

Environmental Management (Control And Management Of Mercury And Mercury Compounds)

GOVERNMENT NOTICE NO 59 Published On 31/1/2020

THE ENVIRONMENTAL MANAGEMENT ACT,
(CAP. 191)

REGULATIONS

(Made under section 230(1) and (2) (f))

THE ENVIRONMENTAL MANAGEMENT (CONTROL AND MANAGEMENT OF MERCURY
AND MERCURY COMPOUNDS) REGULATIONS, 2020

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THE ENVIRONMENTAL MANAGEMENT ACT,
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THE ENVIRONMENT MANAGEMENT (CONTROL AND MANAGEMENT OF MERCURY
AND MERCURY COMPOUNDS) REGULATIONS, 2020

PART I
PRELIMINARY PROVISIONS

Citation

1. These Regulations may be cited as the Environmental Management (Control and Management of Mercury and Mercury Compounds) Regulations, 2020.

Application

2.-(1) These Regulations shall apply to-

- (a) import, export, transport, sale, distribution, storage, use and disposal of mercury and mercury compounds;
- (b) use of mercury and mercury compounds in manufacturing processes or in small-scale gold mining;
- (c) mercury-added products; and
- (d) point sources associated with mercury emissions and releases.

(2) Notwithstanding the provisions of sub-regulation (1) these Regulations shall not apply to the use of mercury and mercury compounds for-

- (a) civil protection and military uses;
- (b) research, calibration of instrumentation and for use as reference standard;
- (c) electrical and electronic devices where no feasible mercury free alternative for replacement is available; and
- (d) vaccines containing ethyl mercury (thiomersal) as preservatives.

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(3) These Regulations shall apply to Mainland Tanzania.

Interpretation	3. In these Regulations, unless the context requires otherwise-
Cap. 191	"Act" means the Environmental Management Act;
	"allowable emission standards" means a limit on the concentration, mass or emission rate of mercury or mercury compounds, often expressed as "total mercury", emitted from a point source to the atmosphere;
	"allowable release standards" means a limit on the concentration, mass or release rate of mercury or mercury compounds, often expressed as "total mercury", released from a point source to land or water;
	"Basel Convention" means the Basel Convention on the Control of Trans-boundary Movements of Hazardous Wastes and their Disposal;
	"best available techniques" means those techniques that are the most effective to prevent and, where that is not practicable, to reduce emissions and releases of mercury to air, water and land and the impact of such emissions and releases on the environment as a whole;
	"Best Environmental Practices" means the application of the most appropriate combination of environmental control measures and strategies to prevent or reduce emissions and releases of mercury and associated environmental impacts as a whole;
Cap. 182	"Chief Government Chemist" means the Chief Government Chemist appointed under the Industrial and Consumer Chemicals (Management and Control) Act;
Cap. 99	"Chief Medical Officer" means the Chief Medical Officer appointed under the Public Health Act;
Cap. 123	"Commissioner for Minerals" means the Commissioner for Minerals appointed under the Mining Act;
	"Council" means the National Environment Management Council referred to under section 16 of the Act;
	"dental amalgam" means a dental filling material which is used to fill cavities caused by tooth decay and which its primary component is elemental mercury with alloy mixture of silver, tin, copper and other trace metals;
	"Director of Environment" means the Director of Environment appointed pursuant to section 14(2) of the Act;
Cap 219	"emissions" means emissions of mercury or mercury compounds to the atmosphere;
	"Environmental Inspector" means an inspector appointed under

section 182 of the Act;

“environmentally sound management” means taking all practicable steps to ensure that the overall management takes place in such a manner that protects human health and the environment against the adverse effects of mercury or mercury compounds;

"environmental protection order" means a written statutory order that requires a person to undertake actions to remedy a risk or prevent further environmental harm;

"gold amalgamation" means the process of mixing elemental mercury with gold ore slurry to capture gold;

“mercury” means elemental mercury (Hg(0), CAS No. 7439-97-6);

“mercury-added product” means a product or product component or chemical that contains mercury or a mercury compound that was intentionally added in order to provide a specific characteristic, appearance, or quality, or to perform a specific function or for any other reason;

“mercury compound” means any substance consisting of atoms of mercury and one or more atoms of other chemical elements that can be separated into different components only by chemical reactions;

“mercury wastes” means substances or objects:

(a) consisting of mercury or mercury compounds which generally includes mercury or mercury compounds that may be stored, stockpiled or are ‘obsolete’ due to import or export bans or other regulations that require that they be designated as waste;

(b) containing mercury or mercury compounds including wastes of mercury-added products such as mercury thermometers and fluorescent lamps; or

(c) contaminated with mercury or mercury compounds including residues generated from mining processes, industrial processes, or waste treatment processes;

“Minister” means the Minister responsible for matters relating to environment;

“Minamata Convention” means the Minamata Convention on Mercury;

"permit" in relation to these Regulations means permits issued by Regulatory Authorities mandated to perform various functions under these Regulations;

"point source" means single identifiable, localized, stationary source of mercury emissions and releases;

“releases” means releases of mercury or mercury compounds to

land or water;

“small-scale gold mining” means gold mining conducted by individual miners or small enterprises with limited capital investment and production;

"undesirable medical device" means any medical device containing mercury which is intentionally added during manufacture of such device to provide a specific characteristic, appearance or quality, or to perform a specific function such as thermometers and sphygmomanometers (blood pressure devices);

"worst practices" means inappropriate handling of mercury or mercury compounds which results into their haphazard emission or release or both, into the environment particularly open burning of gold amalgam and processing of mercury-contaminated tailings with cyanide to extract gold.

