# THE BIOSAFETY ACT, 2009 (No. 2 of 2009)

## THE BIOSAFETY (ENVIRONMENTAL RELEASE) REGULATIONS, 2011

#### ARRANGEMENT OF REGULATIONS

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Application form for environmental Release and/or Placing on the Market of genetically modified organisms

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# THE BIOSAFETY ACT, 2009 (No. 2 of 2009)

IN EXERCISE of the powers conferred by section 51 of the Biosafety Act, 2009, the Minister for Higher Education, Science and Technology with confirmation of the Board makes the following Regulations:—

# THE BIOSAFETY (ENVIRONMENTAL RELEASE) REGULATIONS, 2011

#### PART — IPRELIMINARY

#### Citation.

**1.** These Regulations may be cited as the Biosafety (Environmental Release) Regulations, 2011.

## Interpretation.

- 2. In these Regulations unless the context otherwise requires—
- 'applicant' means a person making an application under to these Regulations;
- 'Authority' means the National Biosafety Authority established under section 5 of the Act;
- 'Biosafety Clearing-House' means a mechanism for exchange of scientific, technical, environmental, socio-economic and legal information and experience with genetically modified organisms;
- 'environmental release' means introduction into the environment of a genetically modified organism for which an approval has been granted in accordance with these Regulations and-
  - (a) for which no specific containment measures are used to limit their contact with and to provide a high level of safety for the general population and the environment; and
  - (b) includes making genetically modified organisms available to the public for purposes other than sale;
- 'genetically modified organism' means an organism that possesses a novel combination of genetic material obtained through the use of modern biotechnology techniques;
- 'placing on the market' means making a genetically modified organism available for sale;
- 'regulatory agency' means a regulatory agency as set out in the First Schedule to the Act, or such other agency as the Minister may, by order in the Gazette, determine;

'risk assessment' means the evaluation of risks to human and the environment, whether direct or indirect, immediate or delayed, which the environmental release or placing on the market of genetically modified organisms may pose;

'screening for completeness' means the evaluation of an application to ensure that all the administrative as well as technical requirements are met.

## Objective.

**3.** The objective of these Regulations is to ensure that potential adverse effects of genetically modified organisms are addressed to protect human health and the environment when conducting environmental release.

## **Exceptions.**

**4.** These Regulations shall not apply to genetically modified organisms that are pharmaceuticals for human use

#### PART II—APPLICATIONS

#### **Environmental Release.**

- **5.** (1) A person shall not make an environmental release without the written approval of the Authority.
- (2) An application for environmental release shall be made to the Authority in the form set out in Part A of the First Schedule to these Regulations and shall be accompanied by-
  - (a) an application fee of Kenya shillings eight hundred and fifty thousand; and
  - (b) where necessary, an additional risk assessment report.
  - (3) An applicant may-

refer to data or results from an application previously submitted by another applicant; or

- (a) submit additional information that the applicant considers relevant; provided that the information, data and results are non-confidential or such applicants have given their agreement in writing.
- (4) The Authority may allow an application for release of the same genetically modified organism on the same site or on different sites for the same purpose and within a definite period to be made in a single application.

- (5) Where the Authority, after a risk assessment, considers that it is necessary for the genetically modified organism to be subjected to contained use, the Authority shall communicate its decision to the applicant in writing and the provisions of the Contained Use Regulations shall apply.
- (6) Where the application is for introduction into the environment of a genetically modified organism that is not locally developed, the Authority, after a risk assessment, may require that the applicant carries out field trials of the genetically modified organism and the provisions of the Contained Use Regulations shall apply.
- (7) A person who contravenes sub- regulation (1) commits an offence. Placing on the market

### Placing on the market.

- **6.** (1) A person shall not place on the market a genetically modified organism without the written approval of the Authority.
- (2) An application to place on the market a genetically modified organism shall be made to the Authority in the form set out in Part B of the First Schedule to these Regulations and shall be accompanied by—
  - (a) an application fee of Kenya shillings eight hundred and fifty thousand; and
  - (b) where necessary, a risk assessment report.
  - (3) An applicant may—
  - (b) refer to data or results from an application previously submitted by other applicants;
  - (c) submit additional information that the applicant considers relevant;

provided that the information, data and results are non-confidential or such applicants have given their agreement in writing.

