

GOVERNMENT NOTICE NO..... published on.....

THE ENVIRONMENTAL MANAGEMENT ACT  
(CAP. 191)

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**REGULATIONS**

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(Made under Section 144, 145 and 230 (s))

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THE ENVIRONMENTAL MANAGEMENT (SOIL QUALITY STANDARDS)  
REGULATIONS, 2007

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**SCHEDULE**

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**FIRST SCHEDULE**  
**LIMITS OF CONTAMINANTS IN HABITATS AND AGRICULTURAL**  
**ACTIVITIES**

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THE ENVIRONMENTAL MANAGEMENT ACT  
(CAP. 191)

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(Under Section 144, 145 and 230 (2) (s))

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THE ENVIRONMENTAL MANAGEMENT (SOIL QUALITY STANDARDS)  
REGULATIONS, 2007

PART I  
PRELIMINARY PROVISIONS

Citation

**1.** These Regulations may be cited as the Environmental Management (Soil Quality Standards) Regulations, 2007.

Interpretation

**2.** In these Regulations, unless the context otherwise requires-  
“Act” means the Environmental Management Act, 2004;  
“compliance plan” means an environmental compliance order issued in terms of section 198 of the Act containing a set of conditions for observance or fulfilment by any person breaching these Regulations;  
“conservation measures” means activities which will prevent degradation and maintain or enhance the quality of a particular soil or the environment;  
“contaminant” means substance or agent present in the soil as a result of human activities which impairs the origin state/quality/function of that soil;  
“contaminated soil” means soil which contains one or more contaminants from an unintentional or intentional spilling, leaking, pumping, pouring, emitting, emptying, or dumping of a hazardous substance, hazardous waste, or pollutant;

“Council” means the National Environment Management Council established under the Act;

“degraded land” means land which, due to natural processes or human activity, is no longer able to properly sustain an economic function and or its original natural, or near-natural, ecological function;

“degraded soil” means soil whose natural properties or productivity have been damaged by contamination or physical or other processes;

“Director General” means the Director General of the National Environment Management Council;

“habitat” means the area or environment where an organism or ecological community normally lives or occurs;

“hazardous substance” means any chemical, waste, gas, medicine, drug, plant, animal or micro organism which is likely to be injurious to human health, life or environment;

“hazardous wastes” means any solid, liquid, gaseous or sludge waste which by reason of its chemical reactivity, environmental or human hazardousness, its infectiousness, toxicity, explosiveness and corrosiveness is harmful to human health, life or environment;

“main soil polluting activity” means an activity that does not comply with minimum quality standards prescribed under these Regulations for which prior grant of discharge permit by the Council is mandatory;

“pollutant” means substance or agent present in the soil or groundwater which due to its properties, amount or concentration causes adverse impacts on soil functions;

“responsible person” means the owner of the land or person residing on, or using the land;.

“soil” includes earth, sand, rock, shell, mineral, vegetation, and the flora and fauna in the soil and derivatives thereof such as dust;

“subsoil” means volume underlying the topsoil and overlying the solid (parent) rock beneath;

Object

**3.** The object of these Regulations is to-

- (a) set limits for soil contaminants in agriculture and habitat
- (b) enforce minimum soil quality standards prescribed by the National Environmental Standards Committee;
- (c) prescribe measures designed to maintain, restore and enhance the sustainable productivity of the soil;
- (d) prescribe minimum soil quality standards to maintain restore and enhance the inherent productivity of the soil in the long term;
- (e) enforce minimum soil standards prescribed by the National Environmental Standards Committee for such purposes as agricultural practices;
- (f) ensure implementation of criteria and procedures prescribed by the National Environmental Standards Committee for the measurement and determination of soil quality; and
- (g) prescribe measures and guidelines for soil management;
- (h) ensure compliance with any such measures and guidelines for soil management that may be prescribed by the Minister.