PART II OBJECTIVES

Objectives

4. The objectives of these Regulations shall be to-

- (a) domesticate legal obligations of the Minamata Convention;
- (b) strengthen institutional coordination and enforcement of relevant written laws on the control and management of mercury and mercury compounds;
- (c) control the importation, exportation, manufacture, transportation, sale, distribution, storage and use of mercury and mercury compounds;
- (d) promote environmentally sound management of mercury and mercury compounds;
- (e) enforce national standards on allowable mercury emissions and releases from point sources; and
- (f) ensure protection of human health and the environment from anthropogenic emissions and releases of mercury and mercury compounds.

PART III ADMINISTRATION AND INSTITUTIONAL ARRANGEMENT

National
Environment

5. The National Environmental Advisory Committee established under the Act, shall be responsible for advising the

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| al Advisory
Committee | Minister on matters pertaining to the control and management of mercury and mercury compounds, with respect to- |
| | (a) sources and trends in mercury emissions and releases; |
| | (b) setting national priorities and promoting environmentally sound management of mercury and mercury compounds; |
| | (c) implementation of national plans, strategies, programmes and projects for enhancing the control of mercury emissions and releases; and |
| | (d) enhancing working partnership, coordination and effective engagement of regulatory authorities and other key stakeholders for effective implementation of these Regulations. |

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| Functions of
Minister | 6.-(1) In these Regulations, the Minister shall- |
| | (a) articulate national priorities, policy instruments and strategic interventions to promote environmentally sound management of mercury and mercury compounds; |
| | (b) mobilize implementation of relevant national plans, strategies and programmes for the control of mercury and mercury compounds; |
| | (c) ensure effective engagement, collaboration and information sharing among key stakeholders towards enhancing the control and management of mercury emissions and releases; and |
| | (d) perform any other functions vested upon him by the Act and these Regulations. |
| | (2) The Minister shall, in the discharge of his functions under these Regulations, collaborate with the Director of Environment, Council, Chief Government Chemist, Ministry responsible for Minerals, Tanzania Medicine and Medical Devices Authority, Tanzania Bureau of Standards, Ministry responsible for Health, Ministry responsible for Local Government Authorities and Environmental Inspectors. |

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| Functions of
Director of
Environment | 7. For the purpose of these Regulations, the Director of Environment shall- |
| | (a) serve as National Focal Point for the Minamata Convention and coordinate its implementation; |
| | (b) prepare national report on the implementation of the Minamata Convention and submit to the Secretariat of the Convention; |

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- (c) prepare and coordinate implementation of relevant national plans and strategies for the control and management of mercury and mercury compounds;
- (d) develop guidelines for promoting environmentally sound management of mercury and mercury compounds;
- (e) coordinate and promote public awareness on the control and management of mercury and mercury compounds;
- (f) ensure sectoral coordination, monitoring and mobilization of stakeholders for control and management of mercury and mercury compounds; and
- (g) carry out such other functions vested upon him under the Act and these Regulations.

Functions of
Council

shall-

8. For the purpose of these Regulations, the Council

- (a) coordinate enforcement and compliance of these Regulations;
- (b) ensure control of manufacturing processes that use mercury or mercury compounds;
- (c) ensure environmentally sound management of mercury waste and mercury contaminated sites;
- (d) prescribe procedures and guidelines on clean-up and remediation of mercury contaminated sites;
- (e) undertake periodic inventory and maintain a register of mercury contaminated sites;
- (f) enhance public awareness on mercury related issues;
- (g) coordinate and ensure enforcement of national standards on allowable mercury emissions and releases for point source categories; and
- (h) carry out such other functions vested upon the Council under the Act and these Regulations.

Functions of
Chief
Government
Chemist

Government Chemist shall-

9. For the purpose of these Regulations, the Chief

- (a) serve as the Registrar of mercury and mercury compounds;
- (b) issue certificate for registration to importers, exporters, dealers, transporters, users or storage of mercury and mercury compounds in accordance with the Industrial and Consumer Chemicals (Management and Control) Act;

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- Cap. 182
- (c) issue permits for importation, exportation or transportation of mercury and mercury compounds in accordance with the Industrial and Consumer Chemicals (Management and Control) Act;
 - (d) provide referral laboratory services for analysis of mercury or environmental or occupational samples;
 - (e) conduct periodic inventory to the end user of mercury and mercury compounds;
 - (f) enhance public awareness on mercury related issues;
 - (g) ensure enforcement and compliance of mercury trade requirements provided under these Regulations and any other related written laws; and
- Cap. 182
- (h) carry out such other functions vested upon him under the Industrial and Consumer Chemicals (Management and Control) Act and these Regulations.
- Functions of
Director
General of
Tanzania
Medicine
and Medical
Devices
Authority
- 10.** For the purpose of these Regulations, the Director General of Tanzania Medicine and Medical Devices Authority shall-
- (a) regulate the manufacturing, importation, exportation, distribution of undesirable medical devices containing mercury or mercury compounds;
 - (b) undertake inventory and maintain a register of undesirable medical devices containing mercury or mercury compounds;
 - (c) develop and coordinate implementation of a national strategy for gradual phase-out of undesirable medical devices containing mercury or mercury compounds;
 - (d) enhance public awareness on mercury related issues; and
- Cap. 219
- (e) carry out such other functions vested upon him under the Tanzania Food, Drugs and Cosmetics Act and these Regulations.
- Functions of
Commissioner
for Minerals
- 11.** For the purpose of these Regulations, the Commissioner for Minerals shall-
- (a) ensure reduction, and where feasible eliminate, the use of mercury in small-scale gold mining;
 - (b) promote elimination of worst practices contributing in mercury emissions and releases during extraction of gold;