(4) A person who contravenes sub-regulation (1) commits an offence.

## Consideration of an application.

- **7.** (1) Upon receiving an application, the Authority shall within fourteen days screen for completeness and circulate to the relevant regulatory agencies for further information, comments or reasoned objections.
  - (2) The Authority shall in considering an application, examine—

- (a) the conformity of an application with the requirements of these Regulations;
- (b) the accuracy and completeness of the information given;
- (c) the risk assessment submitted by the applicant; and
- (d) the uses of the genetically modified organism.
- (3) The authority shall publicize an application received hereunder and invite written comments from members of the public within twenty one days.
  - (4) Where necessary, the Authority may ask an applicant to provide further information.
- (5) The Authority shall communicate its final decision to the applicant within one hundred and fifty days of receipt of the application, but not earlier than ninety days of such receipt.
- (6) For the purpose of calculating the periods, any period of time during which the Authority is awaiting any further information that it may have requested from the applicant shall not be taken into account.

#### Non-assessment of risks.

- **8.** (1) The Authority may opt not to undertake risk assessment where it determines that sufficient experience or information exists to conclude that an environmental release does not pose a significant risk.
- (2) Once an approval has been granted by the Authority for release of a genetically modified organism, subsequent release of the same species, or the same species modified with the same gene or combination of genes, may be exempted from risk assessment.

#### Approval.

- **9.** (1) An approval for environmental release shall be in the Form set out in the Second Schedule to these Regulations.
- (2) If information becomes available that an approved activity poses a risk to human health or the environment, the Authority may amend or revoke the approval.

## Validity and Renewal of approval.

**10.** (1) An approval granted under these Regulations shall be for a period not exceeding ten years.

- (2) At least nine months before the expiry of an approval period, a person intending to continue to release into the environment or placing genetically modified organisms on the market shall submit an application for the renewal of the approval.
- (3) An application for renewal of an approval under these Regulations shall contain the information set out in the First Schedule to these Regulations and shall be accompanied by-
  - (a) an application fee of eight hundred and fifty thousand shillings;
  - (b) a copy of the approval under regulation 9 (1);
  - (c) a report on the results of the monitoring which was carried out in accordance with these Regulations;
  - (d) any new information which has become available with regard to the risks of the genetically modified organism to human health and the environment; and
  - (e) a proposal for amending or complementing the conditions of the original approval and any other conditions concerning future monitoring.
- (4) The Authority shall consider an application for renewal within thirty days of receiving the application and may-
  - (a) approve the application with or without conditions; or
  - (b) reject the application stating the reasons for rejection.
- (5) Pending the renewal of an approval, an applicant may continue operating under the conditions of approval granted under regulation 9 (1) until a final decision has been taken on the application for renewal.
  - (6) An approval for renewal from the Authority shall be valid for a period of ten years.
- (7) Where a genetically modified organism has been released into the environment or placed on the market for twenty years with the approval from the Authority, and the Authority establishes that monitoring data indicates no risk to human health and the environment, the genetically modified organism may continue to be released to the environment or placed on the market without further approval.

## Handling of new information.

11. (1) Where there are any changes to a genetically modified organism or of a combination of genetically modified organisms as a result of the environmental release which could have adverse effects on human health and the environment after the Authority has given its written approval, the applicant shall immediately-

- (a) take the measures necessary to protect human health and the environment;
- (b) inform the Authority in advance of any change or as soon as the unintended change is known or the new information is available; and
- (c) revise the measures specified in the application or approval.
- (2) Where there are any changes to a genetically modified organism or of a combination of genetically modified organisms as a result of the environmental release which could have adverse effects on human health and the environment after the Authority has given its written approval the Authority-
  - (a) shall evaluate such information and may make it available to the public; and
  - (b) may require the applicant to, modify the conditions of, suspend or terminate the environmental release.