## PART II

### THE NATIONAL ENVIRONMENTAL STANDARDS COMMITTEE

Setting minimum standard  
of soil quality

**4.-(1)** The National Environmental Standards Committee of Tanzania Bureau of Standards shall-

- (a) establish criteria and procedures for the measurement and determination of the quality of soil;
- (b) set minimum standards for the management of the quality of soil;
- (c) prescribe guidelines for, the disposal of any waste in the soil, the optimal utilization of any soil, identification of the various soils and practices that are necessary in order to

conserve soil and prohibit activities that may degrade the soil;

- (d) prescribe guidelines to minimize the effects of polluted waters and air unloading the pollutant into the soil and vice versa;
- (e) prescribe guidelines to ensure that anthropogenic activities such as mining, agricultural activities, as well as solid and liquid waste disposal do not degrade the soils;
- (f) prescribe guidelines to prevent the degradation of soils resulting from dumping, or disposal of chemicals into soil; any special agricultural practices; use of pesticides; transporters of dangerous goods if there spillage; and
- (g) do any other thing necessary for the monitoring and control of soil degradation.

(2) The National Environmental Standards Committee of Tanzania Bureau of Standards may recommend to the Minister any variation or addition or change or generally amendment to any Schedule to these Regulations.

Duty to comply with soil quality standards

**5.-**(1) A person undertaking any activity which impacts upon soil shall comply with soil quality standards that may be prescribed by the National Environmental Standards Committee.

(2) In enforcing soil quality standards prescribed under these Regulations or under any written law, the Council or any person directed by the Council may-

- (a) order or carry out investigation of actual or suspected soil pollution including the collection of samples, records and data;
- (b) upon reasonable notice served on the occupier enter, any place, area, premise, or vehicle, vessel, boat, aircraft, on which the Council has reasonable grounds to believe that the

activity is or is likely to lead to violation of prescribed soil quality standards;

- (c) take necessary measures to ensure that industry and other facilities adopt cleaner technology to meet the requirements of the prescribed soil quality standards; or
- (d) perform or do anything or act that is necessary for the monitoring or control of pollution of soils.

(3) Prior to approving the soil quality standards under these Regulations, the Minister may consult and accommodate views and recommendations from any other sector Ministry.

(5) A person who permits or causes to permit pollution or emission in excess of soil quality standards commits an offence.

Publication of standards

**6.-(1)** The Minister shall approve and publish in the Gazette minimum standard of soil quality and standards for discharge of effluent into soil made under these Regulations.

(2) Every person shall comply with Soil quality standards and minimum standard of soil quality standards approved and published under these Regulations

Contaminants of volatile organic compounds

**7.** Contaminants of volatile organic compounds in habitat and agricultural soils shall comply with parameters and upper limits specified in Table 1 of the First Schedule to these Regulations.

Contaminants of heavy and other metals

**8.-(1)** Contaminants of heavy metals in habitat and agricultural soils shall comply with parameters and upper limits specified in Table 2 of the First Schedule to these Regulations.

(2) Contaminants of other metals in habitat and agricultural soils shall comply with parameters and upper limits specified in Table 4 of the First Schedule to these Regulations.



Contaminants of pesticides

**9.** Contaminants of pesticides in habitat and agricultural soils shall comply with parameters and upper limits specified in Table 3 of the First Schedule to these Regulations.

Pesticides and industries related pollutants

**10.** The Minister shall periodically cause to be published in the Gazette-

- (a) common names of pesticides registered in Tanzania under any written law and their potential polluting effect; and
- (b) list of pollutants related to different types of industry;

Failure to comply with prescribed minimum standards

**11.** A person who fails to comply with any of the minimum soil quality standards prescribed in the First Schedule to these Regulations commits an offence.

Methods for Determination of soil quality

**12.**-(1) Methods of determination of soil quality standards in habitat and agricultural soils shall be as respectively prescribed in third columns of Tables 1, Table 2, Table 3 and Table 4 of the First Schedule to these Regulations:

Provided that the National Environmental Standards Committee may at its own motion or following the recommendation of any sector Ministry, recommend to the Minister amendment, variation, repeal or replacement of methods of determination of soil quality.

(2) A person who fails to comply with methods of determination of soil quality standards commits an offence.

Soil conservation measures by local governments

**13.**-(1) Without prejudice to the standards prescribed under these Regulations, local government authority may prescribe special or specific measures and guidelines for soil conservation applicable to their respective areas of jurisdictions which are not below standards prescribed under these Regulations. .