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- Cap. 123
- (c) promote mercury-free technologies and best practices in mercury use for gold extraction;
 - (d) conduct periodic inventory and maintain a register of mercury consumption and any other related information in small-scale gold mining;
 - (e) promote and ensure compliance to occupational health and safety, and environmental legal requirements in small scale gold mining;
 - (f) enhance public awareness on mercury related issues;
 - (g) support implementation of the National Action Plan for Small-Scale Gold Mining; and
 - (h) carry out such other functions vested upon him under the Mining Act and these Regulations.

Functions of
Chief
Medical
Officer

12. For the purpose of these Regulations, the Chief Medical Officer shall-

- (a) develop, implement and update a dedicated public health strategy for preventing and mitigating mercury exposure to small-scale gold mining communities;
 - (b) undertake epidemiological surveillance to assess health impacts associated with mercury;
 - (c) coordinate development and implementation of a national plan to gradually phase-out the use of dental amalgam;
 - (d) ensure compliance and enforcement of these Regulations in dental facilities and any other related mercury sources;
 - (e) enhance public awareness on mercury related issues; and
 - (f) carry out such other functions vested upon him under the Public Health Act and these Regulations.
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Functions of
Tanzania
Bureau of
Standards

13. For the purpose of these Regulations, the Director General of the Tanzania Bureau of Standards shall-

- (a) develop national standards on allowable emissions and releases of mercury from point source categories;
- (b) maintain a register of mercury-added products and their alternatives;
- (c) enforce the prohibition of the manufacture, import or

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- export of mercury-added products as from 2030 in accordance with the provisions of the Minamata Convention;
- (d) enhance public awareness on mercury related issues and disseminate Code of Practice for Management of Mercury in Small-Scale Gold Mining and Refineries; and
- Cap. 130 (e) carry out such other functions vested upon the Tanzania Bureau of Standards under the Standards Act and these Regulations.
- Functions of Local Government Authority
- 14.** For the purpose of these Regulations, each Local Government Authority shall, with respect to its area of jurisdiction, ensure that-
- (a) necessary steps are taken to minimize public health risks associated with mercury releases and emissions or contaminated sites;
- (b) provide information on mercury contaminated sites and any other source of mercury emissions and releases to the Council;
- (c) enhance public awareness on mercury related issues; and
- Cap. 191 (d) carry out such other functions vested upon the Local Government Authority under the Act and these Regulations.
- Powers of Environmental Inspector
- 15.** In addition to the powers contained in section 183 of the Act, an Environmental Inspector may-
- (a) carry out periodic inspection of all establishments or activities within the local limits of his jurisdiction in which importation, exportation, transportation, storage, use or dealing in mercury and mercury compounds, to ensure compliance of these Regulations;
- (b) enter upon any premises where mercury or mercury waste is stored, processed or disposed of;
- (c) stop and inspect any vehicle used for the transportation of mercury and mercury compounds;
- (d) take samples of mercury or environmental samples or articles to which these Regulations relate and, submit such samples for test and analysis in an accredited laboratory;
- (e) make examinations and enquiries to explore whether these Regulations and the Act are complied with;

- Cap. 191
- and
(f) compound offences in accordance with the provisions of section 194 of the Act.

PART IV
ELEMENTAL MERCURY AND MERCURY COMPOUNDS

Registration and issuance of permits

16. The Chief Government Chemist shall register and issue certificates of registration and permits for mercury and mercury compounds handling activities including the following-

- (a) importation;
- (b) exportation;
- (c) transportation;
- (d) distribution and sale;
- (e) storage; or
- (f) use.

Application for registration of a dealer, chemicals and premises

17. Any person who intends to import, export, transport, distribute, sale, store or use mercury and mercury compounds shall apply to the Chief Government Chemist for registration of-

- (a) a dealer;
- (b) chemicals; and
- (c) premises or facilities,

in a manner provided for in the Industrial and Consumer Chemicals (Management and Control) Act.

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Issuance of certificates for registration

18. The Chief Government Chemist shall issue certificates for registration in the following categories-

- (a) mercury and mercury compounds as chemical substances;
- (b) manufacturer, importer, exporter, user, transporter or distributor of mercury and mercury compounds; and
- (c) premises and facilities for handling mercury and mercury compounds.

Conditions for use of mercury and mercury compounds in laboratory and research

19.-(1) Without prejudice to the provisions of these Regulations, the allowed quantity of mercury and mercury compounds stored in premises used as a laboratory or research facility shall not exceed-

- (a) a weight of 500 g for mercury;
- (b) a weight of 300 g for each type of mercury compound in the form of a substance; and
- (c) a volume of 300 ml for each type of mercury

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compound in the form of a solution.