## Public awareness and Participation.

- **12.** (1) The Authority shall promote public awareness and participation on the proposed environmental release.
- (2) In carrying out public awareness and participation, the Authority shall publish guidance documents.
  - (3) The Authority shall—
  - (a) by notice in the Gazette;
  - (b) in at least two newspapers of wide circulation; and
  - (c) on its website,

make available to the public, non-confidential information on applications for environmental release of genetically modified organisms.

(4) Any person may within thirty days of the publication of a notice under paragraph (3), submit written comments on the proposed decisions for any application for placing a genetically modified organism on the market.

## **Decision document.**

**13.** (1) A decision on the application shall be recorded in a decision document.

- (2) The decision document shall be in such form as the Authority may determine and shall contain a statement to the proposed manner of the use, risk management and proposed requirements for monitoring and shall include the following information—
  - (a) identification of properties of a recipient which are important for the use of the genetically modified organism;
- (b) any known risks to health and the environment arising from the introduction of non-modified recipient into the environment or on the market;
- (c) description of results of genetic modification in genetically modified organisms;
- (d) evaluation of the sufficiency of characterising genetic modification in the request to assess risks;
- (e) identification of risks to the health of humans, animals, plants and the environment which may arise from the use of genetically modified organisms in comparison with the use of corresponding non-modified organism, based on the risk assessment conducted;
- (f) a conclusion as to whether-
  - (i) a genetically modified organism may be released into the environment or placed on the market, and under which conditions, or
  - (ii) a genetically modified organism shall not be released into the environment or placed on the market, in which case the reasons shall be stated.

## Monitoring.

- **14.** (1) A person granted an approval under these Regulations together with the relevant regulatory agency shall monitor and report on the release in accordance with the approval.
  - (2) The relevant regulatory agency shall submit the monitoring report to the Authority.
- (3) The Authority shall ensure that all appropriate measures are taken to avoid adverse effects on the health of humans, animals and the environment which might arise from the environmental release or the placing on the market of genetically modified organisms.
- (4) The Authority shall develop and issue an inspection manual and guidelines to ensure that the relevant regulatory agency organises inspections and other control measures as appropriate for purposes of compliance with this regulation.
- (5) In the event of a release of a genetically modified organism or the placing on the market of a genetically modified organism for which no approval has been granted, the Authority shall ensure that-

- (a) necessary measures are taken to terminate the release or placing on the market of such organism;
- (b) remedial action is taken, if necessary; and
- (c) the public is informed and appropriately advised on such release or placing on the market.

#### PART III—MISCELLANEOUS

## Registration of decisions in the National Biosafety Clearing House.

**15.** The Authority shall register all decisions made under these Regulations in the National Biosafety Clearing House within thirty days of making the decision.

## Confidentiality.

- **16.** (1) The Authority shall not disclose to a third party any confidential information exchanged under these Regulations and shall protect intellectual property rights of the applicant.
- (2) An applicant may indicate with verifiable justification, information in the application submitted under these Regulations, the disclosure of which might harm the applicant's competitive position and which should be treated as confidential.
- (3) The Authority shall, after consultation with the applicant, decide which information may be kept confidential and shall inform the applicant accordingly.
  - (4) The following information shall not be considered to be confidential—
  - (a) the name and address of the applicant;
  - (b) the general description of the genetically modified organism;
  - (c) the purpose of the release;
  - (d) the location of release and intended uses;
  - (e) the plans for monitoring of the genetically modified organism and for emergency response; and
  - (f) the risk assessment report.
- (5) If, an applicant withdraws an application, the Authority shall respect the confidentiality of the information supplied.

# Offences and penalties.

17. A person who contravenes any of these Regulations commits an offence and shall be liable on conviction to a fine not exceeding twenty million shillings or to imprisonment for a term not exceeding ten years, or both.

## FIRST SCHEDULE

(r 5 (2), 6 (2)

Part A of this schedule shall be filled by an Applicant making an application for either Environmental Release or Placing on the market of genetically modified organism(s), or both.

Part A and B of this schedule shall be filled by an Applicant making an application for Placing on the market of genetically modified organism(s).

