduce emissions and releases of mercury to the environment; (iv) Supporting research and development in respect of mercury-free catalysts and processes; (v) Not allowing the use of mercury five years after the Conference of the Parties to the Minamata Convention has established that mercury-free catalysts based on existing processes have become technically and economically feasible; (vi) Reporting to the Minister on its efforts to develop and/or identify alternatives and phase out mercury use.
Sodium or Potassium Methylate or Ethylate	Measures to be taken shall include but not be limited to:  (i) Measures to reduce the use of mercury aiming at the phase out of this use as fast as possible and within 10 years of the entry into force of the Convention;  (ii) Prohibiting the use of fresh mercury from primary mining;  (iii) Supporting research and development in respect of mercury-free processes;  (iv) Not allowing the use of mercury five years after the Conference of the Parties to the Minamata Convention has established that mercury-free processes have become technically and economically feasible;  (v) Reporting to the Minister on its efforts to develop and/or identify alternatives and phase out mercury use.
Production of polyurethane using mercury containing catalysts	Measures to be taken shall include but not be limited to: (i) Taking measures to reduce the use of mercury, aiming at the phase out of this use as fast as possible, by 16 August 2027; (ii) Taking measures to reduce the reliance on mercury from primary mercury mining; (iii) Taking measures to reduce emissions and releases of mercury to the environment; (iii) Encouraging research and development in respect of mercury-free catalysts and processes;

#### **ANNEXURE 3**

Application Form for registration in terms of these Regulations

#### A. APPLICANT DETAILS:

Name of applicant:	
Identity or passport no in the case of a	an individual:
Registration number in the case of a S	South African company or Close Corporation or Pty.
Company registration in case of an int	ternational company:
Tel no:	
Fax no:	
E-mail address:	
Postal Address:	Physical Address:

Import, manufacture or distribution of an identified product.	Import of mercury or mercury waste from a SADC country (that is a party to Minamata Convention on mercury) for the purpose safe disposal.
Import, storage or use of mercury or mercury added products (MAPs) for research purposes.	Transport of mercury or mercury containing materials.

#### PLEASE PROVIDE THE FOLLOWING INFORMATION THAT RELATES TO THE ACTIVITY FOR WHICH REGISTRATION IS APPLIED FOR

C. IMPORT, MANUFACTURE OR DISTRIBUTE AN IDENTIFIED PRODUCT
The address where the business is carried on:
The quantity of identified products that is manufactured, stored or distributed:
Manufactured:
Stored:
Distributed:

D. TRANSPORT OF MERCURY OR MERCURY ADDED PRODUCTS.

The quantity and type of mercury or mercury added product(s) to be used in the research per annum.
F. IMPORT OF MERCURY OR MERCURY WASTE FROM SADC COUNTRY (THAT IS A PARTY TO THE MINAMANATA CONVENTION ON MERCURY) FOR THE PURPOSE OF SAFE DISPOSAL
The quantity of mercury or mercury waste that is imported:
The country from which it is imported:
The conditions and period of the contract under which, the mercury or mercury waste is accepted:
The location of the authorised disposal site where the mercury waste is being disposed of and the environmental licence details and conditions of the site or facility:
,

**SECTION 4** 

1.4.3	Other numbers	
	(if applicable, specify the numbering system)	
SECTIO	N 2	IDENTITY OF THE PREPARATION TO BE EXPORTED
2.1	Trade name and name of the preparation	
2.2	For each substance in the preparation that is subject to the export notification, concentration (%) and information as specified under SECTION 1	
SECTIO		
	DN 3	INFORMATION CONCERNING THE EXPORT
3.1	Expected date of export (dd.mm.yy)	INFORMATION CONCERNING THE EXPORT
3.1	Expected date of export	INFORMATION CONCERNING THE EXPORT
	Expected date of export (dd.mm.yy)  Foreseen category (mercury, mercury-added product, or mercury waste) and foreseen use	INFORMATION CONCERNING THE EXPORT
3.2	Expected date of export (dd.mm.yy)  Foreseen category (mercury, mercury-added product, or mercury waste) and foreseen use in importing country  Name, address, telephone, fax	INFORMATION CONCERNING THE EXPORT

AND PRECAUTIONARY MEASURES

INFORMATION ON HAZARDS AND /OR RISKS OF THE

MERCURY, MERCURY-ADDED PRODUCT, OR MERCURY WASTE

5.2	Reference	
3.2	Reference	
SECTIO	N 6	SUMMARY INFORMATION ON FINAL REGULATORY ACTION TAKEN BY THE EXPORTING COUNTRY
6.1	Summary of the final	regulatory action and data of entry into force
6.2	The final regulatory action has been taken for the category	
	mercury	mercury-added product mercury waste
	Please indicate:	
	- use or uses prohil	bited
	- use or uses that remain allowed	
	- where available, e	stimated quantity produced, imported, exported and used
6.3	Reference to the regulatory document	
SECTIO	ON 7	DESIGNATED NATIONAL AUTHORITIES (DNAs)

exporting country at the following address:		
Name and address		

Please send the acknowledgment within 30 days of the date indicated in section 7 to the