(2) It shall be an offence to store mercury or mercury compounds for laboratory or research purposes which exceed the allowed quantities under sub-regulation (1).

Issuance of permits
Cap. 182

20. A person who intends to import, export or transport mercury and mercury compounds shall apply for mercury importation, exportation, or transportation permit to the Chief Government Chemist in a manner provided for in the Industrial and Consumer Chemicals (Management and Control) Act.

Seizure of illegally stored mercury or mercury compounds

21-(1) The Chief Government Chemist may seize and dispose of illegally stored mercury or mercury compounds.

(2) Without prejudice to sub-regulation (1), the cost incurred in the seizure, storage, handling, transportation and disposal of mercury or mercury compounds shall be borne by the person who illegally stored such mercury or mercury compounds.

Requirements for environmentally sound interim storage of mercury
Cap. 182

22.-(1) Mercury and mercury compounds shall be stored in quantities commensurate with their intended use.

(2) For the purpose of these Regulations, the threshold quantity of mercury for an interim storage shall be a stock of 100kg intended for use in small-scale gold mining.

(3) Pursuant to sub-regulation (2), a person in possession of mercury stock under interim storage shall apply for a permit to the Chief Government Chemist in a manner provided for in the Industrial and Consumer Chemicals (Management and Control) Act.

(4) Any person in possession of mercury stock under interim storage shall take all appropriate steps to ensure that it is managed in an environmentally sound manner.

Requirements for environmentally sound management of mercury and mercury compounds
Cap. 182

23. Any person who imports, exports, transports, distributes, stores or uses mercury and mercury compounds shall take all appropriate steps to ensure environmentally sound management of such chemicals as provided for in the Industrial and Consumer Chemicals (Management and Control) Act.

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| Offences and penalties | 24. A person who contravenes this Part commits an offence and upon conviction shall be liable- |
| | (a) in case of a body corporate to a fine of not less than five million shillings and not more than fifty million shillings; and |
| Cap. 182 | (b) in case of a natural person to a fine of not less than fifty thousand shillings and not more than five million shillings or a term of imprisonment of two years or to both. |

**PART V
UNDESIRABLE MEDICAL DEVICES**

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| Undesirable medical devices | 25. Medical devices containing mercury shall be considered to be undesirable medical devices, and are therefore subject for gradual phase-out. |
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| Issuance of permit | 26. Any person who intends to import or export undesirable medical devices shall apply for a permit to the Director General of Tanzania Medicine and Medical Devices Authority in a manner provided for in the Tanzania Food, Drugs and Cosmetics Act. |
| Cap. 219 | |

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| Requirements for environmentally sound management of undesirable medical devices | 27. Any person who manufactures, imports, exports, or uses undesirable medical devices shall take all appropriate steps to ensure environmentally sound management of such devices as provided for in the relevant written laws. |
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| Gradual phase-out of undesirable medical devices | 28.-(1) For the purpose of facilitating the gradual phase-out of undesirable medical devices, the Director General of Tanzania Medicine and Medical Devices Authority shall- |
| | (a) restrict and maintain a register of the importation, manufacture, storage, sale and distribution of undesirable medical devices; and |
| | (b) prescribe guidelines for environmentally sound management of undesirable medical devices. |
| | (2) The Director General of Tanzania Medicine and Medical Devices Authority by notice in writing, may require any |

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person who manufactures, imports, exports, stores or uses undesirable medical devices to furnish him with information which that person has in his possession.

Offences and penalties

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29. Any person who contravenes this Part, commits an offence and upon conviction shall be liable to the penalty prescribed under the Tanzania Food, Drugs and Cosmetics Act.

**PART VI
DENTAL AMALGAM**

Gradual phase-out of dental amalgam

30. Dental amalgam fillings shall be subjected to gradual phase-out in line with the requirements of the Minamata Convention.

Prohibition on use of mercury in bulk form

31-(1) Dental amalgam shall be used only in pre-dosed encapsulated form.

(2) Dental practitioners shall not use mercury in bulk form.

Restriction on use of dental amalgam to children and women

32. Dental amalgam shall not be used for dental treatment of deciduous teeth of children under the age of 15 years, pregnant women and breastfeeding women, except when deemed strictly necessary by the dental practitioner based on the specific medical needs of the patient.

National strategy for gradual phase-out of dental amalgam

33.-(1) The Chief Medical Officer shall coordinate development and implementation of a national strategy for gradual phase-out of the use of dental amalgam.

(2) For the purpose of facilitating the gradual phase-out of the use of dental amalgam, the national strategy shall include the following priority interventions-

- (a) minimising the use of dental amalgam and prevention of dental caries;
- (b) promoting cost effective and clinically effective mercury-free alternatives for dental restoration;
- (c) promoting research and development of quality mercury free materials for dental restoration;
- (d) encouraging education and training of dental professionals and students on the use of mercury free dental restoration alternatives and promoting best management practices;
- (e) discouraging insurance policies and programmes that favour the use of dental amalgam over mercury free dental restoration;
- (f) restricting the use of dental amalgam to its encapsulated form; and
- (g) promoting the use of best environmental practices in dental facilities to reduce releases of mercury and mercury compounds to water and land.