(2) A person who contravenes these Regulations commits an

offence.

Existing soil  
quality standards

**14.** The Minister wherever he deems it necessary for effective implementation of laws, may identify and allow the continued operation of existing soil quality standards made under other written law.

### PART III

## PROHIBITIONS AND PRESCRIBED MINIMUM

### SOIL QUALITY STANDARDS

General prohibitions of soil  
pollution

**15.**-(1) A person who knowingly puts or permits to be put or to fall or to be carried into any soil, so as either singly or in combination with other similar acts of the same nature or interfere with its natural or ordinary quality or pollute its constituent or puts solid refuse of any manufactory or manufacturing process, or puts any rubbish or puts any other waste or puts any putrid solid matter into such soil commits an offence.

(2) A person who causes any contaminant to fall or flow or knowingly permits to fall or flow or to be carried into any soil any poisonous, noxious or polluting liquid proceeding from any factory or manufacturing process commits an offence.

Prohibition to discharge  
hazardous substances,  
chemicals and materials or  
oil etc.

**16.**-(1) No person shall discharge any hazardous substance, chemical, oil or mixture containing oil on any soils except in accordance with what is prescribed under these Regulations or any other written law.

(2) A person who discharges any hazardous substance, chemical, oil or mixture containing oil on any soils or any other segment of the environment commits an offence.

(3) Apart from the general punishment provided under the Act, the person convicted of an offence under this section may be ordered by the court to pay-

(a) the cost of the removal, including any costs which may be

incurred by the Government or Government agency in the restoration of the soil environment damaged or destroyed as a result of the discharge; and

(b) the cost of third parties in the form of reparation, restoration, restitution or to compensation as may, from time to time, be determined by a court.

(4) It shall be the duty of every organizations and individual producing, transporting, trading, using, storing or disposing of chemicals, toxic substances, inflammable or explosive substances, to comply with these regulations on safety for human and other living organisms and avoid causing degradation of soils.

#### PART IV

#### SOIL POLLUTANT DISCHARGE PERMITS

Management of soil  
pollutant discharge permits

**17.-**(1) The Council shall designate certain categories of human activities to be main soil polluting activities for which prior grant of discharge permit by the Council are mandatory.

(2) A Regional Environment Management Expert, a City Environment Management Officer, a Municipal Environment Management Officer, a District Environment Management Officer and a Town Environment Management Officer may with respect to their areas of jurisdiction, recommend to the Council categories of human activities to be main soil polluting activities.

(2) A person whose activities do not comply with minimum quality standards prescribed under these Regulations shall apply to register any of the said activity as a main polluting activity.

(3) An owner or operator of a main polluting activity shall apply to be registered by the Council.

(4) The Council may register a main polluting activity with the following conditions-

- (a) periodic or continuous monitoring for performance or compliance testing, ambient and any monitoring and other measures to maintain and if necessary improve ambient soil quality and such other terms and conditions as determined by the Council to be reasonable and necessary and consistent with the Act and these Regulations;
- (b) at all times, including periods of startup, shutdown, and malfunction, to maintain and operate soil pollution control equipment in a manner consistent with good soil pollution control practice for minimizing discharges;
- (c) draw up and present to the Council proposed compliance status of the facility with respect to all applicable requirements including all sources that exceed discharge standards or targets or are predicted to exceed soil quality standards or guideline concentration or other requirements that have not been satisfied;
- (d) a proposed compliance schedule setting forth remedial measures to be taken, including a sequence of actions with milestones leading to total compliance; and
- (e) such terms and conditions as it deems fit.

(5) In determining whether or not to issue a permit, the Council or any other person empowered to make the decision shall-

- (a) refer to any guide from conduct of Environmental Impact Assessment and Environmental Audit.
- (b) consider the cumulative effect on the environment likely to result from any such grant;
- (c) seek to ensure that the prescribed best practicable option is adopted.

(6) For the purposes of these regulations the “best practicable option” shall mean the best method for preventing or minimizing adverse effects on human health, life or the environment.