	PLICATION FORM ONMENTAL RELEASE AND
	Γ OF GENETICALLY MODIFIED ORGANISM(S)
/OKTLACING ON THE MARKE	PART A
100	General information
1.1 Name of applicant 1.2 Physical Address	
1.1 Name of applicant	1.2 I Hysical Address
1.3 Telephone	1.4 Email
1.5 Title of the Application	1.6 Application Type of
	□ New
	☐ Renewal
2.0 Information or	the Genetically modified organism
	0.0 T
•	2.2 Transformation event(s)
genetically modified organism	
(Differences between the biological	
characteristics of the genetically	
modified organism and those of the	
recipient organism or parental	
organisms)	

2.3 Intellectual property ownership	2.4 Uniqu	e identifier for the genetically modified
of the novel trait, if any	organism i	
of the novel trait, if any	Organism i	any
2.5 Introduced or modified trait (Cho	oose the trait	from the following list)
2.5.1 Abiotic environmental		ed growth, development and product quality
tolerance		
Altered photoperiod sensitivity	Altered	ripening or flowering
Cold or heat tolerance	Colorat	ion
Drought or water tolerance		restoration
Other	Growth	rate or yield
	Male s	
		onal composition (including allergenicity)
	Selecta	ble marker genes and reporter genes
	Uptake	or degradation of environmental
	pollutants	
	Other g	growth, development and product quality
2.5.3 Chemical tolerance	2.5.4Medic	eal products
Herbicide tolerance	Animal	vaccines
Other chemical tolerance		oment of transplant organs
	Product	ion of pharmaceuticals
	Other n	nedical products
2.5.5 Pest resistance	2.5.6 Other	r – specify
Bacterial resistance		
Fungus resistance		
Insect resistance		
Nematode resistance		
Virus resistance		
Other pest resistance		
2.6 Technique used for modification.	(Please sele	ect techniques used for the transformation)
Plasmid carried by	Biolistic me	ethods
Agrobacterium tumefaciens	Osmotic sh	ock
Electric shock polarisation		
Other- specify		
2.7 Description of gene modification		
2.8 Summary of contained use and	confined f	ield trial data (provide information on key
	el and confi	ned field trials whether conducted in Kenyo
or outside Kenya)		
3.0 Characteristics of genetic modific	cation	
3.1Vector characteristics		
3.1.1 vector(s) 3.1.2 source(s)	or origin	3.1.3 host range
identity	-	
3.2 Insert or inserts		

*	ted nucleic acid and the function it specifies, and/or
characteristics of the modification into	roduced)
	3.4 Rate and level of expression of the new genetic material. Method and sensitivity of measurement
3.5 Activity of the expressed protein(s	(5)
<u>.</u>	detection techniques of the inserted sequence and vector
4.0 Recipient organism or parental or 4.1 Taxonomic name/status of recipient organism or parental organisms	4.2 Common name of recipient organism or parental
4.3 Point of collection or acquisition of parental organisms	4.4 Center(s) of origin of the recipient organism or parental organisms (Describe the exact location and give geographical coordinates)
4.5 Center(s) of genetic diversity, if known, of Centre's of genetic Diversity, if known, of Recipient organism or Parental organisms (Describe the exact location and give geographical coordinates)	
4.7 Description of the habitat wher proliferate	re the genetically modified organism may persist or
5.0 Donor organism(s)	
5.1 Taxonomic name/status of the donor organism or parental organisms	5.2 Common name of donor organism
5.3 Point of collection or acquisition of donor organism (Describe the exact location and geographical coordinates)	5.4 Biological characteristics of donor organisms
6.0 Intended use and receiving environ	nmont
	berate release, including the purpose(s) and foreseen