Requirements
for
environmentally
sound
management
of dental
amalgam

34.-(1) All dental facilities in which dental amalgam is used shall ensure that they are equipped with amalgam separators for the retention and collection of amalgam particles, including those contained in wastewater generated from such facility.

(2) Amalgam separators put into service shall provide a retention level of at least 95% of amalgam particles.

(3) Dental practitioners shall ensure that their amalgam waste, including amalgam residues, particles, fillings, and teeth, or parts thereof, contaminated by dental amalgam, is handled in an environmentally sound manner as provided for in relevant written laws.

(4) Dental practitioners shall not release directly or indirectly such amalgam waste into the environment under any circumstances.

Offences and
penalties

35. Any person who imports or exports dental amalgam fillings or provides dental services using dental amalgam without registering or adhering to conditions stipulated in the permit or contravenes the provisions of these Regulations or other related legal requirements under the Public Health Act, commits an

Cap. 99

offence and upon conviction shall be liable to the penalty prescribed under the Public Health Act.

PART VII MANUFACTURING PROCESSES USING MERCURY OR MERCURY COMPOUNDS

Prohibition
on use of
mercury in
manufacturing
processes
Cap. 191

36.-(1) Manufacturing processes shall not use mercury or mercury compounds.

(2) Any person who contravenes sub-regulation (1) commits an offence and on conviction he shall be liable to the penalty prescribed in the Act.

Measures for
prohibition
on use of
mercury in
manufacturing
process

37. For the purpose of facilitating prohibition on the use of mercury in manufacturing processes, the Council shall-

- (a) refrain from processing the application for Environmental Impact Assessment certificates to new facilities with manufacturing processes that use mercury or mercury compounds;
- (b) enforce change to mercury-free manufacturing processes for existing facilities with manufacturing processes that use mercury or mercury compounds;
- (c) conduct public awareness on environmental and health risks of mercury and encourage the use of available mercury-free manufacturing technologies; and
- (d) perform such other functions as shall deem fit for the purpose of prohibiting manufacturing processes using mercury or mercury compounds.

Offences and
penalties
Cap. 191

38. Any person who imports or exports or uses manufacturing process technologies that use mercury or mercury compounds, commits an offence and upon conviction shall be liable to the penalty prescribed in the Act.

PART VIII MERCURY-ADDED PRODUCTS

Prohibition
of mercury-
added
products

39.-(1) The export, import and manufacturing of mercury-added products set out in the First Schedule to these Regulations, shall be prohibited as from 2030 in line with the provisions of the Minamata Convention.

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(2) A person shall not manufacture, import, export or place on the market new mercury-added products.

Requirements
for
environmenta
lly sound
management
of mercury-
added
products

40.-(1) Any person in possession of mercury-added products shall take all appropriate measures to ensure environmentally sound management of such products.

(2) Subject to the provisions of sub-regulation (1), a person shall not-

- (a) mix discarded mercury-added products with municipal wastes;
- (b) dispose mercury-added products in uncontrolled landfills, transfer stations, or incinerators, regardless of the amount of mercury in the product;
- (c) incinerate discarded mercury added products without dedicated flue gas cleaning and controls; and
- (d) export discarded mercury added products except for the purpose of environmentally sound disposal.

National plan
for gradual
phase-out of
mercury-
added
products

41.-(1) For the purpose of these Regulations, the Director of Environment shall coordinate preparation and implementation of national plan for gradual phase-out of mercury-added products.

(2) For the purpose of facilitating gradual phase-out of mercury-added products, the Tanzania Bureau of Standards shall-

- (a) maintain a register of mercury-added products and their alternatives;
- (b) restrict manufacturing, importation and exportation of mercury-added products to facilitate their phase-down;
- (c) facilitate public awareness on risks associated with mercury-added products; and
- (d) promote mercury free alternative products.

PART IX
SMALL-SCALE GOLD MINING

Reduction of
mercury use
in small-scale
gold mining

42. The Commissioner for Minerals, in collaboration with other relevant authorities, shall take steps to ensure reduction and where feasible eliminate the use of mercury in small-scale gold mining.

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Measures for reduction of mercury use in small-scale gold mining

43. For the purpose of facilitating reduction of mercury use in small-scale gold mining, the Commissioner for Minerals shall-

- (a) promote elimination of worst practices particularly open burning of amalgam and processing of mercury contaminated tailings with cyanide to recover gold;
- (b) promote mercury-free technologies for gold processing;
- (c) promote best practices in gold processing using mercury;
- (d) conduct periodic inventory of mercury use in small-scale gold mining; and
- (e) provide information to miners and the public on mercury related issues.

National action plan for small-scale gold mining

44.-(1) The Director of Environment shall coordinate development, implementation and updating of national action plan for reduction, and where feasible eliminate, use of mercury in small-scale gold mining in accordance with the key elements specified in the Second Schedule to these Regulations.

(2) Subject to the provisions of sub-regulation (1), the national action plan shall be reviewed and updated after every five years.

Public health strategy for preventing and mitigating exposure to mercury

45.-(1) The Chief Medical Officer shall be responsible for development and implementation of a dedicated public health strategy for preventing and mitigating mercury exposure to small-scale gold mining communities.