(7) A person who-

- (i) fails to register his main polluting activities or
- (ii) being a registered owner or operator of a main polluting activity contravenes conditions or compliance schedule or any terms attached to his permit,

commits an offence under these Regulations.

Review of compliance plan

**18.**-(1) Where any compliance plan prepared by owner or operator of a main polluting activity is not approved, the Council shall in writing provide the reasons for refusal and grant sixty days following the notification of refusal, to revise and resubmit the compliance plan.

(2) Where after the review of the revised compliance plan there remain aspects that are inadequate, the Council shall impose conditions to be adhered to together with written reasons for imposing such condition.

Transfer, change of ownership of main polluting activity

**19.**-(1) Where a registered owner of any main polluting activity transfers ownership or sells or leases out the activity or operation of the activity, obligations and conditions attendant to initial registration shall be deemed to form part of the sale, transfer of ownership or lease.

(2) A registered owner of main polluting activity subject to transfer shall be required to ensure that environmental obligations under the ownership are made known to the new owner.

Fees for discharge of pollutants into soil

**20.** A person permitted to discharge pollutants into the soil under these Regulations shall pay a fee as prescribed by the Minister.

Other registration fees

**21.** A person seeking any kind of registration under these Regulations shall pay such fees as may be prescribed by the Minister.

Management of soil pollutant discharge permits

**22.**-(1) Notwithstanding the requirements under any other written

law, no person shall discharge effluent from any commercial, industrial or other trade waste systems into soils or subsoil without a consent duly granted by the Council or by any other person designated by the Council for that purpose

(2) Copies of applications for grants of consents to discharge into the ground or subsoil made under any law shall also be lodged with the Council or to any other person designated by the Council for approval.

(3) A person who fails to comply with obligations and conditions under Sub-regulation (1) commits an offence and is liable on conviction to a fine of not less than two million shillings but not exceeding ten million shillings or to imprisonment for a term of not less than two years but not exceeding seven years.

## PART V

### SOIL QUALITY COMPLIANCE AND ENFORCEMENT

Taking and analysis of samples

**23.-** The taking of samples and analysis shall be carried out by the Council and laboratories accredited or designated in accordance with the Act.

Compliance Orders

**24.-**(1) Where the Council has reason to believe that-

- (a) any condition of any license or permit has been breached or about to be breached; or
- (b) any person is in breach of any provisions of these Regulations or any terms and conditions made thereunder,

it may issue an compliance order.

(2) The compliance order shall specify in such terms as will enable the person on whom it is served to understand and shall contain the following-

- (a) the name of the person to whom it is addressed;
- (b) the action or non-action or other matter which it is alleged to

constitute the breach of the terms of the permit or of any condition attached to the permit;

- (c) steps that must be taken to rectify the breach, time, being not earlier than twenty one days from the date of service of the notice of compliance, and the reasons why those steps are being required;
- (d) fee or compensation if any which must be paid by the permit holder to make good the losses or damage caused by such breach; and
- (e) penalties which may be imposed in the event of non-compliance which may include revocation of the permit.

(3) A City Environment Management Officer, a Municipal Environment Management Officer, a District Environment Management Officer and a Town Environment Management Officer may issue compliance order.

Soil protection orders

**25.**-(1) The Council, a City Environment Management Officer, a Municipal Environment Management Officer, a District Environment Management Officer and a Town Environment Management Officer may serve protection order against activities likely to result in adverse effect to the soil environment or public health.

(2) A person who breaches an order made under Sub-regulation (1) commits an offence and is liable on conviction, to a fine not exceeding five million shillings or to imprisonment for a term not exceeding seven years or to both.

Stop orders

**26.**-(1) Notwithstanding the provisions governing notice of compliance under these Regulations, the Council, a City Environment Management Officer, a Municipal Environment Management Officer, a District Environment Management Officer and a Town Environment Management Officer may issue a stop order to any person where he is satisfied that further delays will occasion more serious harm to the soils

or human health or living environment.

(2) A copy of a stop order shall contain such information and be made known in such manner as would enable the person or group of persons on whom it is served to understand and comply with such order.