	Quantities of genetically modified organisms to be released
6.4 Suggested method(s) for safe hand	ling, transport and storage during release
modified organism - (country, region,	vironmental releases, as well as uses of the genetically dates of releases especially at different scales and in ects on the health of human, animal and plant, and
6.6 Intended use of the Genetically	6.7 Receiving environment
	(Information on the location, geographical, climatic
(Information relating to the intended use of the genetically modified	and ecological characteristics, including relevant information on biological diversity and centres of
	origin of the likely potential receiving environment)
use compared to the recipient organism or parental organisms)	
7.0 Risk assessment summary (Cite refe	
7.1 Detection/Identification method of	
(Suggested detection and identification	n methods and their specificity, sensitivity and
reliability)	
7.2 Evaluation of the likelihood of adv	verse effects
(An evaluation of the likelihood of the	ese adverse effects being realized, taking into account e likely potential to the health of human, plant and
7	0 / 0 /
7.3 Evaluation of the consequences	
(An evaluation of the consequences sh	ould these adverse effects be realized)
7.4 Overall risk	
(An estimation of the overall risk pos	ed by the genetically modified organism based on the
evaluation of the likelihood and conseq	uences of the identified adverse effects being realized)
7.5 Recommendation	
	not the risks are acceptable or manageable, including,
where necessary, identification of strai	
7.6 Information on post release mon	itoring and emergency response plans (describe post
release monitoring methods, recall pro	
1	
8.0 A	dditional information

8.1 Availability of detailed risk assessment information
(Please indicate whether more details on the risk assessment are available and how they can
be accessed)
8.2 Any other relevant information
8.3 Additional notes

	DADE D
1	PART B
1.1 Name or names, as appropriate, and surname ( <i>trade company</i> ), if the applicant is the natural person authorised to operate a business	.0 General information  1.2 Title (trade company) and the legal form, if the applicant is legal person
1.3 Nationality (in case of natural persons)	1.4 Place of business (in case of legal persons) or place of business and place of residence (in case of natural persons)
1.5 Company registration number (if assigned	1.6 Tax identification number (if assigned)
1.7 Subject of activity	1.8 Name of person(s), who represents a statutory body of the applicant, including the manner of acting on behalf of the applicant (in case of legal persons), as appropriate
1.9 Address of residence	1.10 Contact address
1.11 Telephone 1.12 Fax number number	1.13 E-mail
2.0 Information of	n the genetically modified organism
2.1 Name of each constituent genetically modified organism contained in a package	2.2 Origin of each constituent genetically modified organism contained a package
2.3 The properties of each constituent	genetically modified organism contained in a package
3.0 Purpose and procedure of	of the placing of genetically modified organism
3.1 The purpose of placing of the gene	etically modified organism on the market
3.2 Date of expected commencement of the placing genetically	3.3 Expected amount of the genetically modified organism that will be used in the individual stages

modified organism placing on the market and its binding	including information on whether the production comes from Kenya or whether it's imported.
schedule (details and the period of the individual stages)	ds
4.0 Summary of the Risk assessmen market	nt of genetically modified organism to be placed on the
	m placing on the market if any, of the same genetically or currently applied for or carried out by the applicant
5.1 Additional information	
DECLARATION BY APPLICANT	
	O. Box No of (Company/ Institution), hereby declare that to the best of my knowledge and oplication are true and correct.
Declared by}	
thisday of }	DECLARANT
at }	
Before me Commissioner for Oaths/Magistrate	/Judge
S	ECOND SCHEDULE
THE	(r. 9 (1) E BIOSAFETY ACT,2009 (No.2 of 2009)
THE NATIO	NAL BIOSAFETY AUTHORITY
	NTAL RELEASE/PLACING ON THE MARKET* OF A ALLY MODIFIED ORGANISMS
APPROVAL	DATE OF

NUMBER	ISSUE
	VALID UP TO
In accordance with Regulation 9 of the Regulations, approval is hereby granted on the market* of the genetically modapproval is granted to the applicant/reseapproval.	d for environmental release/placing dified organism herein stated. The
Name of the Applicant/ Research Institution	
Scope of the approval	
Identity of the genetically modified organism	
Quantity approved	
Specification of the genetic modification	
Purpose	
This approval is granted with to the foll 1	lowing requirements:
2	
3	
This approval is granted with the follow	ving monitoring requirements.
1	ving monitoring requirements.
2	
3.	
J	

Place:	Name:
	Signature:
Date	
	The Chief Executive Office
	National Biosafety Authority

- N.B. The applicant shall make samples available to the Authority on request
  - -This approval is not transferrable
  - \* Please delete as appropriate

Dated the 15th July, 2011.

HELLEN SAMBILI, Acting Minister for Higher Education, Science and Technology.