(2) Subject to the provisions of sub-regulation (1), the public health strategy shall be reviewed and updated after every five years.

Offences and penalties

Cap. 182

46. Any person who uses mercury without registering to the Chief Government Chemist commits an offence and upon conviction shall be liable to the penalty prescribed under the Industrial and Consumer Chemicals (Control and Management) Act.

PART X
MERCURY EMISSIONS AND RELEASES

Point source

47.-(1) Point source categories of emissions and releases

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categories of mercury emissions and releases of mercury and mercury compounds to the environment, in line with the Minamata Convention, shall include-

- (a) coal-fired power plants;
- (b) coal-fired industrial boilers;
- (c) smelting and roasting processes used in the production of non-ferrous metals;
- (d) waste incineration facilities; and
- (e) cement clinker production facilities.

(2) Without prejudice to sub-regulation (1), these Regulations shall apply to all other point source categories of mercury emissions and releases.

Prohibition for haphazard discharge of mercury **48.** No person shall haphazardly discharge mercury or mercury compounds to any segment of the environment.

Inventory and register of point source categories of mercury emissions and releases **49.**-(1) The Council shall undertake inventory and maintain a register of point source categories of emissions and releases of mercury and mercury compounds to the environment and submit annual inventory report to the Director of Environment.

(2) Without prejudice to sub-regulation (1), the Council shall maintain a pollutant release and transfer register to help collect and manage data on mercury emissions, releases and transfers to the environment.

National plan for reducing mercury emissions and releases from point sources **50.** Notwithstanding the provisions of regulation 49, the Director of Environment shall coordinate preparation, implementation and updating of a national plan for controlling and where feasible reducing emissions and releases of mercury and mercury compounds to the environment from point sources and such plan may include the following measures-

- (a) development and implementation of national standards on allowable mercury emissions and releases from point sources;
- (b) promote use of Best Available Techniques and Best Environmental Practices to control mercury emissions and releases;
- (c) multi-pollutant control strategy that would deliver core benefits for control of mercury emissions and releases; and
- (d) alternative measures to reduce mercury emissions

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and releases.

Enforcement
and
compliance

51. The Council, in collaboration with other relevant regulatory authorities, shall coordinate and ensure enforcement and compliance of national standards on allowable mercury emissions and releases from point source categories.

Offences and
penalties

52. Any person who operates a facility involving point source categories of mercury emissions and releases without adhering to relevant national standards commits an offence and upon conviction shall be liable to the penalty prescribed in the Act.

PART XI
MERCURY WASTE

Mercury
waste
classification

53.- Mercury waste shall be considered to be hazardous waste and shall be classified in accordance with the Basel Convention as follows-

- | | |
|-----------|--|
| (a) Code | Description; |
| (b) Y29 | Mercury, mercury compounds; |
| (c) A1010 | Metal waste and waste consisting of alloys of |
| (d) A1030 | Mercury;
Waste having as constituents or contaminants of |
| (e) A1180 | mercury or mercury compounds;
Mercury in waste electrical and electronic assemblies or scrap; mercury switches. |

Threshold
limit for
mercury
waste

54. Mercury waste includes all waste with a total mercury concentration greater than 1 ppm based on the analysis of an extract and includes organo mercury compounds.

Prohibition
on
importation
of mercury
waste

55. No person shall import mercury waste into the country for any purpose.

Registration
of generators
of mercury

56.- (1) The Council shall maintain a register of generators of mercury waste.

(2) The register may contain name and address of the

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waste	responsible person, type of business, amount of mercury waste generated, type of mercury waste, collection scheme and how such wastes are finally managed or disposed of.
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Requirements for environmentally sound management of mercury wastes	57.-(1) The generator of mercury waste shall take appropriate measures so that mercury waste is managed in an environmentally sound manner, taking into account the guidelines developed under the Basel Convention and requirements of the Minamata Convention.
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(2) Subject to the provisions of sub-regulation (1), mercury waste shall-

- (a) not be mixed with other waste;
- (b) not be discarded in uncontrolled landfills;
- (c) not be co-incinerated without dedicated flue gas cleaning and controls;
- (d) be treated to extract the mercury or to immobilize it in an environmentally sound manner; and
- (e) not be exported except for the purpose of environmentally sound disposal.

Offences and penalties Cap. 191	58. Any person who generates or owns or handles mercury waste without adhering to conditions stipulated under the Act, commits an offence and upon conviction shall be liable to the penalty prescribed in the Act.
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**PART XII
MERCURY CONTAMINATED SITES**

Threshold value for mercury contaminated site	59. The threshold value to declare a mercury contaminated site shall be soil with an average concentration of mercury above 1ppm.
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Liability for management of mercury contaminated sites	60.-(1) An owner of a mercury contaminated site shall- (a) immediately notify the Council and Local Government Authority about the mercury contaminated site; (b) take all necessary steps to minimize public health risks associated with the site; and (c) prepare contingency plan for managing the contaminated site, which shall be presented to the Council for approval. (2) Where the owner of a mercury contaminated site
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cannot be identified, the Local Government Authority of the respective jurisdiction shall assume the responsibility.

(3) Upon receiving notification of a mercury contaminated site, the Council shall prescribe procedures for clean-up and remediation of such site.