(3) A person on whom a stop order is served shall stop performing any of the activities referred to in the said stop order.

(4) A person defying any stop order issued under these Regulations commits an offence and is liable on conviction, to a fine not exceeding five million shillings or to imprisonment for a term not exceeding seven years or to both.

Powers of environmental inspectors

**27.** An environmental inspector appointed or designated shall have and exercise powers conferred upon him by the Act.

Emergency powers to prevent discharges

**28.-(1)** An environmental inspector who observes or receives information on discharge of a contaminant into the environment in an amount, concentration or manner that constitutes a risk to the soils, may serve an emergency prevention order.

**(2)-** A prevention order made under Sub-regulation (1) shall require the person against whom it is made-

(a) to create and forward to the Council a written emergency response plan that is adequate to reduce or eliminate the risk;

(b) to have any necessary equipment, facilities and trained personnel available to deal with the risk;

(c) to take whatever other measures which may be necessary to ensure that any emergency can be effectively responded to.

(3)-A person on whom a prevention order is served shall comply with the requirements of the order by the dates specified in the order and where no date is specified, that person shall comply with the order immediately.

(4)- A person who contravenes Sub-regulation (3), commits an offence and shall on conviction, be liable to a fine of not more than one million shillings or to imprisonment for a term not exceeding one year and where



that person fails to comply with the requirement specified in the prevention order within the specified time, that person shall be liable to a further fine not exceeding one hundred thousand shillings for every day or part of a day after the date specified in the order during which the offence continued.

Disobeying environmental inspectors

**29.** A person who-

- (a) hinders or obstructs an environmental inspector in the execution of his duties under these Regulations; or
- (b) fails to comply with a lawful order or requirements made by any environmental inspector in accordance with these Regulations;
- (c) refuses an environmental inspector entry upon any land or into any premises which he is empowered to enter by these Regulations;
- (d) impersonates an environmental inspector;
- (e) refuses an environmental inspector access to records kept in accordance with the Act touching upon any aspect of these Regulations;
- (f) gives environmental inspector false name or false address or misleading information;

commits an offence and is liable on conviction, to a fine not less than ten million shillings or to imprisonment for a term of not more than five years or to both.

Accidental or inadvertent discharges

**30.-(1)** An owner or occupier of premises shall be required to ensure that all incidents of inadvertent or accidental emissions or pollution of soils in violation of prescribed standards are within seven days of the occurrence reported to the respective City Environment Management Officer, Municipal Environment Management Officer, District Environment Management Officer and Town Environment

Management Officer for transmission to the Council.

(2) A person who fails to report accidental or inadvertent discharge on the soils commits an offence on conviction to a fine not exceeding five million shillings or to imprisonment not exceeding seven years or to both.

Reward for reporting  
pollution

**31.** The Minister may provide a reward to any person reporting an incident of accidental, concealment or inadvertent pollution of soil.

Enforcement of  
environmental quality  
standards

**32.-(1)** For purposes of enforcing soil quality standards and criteria, the Council or an environmental inspector may-

- (a) order or carry out investigations of actual or suspected pollution including the collection of samples, records and data;
- (b) enter, inspect and examine any place, area, premise or any vehicle, vessel, boat, aircraft or any carriage of any description on which it has reasonable grounds to believe that the activity is or is likely to lead to violation of environmental soil quality standards;
- (c) take necessary measures to ensure that industry and other facilities adopt cleaner technology to meet the requirements of soil quality standards prescribed under these Regulations;
- (d) monitor pollutants concentration and nature of pollutants emitted;
- (e) make guidelines on best practices and identify suitable technologies for minimization of soil pollution; or
- (f) do or perform anything or act that is necessary for the monitoring and control of soil pollution.

(2) Subject to the provisions of any other law which may provide greater punishment, any person who pollutes the soils in excess of quality and criteria standards stipulated pursuant to these Regulations commits an

offence.

(3) The Council shall establish and maintain close collaboration with sector Ministries, local government authorities, Tanzania Bureau of Standards, the Tanzania Atomic Agency, Tropical Pesticides Research Institute, Government Chemist Laboratory Agency, Tanzania Food and Drugs Authority, Energy and Water Regulatory Authority, Surface and Marine Regulatory Authority and such other institutions for the purposes of enforcement of soil quality standards.