(4) The owner of a mercury contaminated site or Local Government Authority where applicable, shall be liable for the expenses incurred during clean-up operation of a mercury contaminated site.

Inventory
and register
of mercury
contaminated
sites

61. The Council shall undertake periodic inventory and maintain a register of mercury contaminated sites and submit annual report to the Director of Environment.

Offences and
penalties
Cap. 191

62. Any person who contravenes the provisions under this Part commits an offence, and upon conviction shall be liable the penalty prescribed in the Act.

PART XIII COMPLIANCE AND ENFORCEMENT

Powers to
serve
environmental
protection
order

63.-(1) Where an Environmental Inspector of the Council or of any other relevant authority for the purpose of compliance to these Regulations, has reasonable ground to believe that a person is dealing in or handling mercury or is in possession of mercury or mercury compounds that may result in violation of the provisions of these Regulations, he may serve an environmental protection order on that person.

(2) Without prejudice to sub-regulation (1), the Council or an Environmental Inspector may serve an environmental protection order to a person who is or will be dealing or handling dental amalgam or mercury-added products or manufacturing process using mercury or mercury waste that may result in violation of the provisions of these Regulations.

(3) A person on whom an environmental protection order is served shall comply with the requirements of the order by the date or dates specified in the order and if no date is specified, that person shall comply with the order immediately.

(4) A person who contravenes an environmental protection order commits an offence and shall upon conviction, be liable to a fine or imprisonment or to both as provided for in the Act.

Compliance
order

64.-(1) Where the Council or an Environmental Inspector has reasonable ground to believe that any condition of a certificate or permit issued under these Regulations has been breached, he may serve a compliance order requiring that person to remedy the breach within a period stipulated in the order, failure of which the issuing authority may cancel or revoke the certificate or permit.

(2) In addition to revocation or cancellation of certificate or permit under sub-regulation (1), the issuing authority may take any further action it deems appropriate.

Cancellation
of the
certificate or
permit

65. The issuing authority may suspend or revoke a certificate or permit issued for the purpose of giving effect to these Regulations where the authority is satisfied that-

- (a) the conditions of the grant of a certificate or permit have not been complied with; or
- (b) continuing with the activity is or is likely to be injurious to human health and the environment.

PART XIV GENERAL PROVISIONS

Notification
on ailments
or death
associated
with mercury

66.-(1) Any registered medical practitioner or physician who has reason to believe upon examination of a person that such a person has certain ailments or died as a result of exposure to mercury, shall notify in writing the Ministry responsible for health.

(2) Any medical practitioner, physician, public health officer, environmental or natural resources expert who has reason to believe that, certain ailments and death of human beings, animals or contamination to any vegetation or environment occurring in any area under his charge may be linked to exposure to mercury being handled or used in the area, shall notify in writing the Ministry responsible for health..

(3) Any veterinary or livestock officer who has reason to believe that, certain ailments and deaths of animals occurring in the area under his charge may be linked to exposure to mercury, shall notify the Ministry responsible for livestock.

Inquiry or
investigation

Cap. 24

67.-(1) The Ministry responsible for health may, upon receiving a notification under regulation 66 (1), cause an inquest to be carried out in accordance with the provisions of the Inquest Act.

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(2) A person holding an inquest under this regulation shall report to the Council the findings and recommendations within six months.

(3) The Council shall report to the Minister on the findings and recommendations of the inquest and the measures to be taken.

(4) Any person obstructing a duly authorized officer to conduct an inquest under this regulation, commits an offence.

Duty to keep records

68.-(1) A person who imports, exports, transports, stores or uses mercury, mercury compounds, mercury-added products or undesirable medical devices in accordance with the provisions of relevant written laws, shall keep a record of all quantities and qualities of mercury, mercury compounds or mercury-added products imported, used, sold, distributed, stored, exported or transported.

(2) The records kept in accordance with sub-regulation (1), shall contain the name and address of persons involved in such transactions and shall contain any other matters that may be prescribed or contained in the conditions of registration of mercury or mercury compounds or mercury-added products or undesirable medical devices.

(3) The records kept by relevant authorities subject to the provisions of sub-regulation (1) and (2), shall be submitted to the Council at the end of each calendar year in a format that may be prescribed by the Council.

Labelling requirements

69. An importer, exporter, distributor, seller, user or warehouse operator shall affix a label on the mercury or mercury compounds or mercury-added products or undesirable medical devices to be imported, exported, transported, distributed, sold, used or stored in accordance with the provisions of the relevant written laws.

Validity of certificates and permits

70. The validity of certificates of registration or permits issued by regulatory authorities to facilitate compliance to these Regulations shall be valid for a term provided under the relevant written laws.

Liability for damages

71. Where any damage is caused by emissions and releases of mercury or mercury compounds contaminant into the environment, a person who caused or permitted such mercury or mercury compounds to be released or emitted, is liable for the damage to human health and the environment.

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Requirements
for
occupational
medical
examination of
employees

71A. person who deals in mercury or mercury compounds shall ensure formal medical examination of employees as necessary, with respect to-

- (a) assessment of the health of employees in relation to hazards caused by exposure to mercury or mercury compounds;
- (b) diagnose occupational diseases and injuries caused by exposure to mercury or mercury compounds; and
- (c) availing the results of medical records to enable preparation of appropriate health statistics and epidemiological studies, provided anonymity is maintained, where this may help in the recognition and control of occupational diseases.