Disposal of sewage and  
sludge

**33.**-(1) A person who violates guidelines or any standards made by local government authorities on collection, transportation and disposal of sewage and sludge commits an offence and shall be liable on conviction to a fine not exceeding five million shillings or to imprisonment for a term not exceeding two years or to both.

## PART VI

### RECORDS AND REPORTING

Records and reporting

**34.**-(1) The Central Environmental Information System kept and maintained by the Council under the Act shall include-

- (a) environmental obligations on conservation of soils and their quality as specified by the Act or under any written law;
- (b) directives issued by the Minister on matters relevant to the implementation of soil quality standards;
- (c) rules agreed upon between the Minister and any other sector ministry on permits for the discharge of effluent on to the soil or sub soil;
- (d) periodic returns lodged with the Council; and
- (e) permits issued under these Regulations.

(2) The Director of Environment and the Director General of the National Environmental Management Council shall have access to

information relating to the implementation of these Regulations, including any emissions or discharges to soil, necessary to enable them to carry out their respective duties under these Regulations.

(3) Records maintained and kept under Sub-regulation (1) shall be public records and subject to the needs of confidentiality as circumstances may require and any fees which may be prescribed, may be accessed in accordance with the Act.

## PART VII OFFENCES AND PENALTIES

Offences relating to  
environmental standards

**35.** A person who-

- (a) contravenes any soil standards for which no other offence is specifically provided for; or
- (b) contravenes a measure prescribed under these regulations for which no other offence is specifically provided,

shall be liable on conviction to a fine of not less than five hundred thousand shillings and not exceeding ten million shillings or to imprisonment for a term of not less than six months and not exceeding five years.

Compounding of offences

**36.**-(1) The Director General, or an environmental inspector may, subject to and in accordance with the provisions of the Act compound any offence under these Regulations to any person who shows willingness to pay the sum of money as penalty for contravening the provisions of these Regulations.

(2) Subject to the provisions of these Regulations authorizing any measure that may be taken in addition to a fine that may otherwise be taken pursuant to an order of the Tribunal or court, no further criminal or, as the case may be, civil proceedings shall be taken against a person in respect of whom powers to compound offence has been exercised.

PART VIII  
MISCELLANEOUS PROVISIONS

Appeals to the Minister

**37.** A person who is aggrieved the decision of the Council, a Environmental Inspector, a City Environment Management Officer, a Municipal Environment Management Officer, a District Environment Management Officer, a Town Environment Management Officer made under these Regulations may within thirty days of the decision appeal to the Minister.

Appeals to the Tribunal

**38.** A person who is aggrieved by the decision of the Minister may within thirty days following that decision appeal to the Environmental Appeals Tribunal in such manner as may be prescribed by the Tribunal.

Amendment of Schedules

**39.** The Minister may amend Schedules to these Regulations.

## FIRST SCHEDULE

*(Made under Regulations 7, 8,9 and 12)*

The contaminants in habitat and agricultural soils shall have limits as specified in the following Tables 1-4:

**Table 1: Contaminant limits for Volatile Organic Compounds**

S/N	Parameter	Upper Limit (mg/kg)	Test method
1.	Benzene	5	ISO 15009:2002(E) TZS 973
2.	Carbon Tetrachloride	5	***
3.	1,2-Dichloroethane	5	ISO 15009:2002 (E) TZS 973
4.	1,1-Dichloroethylene	0.5	ISO 15009:2002 (E) TZS 973
5.	cis-1,2-Dichloroethylene	40	***
6.	Trans-1,2-Dichloroethylene	60	***
7.	Dichloromethane	90	ISO 15009:2002 (E) TZS 973
8.	Ethylbenzene	200	ISO 15009:2002 (E) TZS 973
9.	Styrene	1,000	***
10.	Tetrachloroethylene	50	***
11.	Toluene	500	ISO 15009:2002 (E) TZS 973
12.	Trichloroethylene	30	***
13.	1,1,1-Trichloroethane	600	ISO 15009:2002 (E) TZS 973

14.	1,1,2-Trichloroethane	10	ISO 15009:2002 (E) TZS 973
15.	Total Xylenes	200	ISO 15009:2002 (E) TZS 973

\*\*\* = No reference method has been specified, hence currently no restriction on test methods as long as they give reliable results.

**Table 2: Contaminant limits for Heavy metals**

S/N	Parameter	Upper Limit (mg/kg)	Test method
1.	Arsenic	1	***
2.	Cadmium	1	ISO 11047:1998 (E) TZS 974
3.	Hexavalent Chromium	100	ISO 11047:1998 (E) TZS 974
4.	Lead	200	ISO 11047:1998 (E) TZS 974
5.	Manganese	1,800	ISO 11047: 1998 (E) TZS 974
6.	Mercury	2	ISO 16772:2004 (E) TZS 975
7.	Nickel	100	ISO 11047:1998 (E) TZS 974
8.	Selenium	20	***
9.	Copper	200	ISO 11047:1998 (E) EMDC 3 (1850) P3
10.	Zinc	150	ISO 11047:1998 (E) TZS 974
11.	Molybdenum	5	***

\*\*\* = No reference method has been specified, hence currently no restriction on test methods as long as they give reliable results.

**Table 3: Contaminant limits for Pesticides**

S/N	Parameter	Upper Limit (mg/kg)	Test method
1.	Atrazine	50	ISO 11264:2005 (E) TZS 976
2.	2,4-Dichlorophenoxy acetic acid (2,4-D)	700	***

3.	2,4-Dichlorophenoxy acetic acid Amine (2,4-D Amine)	700	***
4.	Lindane	2	GC (AOAC Methods, 1984, JAOAC, 1980, Pesticides Analytical Manual, 1979).
5.	Pentachlorophenol	20	ISO 10382:2002 (E) TZS 977
6.	Sulphur	500	Titrimetry (CIPAC Handbook)
7.	Endosulfan	60	GC with MCD or ECD (Analytical Methods Residue Pesticides, 1988, part 1)
8.	Glyphosate	700	HPLC (Pesticide Analytical Manual, 1999 II)
9.	Acetochlor	500	GC with ECD or FID
10.	Carbofuran	200	GC (Analytical Methods Residue Pesticides, 1988, part 1)
11.	Paraquat	300	Colorimetry (Pesticides Analytical Manual, 1979 II)
12.	Diquat	150	Colorimetry (Pesticides Analytical Manual, 1979 II, Analytical Methods Plant Growth Regulators, 1978)
13.	*Chlordane	0.6	***
14.	*DDT	3	ISO 10382:2002 (E) TZS 977
15.	*Dieldrin	0.05	ISO 10382:2002 (E) TZS 977
16.	*Heptachlor	0.2	ISO 10382:2002 (E) TZS 977
17.	**Toxaphene	0.6	***
18.	*Aldrin	0.05	ISO 10382:2002 (E) TZS 977
19.	*Hexachlorobenzene	500	ISO 10382:2002 (E) TZS 977

\* = Restricted by Stockholm Convention on Persistent Organic Pollutants (POPs) to which United Republic of Tanzania is a party

\*\* = Banned by Stockholm Convention on Persistent Organic Pollutants (POPs) to which United Republic of Tanzania is a party

\*\*\* = No reference method has been specified, hence currently no restriction on test methods as long as they give reliable results.



**Table 4: Contaminant limits for Other Chemicals**

S/N	Parameter	Upper Limit (mg/kg)	Test method
1.	Benzo (a) pyrene	1.0	***
2.	Cyanide	10	ISO 11262:2003 (E) TZS 977
3.	Polychlorinated Biphenyls (PCBs)	1.0	ISO 10382:2002 (E) TZS 977
4.	Vinyl Chloride	1.0	***
5.	Polychlorinated Dibenzo Dioxins	100ng TEQ/kg	***

\*\*\* = No reference method has been specified, hence currently no restriction on test methods as long as they give reliable results.

**NB:** In areas where contaminants naturally exceed these limits, measures need to be taken to control increase of such contaminants in the environment.

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....., 2007

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