Provision of
appropriate
personal
protective
gears

72. An employer who engages or permits an employee to handle mercury or mercury compounds shall provide and require the employee to use personal protective gears conducive to the safe handling of such chemicals.

Requirements
for sample
analysis by
accredited
laboratory

73. Any determination of total quantity of mercury made for the purposes of these Regulations shall be conducted by an accredited laboratory.

Appeals

74. A person who is aggrieved by any decision made under these Regulations may appeal in accordance with the provisions of the relevant written laws.

Powers to issue
guidelines or
order

75. The Minister, after consultation with relevant sector ministries, may issue guidelines or orders to facilitate effective implementation of these Regulations.

General
penalty

76. Any person who commits an offence against the provisions of these Regulations and for which no specific penalty is specifically provided, shall be liable to a general penalty under the relevant written laws.

FIRST SCHEDULE

Environmental Management (Control And Management Of Mercury And Mercury Compounds)

GN NO. 59 (contd)

(Made under regulation 39)

LIST OF MERCURY-ADDED PRODUCTS AND THEIR ALTERNATIVES

Product Category	Name/Application / use	Mercury-free alternative
1. Batteries	Button cell, silver oxide	Mercury-free units
	Button cell, zinc air	
	Alkaline manganese (manganese dioxide)	
	Mercuric oxide	
	Button cell, mercuric oxide	
	Button cell, zinc carbon	
2. Electrical/ Electronic devices	Tilt/vibration switch	Capacitive, electrolytic, mechanical, metallic ball, potentiometer, solid-state
	Float switch	Alloy, capacitance, conductivity, magnetic dry reed, mechanical, metallic ball, optical, pressure transmitter, sonic/ultrasonic, thermal
	Pressure switch	Mechanical, solid-state
	Temperature switch	Mechanical, solid-state
	Displacement relay	Dry magnetic reed, electromechanical, hybrid (electromechanical & solid-state), silicon controlled rectifier, solid-state
	Wetted reed relay	
	Contact relay	
	Flame sensor	Electronic ignition system
	Thermostat	Digital, snap-switch
3. Measuring devices	Sphygmomanometer	Aneroid, oscillometrics
	Fever Thermometer	Digital, Liquid-in-glass
	Non-fever Thermometer	Bi-metal, digital, infrared, liquid-in-glass
	Hygrometer/Psychrometer	Digital, spirit-filled
	Barometer	Aneroid, digital
	Manometer	Aneroid, digital
	Flow Meter	Ball-actuated, digital
	Pyrometer	Digital, optical
	Hydrometer	Spirit-filled
4. Lamps/lighting	Linear fluorescent	Linear LED
	Compact fluorescent	LED, LED downlight
	High intensity discharge	Halogen, LED, mercury-free units
	Backlight units for LCD displays	LED
5. Dental amalgam	Dental cements and fillings	Composite, glass ionomer, resin ionomer
6. Paints	Interior/exterior paints	Non-mercury

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Product Category	Name/Application / use	Mercury-free alternative
	(phenylmercuric acetate, biocide)	preservative/microbial
7. Pesticides	Agricultural applications (organomercurial compounds, biocide)	Non-mercury based pesticides
8. Cosmetics	Skin care products (creams, soaps, lotions)	Non-mercury preservative/microbial

SECOND SCHEDULE

(Made under regulation 44)

KEY ELEMENTS OF THE NATIONAL ACTION PLAN FOR
SMALL-SCALE GOLD MINING

1. The National Action Plan shall include the following key elements:
 - (a) National objectives and reduction targets;
 - (b) Actions to eliminate-
 - (i) whole ore amalgamation;
 - (ii) open burning of amalgam or processed amalgam;
 - (iii) burning of amalgam in residential areas; and
 - (iv) cyanide leaching in sediment, ore or tailings to which mercury has been added without first removing the mercury;
 - (c) Steps to facilitate the formalization or regulation of the small-scale gold mining sector;
 - (d) Baseline estimates of the quantities of mercury used and the practices employed in small-scale gold mining and processing within its territory;
 - (e) Strategies for promoting the reduction of emissions and releases of, and exposure to, mercury in small-scale gold mining and processing, including mercury-free methods;
 - (f) Strategies for managing trade and preventing the diversion of mercury and mercury compounds from both foreign and domestic sources to use in small scale gold mining and processing;
 - (g) Strategies for involving stakeholders in the implementation and continuing development of the national action plan;
 - (h) A public health strategy on the exposure of small-scale gold miners and their communities to mercury. Such strategy shall include, inter alia, the gathering of health data, training for health-care workers and awareness-raising through health facilities;
 - (i) Strategies to prevent the exposure of vulnerable populations, particularly children and women of child-bearing age, especially pregnant women, to mercury used in small-scale gold mining;

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- (j) Strategies for providing information to small-scale gold miners and affected communities; and
- (k) A schedule for the implementation of the national action plan.

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2. The national action plan may include additional strategies to achieve its objectives, including the use or introduction of standards for mercury-free small-scale gold mining and market-based mechanisms or marketing tools.

Dodoma,
....., 2020

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